



University of Colorado **Denver**

# 2009-10 Catalog

Prepared by the  
Office of Communications

Published April 2009

# Catalog Home



## **Downtown Campus**

Auraria Campus

Speer at Larimer

[www.ucdenver.edu](http://www.ucdenver.edu)

303-556-2704

Fax: 303-556-4838

[admissions@ucdenver.edu](mailto:admissions@ucdenver.edu)

## **Information/Admissions**

*Office Location*

1250 West 14th Street—Annex

Denver, Colorado

*Mailing Address*

UC Denver Office of Admissions

Campus Box 167, P.O. Box 173364

Denver, CO 80217-3364

## **International Admissions**

303-315-2230

*Office Location*

1380 Lawrence Street, 9th Floor, Suite 932  
Denver, CO 80204-2029

*Mailing Address*

University of Colorado Denver  
International Admissions  
P.O. Box 173364, Campus Box 185  
Denver, CO 80217-3364  
USA

Alternative format available upon request by calling the Office of Integrated University  
Communications  
303-315-3716  
TTY 303-556-4766

The 2009-2010 Downtown Campus Catalog is considered the source for academic and programmatic requirements for students entering programs during the summer 2009, fall 2009 and spring 2010 semesters. Although this catalog was prepared using the best information available at the time, all information is subject to change without notice or obligation. The university claims no responsibility for errors that may have occurred during the typesetting, printing or production of this catalog. For current calendars, tuition rates, requirements, deadlines, etc., students should refer to the bursar's office and registrar's office Web sites, [www.ucdenver.edu/bursar](http://www.ucdenver.edu/bursar) and [www.ucdenver.edu/registrar](http://www.ucdenver.edu/registrar), for the semester in which they intend to enroll.

The courses listed in this catalog are intended as a general indication of the University of Colorado Denver curricula on the Downtown Campus. Courses and programs are subject to modification at any time. Not all courses are offered every semester, and faculty teaching particular courses or programs may vary from time to time. The content of a course or program may be altered to meet particular class needs.

Previous editions of this catalog are available online at  
<http://ucdenver.edu/academics/Pages/Catalogs.aspx>.

The University of Colorado Denver is an affirmative action/equal opportunity employer and educator committed to excellence through inclusiveness.

# Welcome



## **Welcome to a university for the 21st century.**

*The University of Colorado Denver plays a critical role in the development and well-being of the state and its citizens. With a core business of education and health, UC Denver is the region's premier research university.*

*By combining the excellence of our academic programs at the downtown campus with the extensive research and teaching of the Anschutz Medical Campus in Aurora, we provide a unique option in the University of Colorado system. Here you will benefit from:*

**Academic choices**—more than 115 degree programs in 13 schools and colleges

**A spirit of collaboration**—the synergy of combining disciplines to create courses of study like public health administration, computational bioscience or health and behavioral sciences

**Outstanding location**—the Downtown Campus gives access to a vibrant, safe urban lifestyle, alongside opportunities to gain experience in projects and internships at businesses and corporations

**New facilities**—the initial development phase of the 227-acre Anschutz Medical Campus is now complete, providing students with state-of-the-art educational and research facilities in Aurora

*We serve more than 12,700 students on our Downtown Campus plus nearly 3,000 students in health sciences programs and more than 3,700 online. Total enrollment of UC Denver is more than 30,000. We offer 80 options to earn bachelor's, master's, doctoral or educational specialist degrees.*

*This institution is committed to providing you the opportunities you need to achieve your educational goals. You will meet faculty who are dedicated to excellence in the classroom and research laboratory and fellow students who are diverse, goal-oriented and energetic. Whether you engage in undergraduate or graduate studies, you are assured that the University of Colorado Denver degree has global respect and that you will have been well-prepared for the next stage of your work or academic life.*

*It's a privilege to have you join us.*

A handwritten signature in black ink, appearing to read 'M. J. ...' with a long, sweeping underline.

*M. Roy Wilson, MD, MS  
Chancellor  
University of Colorado Denver*

## **UC Denver Executive Team**

### **M. Roy Wilson**

Chancellor  
MD, Harvard University  
*MS, University of California at Los Angeles*

### **Teresa Berryman**

Vice Chancellor for Administration  
and Finance, CPA  
*BS, University of Colorado*

### **Jay Gershen**

Vice Chancellor for External Affairs  
BA, State University of New York-Buffalo  
*DDS, University of Maryland  
PhD, University of California-Los Angeles*

### **Andy Jhanji**

Vice Chancellor for Advancement  
and Chief of Staff  
*BS, MPM, Western Carolina University*

### **Richard Krugman**

Vice Chancellor for Health Affairs  
and Dean of School of Medicine  
*AB, Princeton University  
MD, New York University*

### **Roderick Nairn**

Vice Chancellor for Academic and Student Affairs  
and Provost  
*BSc, University of Strathclyde (Scotland)  
PhD, University of London (England)*

### **Richard Traystman**

Vice Chancellor for Research  
*MS, Long Island University  
PhD, The Johns Hopkins University*

# The University

*The University of Colorado Denver was formed July 1, 2004 by the consolidation of two established universities in the University of Colorado System. UC Denver joins the strengths of a comprehensive campus in downtown Denver with the research and advanced health care programs on the Anschutz Medical Campus in Aurora. Educating more than 30,000 students annually from 50 states and 128 nations, the consolidated university is one of the nation's top public urban research universities.*

The University of Colorado Denver offers a unique experience for students. Its Downtown Campus is in the heart of Denver—the business, cultural and political capital of the West. Its Anschutz Medical Campus in nearby Aurora is the nation's newest health sciences campus, where discoveries in the lab and in the clinic transform medical treatments into cures.

More and more undergraduates are discovering the value of classes in the city taught by professors who are connected with top companies—often advising the same CEOs who are hiring our graduates. New on-campus housing, easy commuting by light rail and discounts to cultural and sporting events give students many options for immersion in vibrant city life. In addition, affiliations with research labs and hospitals at Anschutz Medical Campus make UC Denver an excellent place to start a health care career.

UC Denver awards more graduate degrees than any other university in Colorado. It is known for its programs in urban sustainability, criminal justice, business, education, applied science and engineering, film and music industry as well as a full array of health professional programs at the Anschutz Medical Campus. The graduate student population is a diverse mix of ages and ethnicities, creating a rich environment for learning and networking.

Other reasons why students choose the University of Colorado Denver:

- **Small class sizes:** average student-to-teacher ratio is 15:1.
- **The Denver vibe:** Colorado has always attracted the adventurous. It is one of the healthiest in the country, with an extensive network of bike trails and quick access to mountain sports. The Downtown Campus is adjacent to a thriving arts district.
- **Collaborative culture:** Cross-disciplinary learning and research is a core value at UC Denver. Programs blend technology with health care, business with public policy, behavioral health with architecture and public health with health providers.
- **Choices:** With 13 schools and colleges offering more than 115 degree programs, UC Denver is a major university for the coming century.

## Downtown Campus—Denver

With a solid academic reputation and award-winning faculty, the Downtown Campus offers bachelor's, master's and doctoral programs through seven distinct academic units:

College of Architecture and Planning  
College of Arts & Media  
Business School  
School of Education & Human Development

College of Engineering and Applied Science  
College of Liberal Arts and Sciences  
School of Public Affairs

## **Anschutz Medical Campus—Aurora**

In achieving its mission of education, research, patient care and community service, the Anschutz Medical Campus offers degree programs through six schools and colleges:

School of Dental Medicine  
School of Medicine  
College of Nursing  
School of Pharmacy  
Colorado School of Public Health  
Graduate School

An overview of programs offered on the Anschutz Medical Campus is located in the Health Professions chapter of this catalog. Contact the individual school or program coordinator for details.

## **Mission, Vision and Values**

In 2007-2008, the University of Colorado Denver completed a strategic planning process which resulted in the following guiding statements:

### **Mission**

UC Denver is a diverse teaching and learning community that creates, discovers and applies knowledge to improve the health and well-being of Colorado and the world.

### **Vision**

By 2020, UC Denver will be a leading public university with a global reputation for excellence in learning, research and creativity, community engagement and clinical care.

### **Values**

To be a university greater than the sum of its parts, UC Denver embraces excellence in:

#### **Learning and Scholarship**

UC Denver respects academic freedom and the rigorous quest for knowledge and understanding. We share knowledge and foster student success through a continuous process of inquiry, critical thinking, reflection, collaboration and application.

#### **Discovery and Innovation**

UC Denver fosters an energetic, collaborative and creative environment where we develop and employ new ideas and technologies. Our entrepreneurial culture enables us to expand the frontiers of knowledge and human experience.

### **Health and Care of Mind, Body and Community**

UC Denver enriches the well-being and sustainability of communities and our cultural, living and natural environments. We promote healthy lifestyles, prevent, diagnose and treat disease and deliver high-quality and compassionate health care.

### **Diversity, Respect and Inclusiveness**

UC Denver seeks the richness that an increasing diversity of our communities brings to our learning, research and service endeavors. Our common humanity leads us to create an inclusive and respectful ethos characterized by caring, empathy, compassion, nurturing, collegiality and mentoring.

### **Citizenship and Leadership**

UC Denver serves Colorado and the world as a recognized source of talent, knowledge, informed judgment, exemplary health care and professional practice. We are responsible stewards of the resources entrusted to us and utilize them with integrity for the betterment of our community.

Details about the mission, vision, values and strategic plan for the university is available online at [www.ucdenver.edu/admin/upac](http://www.ucdenver.edu/admin/upac).

## **University of Colorado System**

The University of Colorado is system of three universities located in Boulder, Colorado Springs and Denver/Aurora. With combined total enrollments of more than 52,000 students, the University of Colorado system consistently ranks in the top 15 among public universities and colleges in overall research expenditures and seventh among public universities in federally funded research. Awards for research within the system total more than \$660 million, with funding provided by federal agencies, appropriations from the state of Colorado and private foundations and donors.

## **Board of Regents**

### **Tilman "Tillie" Bishop, Vice Chair**

District 3

*term expires 2013*

### **Steve Bosley, Chair**

At Large

*term expires 2011*

### **Michael Carrigan**

District 1

*term expires 2011*

### **Jim Geddes**

District 6

*term expires 2015*

**Kyle Hybl**

District 5

*term expires 2013*

**Thomas J. Lucero, Jr.**

District 4

*term expires 2011*

**Steve Ludwig**

At Large

*term expires 2013*

**Monisha Merchant**

District 7

*term expires 2015*

**Joe Neguse**

District 2

*term expires 2015*

## **History and Evolution of UC Denver**

1876 Legislature founds the University of Colorado

1883 Medical department opens with two students

1898 CU establishes School of Nursing 1912 CU organizes the Department of Correspondence and Extension in Denver

1913 CU establishes School of Pharmacy

1925 CU dedicates 9th and Colorado Blvd. medical center

1956 Regents purchase Tramway Building for Extension Division

1965 Regents change extension name to University of Colorado-Denver Center

1972 CU-Denver Center changes name to University of Colorado at Denver

1973 School of Dentistry enrolls its first class; state begins building Auraria Campus

1974 CU reorganizes as a four-campus system

1988 CU-Denver moves into the 257,000 square-foot North Classroom Building on the Auraria Campus

1992 School of Pharmacy moves from Boulder to Health Sciences Center

1995 Government conveys 217 acres at Fitzsimons to CU for modern health sciences facility

2000 First new and remodeled facilities open at Fitzsimons

2004 Regents consolidate CU-Denver and Health Sciences Center to form the University of Colorado at Denver and Health Sciences Center

2006 Fitzsimons campus renamed Anschutz Medical Campus

2007 Regents approve shortened version of the name: University of Colorado Denver

2008 Medical, dental, pharmacy and nursing students start classes, Colorado School of Public Health enrolls first students on the Anschutz Medical Campus

## Accreditation

The Downtown Campus of the University of Colorado Denver is institutionally accredited by the Higher Learning Commission of North Central Association of Colleges and Schools.

The commission can be contacted at:

30 N. LaSalle Street, Suite 2400  
Chicago, IL 60602-2504

**Telephone:** 1-800-621-7440

**Web site:** [www.ncacihe.org](http://www.ncacihe.org)

Many professional organizations have also granted accreditation to programs, colleges and schools at the Downtown Campus, including:

- Accreditation Board for Engineering and Technology
- Association for the Advancement of Collegiate Schools of Business—International
- American Chemical Society
- Colorado State Board of Education
- Commission on Accreditation of Healthcare Management Education
- Council for Accreditation of Counseling and Related Educational Programs
- Landscape Architecture Accreditation Board
- National Architectural Accrediting Board
- National Association of Schools of Music
- National Association of School Psychologists
- National Association of Schools of Public Affairs and Administration
- National Council for the Accreditation of Teacher Education
- Planning Accreditation Board

## Academic Programs

UC Denver's Downtown Campus is devoted to the needs of the residents of Denver and the region. A solid foundation of academic and general education is assured through a comprehensive core curriculum. Students may pursue graduate education through all of the campus' colleges and schools. Pre-professional training in the fields of education, law,

journalism and health careers is also available. Complete listings of areas of study available on the Downtown Campus are available in the Programs section of the catalog.

The colleges and schools sections of this catalog provide information on bachelor's, master's and doctoral degree programs, policies on requirements for graduation, course requirements, course-load policies, course descriptions and similar information.

## Continuing and Professional Education

The Division of Continuing and Professional Education at the Downtown Campus offers complete degree programs, certificate/certification courses, professional development programs, precollegiate outreach programs and personal enrichment courses across the state of Colorado. Courses are offered in a variety of formats, including traditional on-campus, off-campus, online, hybrid, weekend, evening, short and condensed courses and many others.

Registration and tuition varies by school or college. Contact the specific school or college to learn about current program and course offerings, or contact the Academic Technology and Extended Learning office at 303-556-2040 or visit our Web site at <http://learn.ucdenver.edu>.

## About Our Students

The diversity of our student body is a source of deep pride. Ethnic minority students make up 23 percent of the student population. Classes include traditional students who have elected to pursue college degrees immediately after high school, transfer students, students who have delayed college entry and professionals who seek to strengthen their base of skills or broaden their appreciation of the world.

With students' ages ranging between 16 and 74, the average undergraduate student age on the Downtown Campus is 24, while our graduate students average 33. They represent a distinctive mix of ages and backgrounds. Around 80 percent of our students are employed, and 44 percent attend part-time. 38 percent are enrolled in graduate-level courses. All take advantage of the convenience of course offerings at times that meet their schedules, enjoying an enviable student-to-faculty ratio of 15:1.

## Related Organizations

### Alumni Association

**Mailing Address:** Campus Box 189, P.O. Box 173364, Denver, CO 80217

**Telephone:** 303-556-2549

**Fax:** 303-556-6545

**E-mail:** [ucdalumni@ucdenver.edu](mailto:ucdalumni@ucdenver.edu)

The University of Colorado Denver Alumni Association provides programs and services of mutual benefit to graduates and the university. Founded in 1976, the Downtown Campus association is governed by a board of alumni representing all schools and colleges. Students automatically become Alumni Association members upon graduation and receive the *UC Denver on the Horizon* newsletter, published twice a year. Alumni are invited to volunteer on

committees, which include recognizing 4.0 students through the Academic Athlete program, providing financial assistance to students through a scholarship fund and bestowing Alumni Association awards to worthy graduates and community leaders. The association also invites alumni to attend periodic seminars and events.

## University of Colorado Foundation

**Mailing Address:** 225 East Sixteenth Avenue, Suite 900, Denver, CO 80203

**Telephone:** 303-813-7900

**Fax:** 303-813-7958

**Web site:** [www.cufund.org](http://www.cufund.org)

Established in 1967, the University of Colorado Foundation is a privately governed nonprofit corporation whose mission is to support the University of Colorado. The Denver office of the CU Foundation was established to advance the campus goal to become one of the nation's premier urban research institutions.

The CU Foundation raises and manages private funds that endow scholarships and professorships, further research, enrich academic programs, upgrade and construct facilities and support projects that benefit students, faculty and the community.

The university's academic leadership establishes priorities for private support, and gifts are directed to the specific schools, program or purpose that the donor designates. Professional fundraisers identify and/or generate interest in the university, assist donors in gift planning and solicit gifts in collaboration with academic leaders.

## At A Glance

### At A Glance: Student Information

#### At A Glance: UC Denver

Locations	Schools and Colleges
Downtown Campus (Auraria)	
Anschutz Medical Campus (Aurora)	<b>Downtown Campus</b>
	College of Architecture and Planning
Total Enrollment	College of Arts & Media
30,000 students served via on-site	Business School
and off-site courses‡	School of Education & Human
16,165 students enrolled in fall 2008*	Development

56% undergraduate

35% graduate

10% first professional

64% full time

8% out-of-state residents

4% international students

Degrees

Bachelor's, master's, doctoral,  
first-professional

Programs

119 degree programs

College of Engineering and

Applied Science

College of Liberal Arts and Sciences

School of Public Affairs

### **Anschutz Medical Campus**

School of Dental Medicine

School of Medicine

College of Nursing

School of Pharmacy

Colorado School of Public Health

Graduate School

Research Funding

More than \$363.00 million in  
sponsored research

Alumni

89,802 (72% live in Colorado)

Downtown Campus Attributes

Anschutz Medical Campus Attributes

### **Enrollment**

13,166\*

8,571 Undergraduate\*

(46% male, 54% female)

4,595 Graduate\*

### **Enrollment**

2,999\*

Undergraduate: 435\*

(9% male, 91% female)

Graduate: 1,018\*

(44% male, 56% female)

(28% male, 72% female)

### **Student-Faculty Ratio**

15:1‡

First Professional: 1,546

(43% male, 57% female)

Diverse Population

18% ethnic minority

### **Incoming**

Freshmen: 1106

Transfers: 1201

Graduate Students: 900

### **Average Age**

Undergraduate: 30

Graduate: 32

First Professional: 27

### **Diverse Population**

24% ethnic minority

Undergraduate: 29%

Graduate: 13%

Average age: 27

Undergraduate: 23

Graduate: 32

### **Bragging Rights**

*U.S. News & World Report,*

*America's Best Graduate Schools, 2009*

(If otherwise noted, it is the most recent year ranked)

### **Health Disciplines**

Clinical nurse specialist,

adult/medical-surgical—6

Nurse-midwifery (2007)—12

Nurse practitioner:

adult—8

family—5

pediatric—3

Nursing, MS (2007)—15

Pharmacy, PharmD (2008)—23

### **Student Body**

From 50 states and 128 countries‡

### **Bragging Rights**

*U.S. News & World Report*

*America's Best Graduate Schools, 2009*

School of Public Affairs,

Top Schools #32

Physician Assistant, MS, PhD (2007)—8

*The Princeton Review, 2008*

*America's Best Value Colleges*

Best Western Colleges,

Best in the West

*Modern Healthcare, 2007*

Top Business Graduate Schools for

Physician-Executives #5

Schools of Medicine

Primary care—4

Research—27

Specialties:

Family medicine—6

Pediatrics—11

AIDS—18

Additional bragging rights for schools and colleges on this campus are printed in their chapters of this catalog.

Public Affairs (School of )—32

The Sciences

Biological sciences: Graduate School, AMC (2007)—48

Additional bragging rights for schools and colleges on this campus are printed in the Health Professions chapter .

\*Fall 2008 end-of-term

‡Fiscal Year 2007-2008 data

## **At a Glance: Undergraduate Areas of Study**

### **Undergraduate Degrees**

BA = Bachelor of Arts

BFA = Bachelor of Fine Arts

BS = Bachelor of Science

### **School/College Codes**

Arts & Media, College of	CAM
Business School	BUS
Engineering and Applied Science, College of	CEAS
Liberal Arts and Sciences, College of	CLAS
Public Affairs, School of	SPA

## **DEGREE PROGRAMS**

## **COLLEGE/SCHOOL**

Anthropology (BA)	CLAS
Biology (BS)	CLAS
Business Administration (BS)	BUS
Accounting	
Accounting and Information Systems	
Finance	
Financial Management	
Human Resources Management	
Information Systems	
International Business	
Management	
Marketing	
Chemistry (BS)	CLAS
Civil Engineering (BS)	CEAS
Communication (BA)	CLAS
Computer Science and Engineering (BS)	CEAS
Criminal Justice (BA)	SPA
Economics (BA)	CLAS
Electrical Engineering (BS)	CEAS
Computer	

English (BA)	CLAS
Film Studies	
Literary Studies	
Literature	
Creative Writing	
English Writing (BA)	CLAS
Fine Arts (BA)	CAM
Art History	
Drawing	
Painting	
Photography	
Sculpture	
Fine Arts (BFA)	CAM
3-D Animation	
Digital Design	
Drawing	
Painting	
Photography	
Sculpture	
French (BA)	CLAS
International Language and Culture for the Professions	
Geography (BA)	CLAS
Earth Sciences	
Environmental Science	
Environmental Studies	
General	

Urban Studies and Planning	
History (BA)	CLAS
Individually Structured Major (BA)	CLAS
International Studies (BA)	CLAS
Mathematics (BS)	CLAS
Actuarial Mathematics	
Applied Mathematics	
Computer Science	
Mathematics Education	
Probability and Statistics	
Pure Mathematics	
Mechanical Engineering (BS)	CEAS
Music (BS)	CAM
Music Business	
Music Industry Studies	
Business	
Recording Arts	
Performance	
Recording Arts	
Philosophy (BA)	CLAS
Physics (BS)	CLAS
Biophysics and Medical Physics	
Pure and Applied Physics	
Political Science (BA)	CLAS
Politics and Public Policy	
Psychology (BA/BS)	CLAS

Sociology (BA)	CLAS
Spanish (BA)	CLAS
International Language and Culture for the Professions	
Theatre, Film and Television (BA)	CAM
Theatre, Film and Television (BFA)	CAM
Film/Video	
Cinematography	
Post-Production	
Writing/Direction	
Performance	
Production, Development and Direction	

## **Pre-Professional Programs In**

Prehealth careers (Child Health Associate, Dentistry, Medicine, Medical Technology, Nursing, Optometry, Pharmacy, Physical Therapy and Veterinary Medicine)  
 Prelaw

## **Teacher Education Licensure\***

Elementary Education  
 Secondary English  
 Secondary Foreign Language (French, Spanish)  
 Secondary Mathematics  
 Secondary Social Studies

\*Cooperative program between the College of Liberal Arts and Sciences and the School of Education and Human Development

## **At A Glance: Graduate Areas of Study**

## Graduate Programs

### Program

### Degree School/College

Accounting	MS	BUS
Administrative Leadership and Policy Studies	MA, EdS	SEHD
Anthropology♦	MA	CLAS
Medical Anthropology		
Sustainable Development and Political Ecology		
Applied Mathematics♦	MS, PhD	CLAS
Architecture	MArch	CAP
Biology♦	MS	CLAS
Business Administration	MBA	BUS
Chemistry♦	MS	CLAS
Clinical Health Psychology♦	PhD	CLAS
Civil Engineering♦	MS, PhD	CEAS
Environmental Engineering		
Geographic Information Systems		
Communication♦	MA	CLAS
Communications Management		
Computer Science♦	MS	CEAS
Computer Science and Information Systems♦	PhD	BUS/CEAS
Counseling Psychology and Counselor Education	MA	SEHD
Criminal Justice♦	MCJ	SPA
Domestic Violence		
Curriculum and Instruction	MA	SEHD
Decision Sciences	MS	BUS

Design and Planning♦	PhD	CAP
Early Childhood Education	MA	SEHD
Economics♦	MA	CLAS
Educational Studies and Research♦	PhD	SEHD
Educational Psychology	MA	SEHD
Electrical Engineering♦	MS	CEAS
Engineering♦	MEng	CEAS
Geographical Informations Systems (Civil)		
Transportation (Civil)		
English♦	MA	CLAS
Applied Linguistics		
Literature		
Teaching of Writing		
Environmental Sciences♦	MS	CLAS
Air Quality		
Ecosystems		
Environmental Health		
Geospatial Analysis		
Hazardous Waste		
Water Quality		
Finance	MS	BUS
Global Energy Management	MS	BUS
Health Administration	MS/MBA	BUS
Health and Behavioral Sciences♦	PhD	CLAS
History♦	MA	CLAS
Humanities♦	MH	CLAS

Information and Learning Technologies	MA	SEHD
Information Systems	MS	BUS
Initial Teacher Education	MA	SEHD
Integrated Sciences♦	MIS	CLAS
International Business	MSIB	BUS
Landscape Architecture	MLA	CAP
Leadership for Educational Equity	EdD	SEHD
Management and Organization	MS	BUS
Marketing	MS	BUS
Mechanical Engineering♦	MS	CEAS
General		
Mechanics		
Thermal Science		
Political Science♦	MA	CLAS
Politics and Public Policy		
Psychology♦	MA	CLAS
Clinical Psychology		
Public Administration	MPA	SPA
Domestic Violence		
Emergency Management and Homeland Security		
Environmental Policy, Management and Law		
Homeland Defense		
Local Government		
Nonprofit Management		
Public Affairs♦	PhD	SPA
Recording Arts♦	MS	CAM

School Psychology	EdS	SEHD
Social Sciences♦	MSS	CLAS
Community Health Science		
International Studies		
Society and Environment		
Women's and Gender Studies		
Sociology♦	MA	CLAS
Spanish♦	MA	CLAS
Special Education	MA	SEHD
Urban and Regional Planning	MURP	CAP
Economic Planning Development		
Urban Design♦	MUD	CAP

♦ Graduate School Rules apply.

### Licensure and Endorsements

<b>Program</b>	<b>School</b>
Community Agency Counseling	SEHD
Early Childhood Special Education	SEHD
Elementary	SEHD
Linguistically Diverse Education (Bilingual/ESL)	SEHD
Principal/Administrator	SEHD
Reading Teacher	SEHD
School Counselor	SEHD
School Library	SEHD
School Psychologist	SEHD
Secondary: English, Foreign Language, Math, Science, Social Studies	SEHD

## Graduate Continuing Education Opportunities

<b>Program</b>	<b>Type</b>	<b>School/College</b>
Adolescent Literacy (Online)	Certificate	SEHD
Autism Spectrum Disorder	Certificate	SEHD
Biology—Biotechnology	Certificate	CLAS
Business-to-Business Marketing	Specialization*BUS	
Business-to-Consumer Marketing	Specialization*BUS	
Business Strategy	Specialization*BUS	
Change Management	Specialization*BUS	
Content Instruction for English Language Learners (CIEL)	Certificate	SEHD
Communication—Interactive Media, Public Relations, Technical and Professional Communication	Certificate	CLAS
Corporate Financial Management	Specialization*BUS	
Culturally Responsive Urban Educator	Certificate	SEHD
Decision Sciences	Specialization*BUS	
Design Build	Certificate	CAP
Digital Storytelling	Certificate	SEHD
Domestic Violence	Certificate	SPA
Early Literacy (Online)	Certificate	SEHD
English—Teaching English to Speakers of Other Languages	Certificate	CLAS
Enterprise Technology Management	Specialization*BUS	
Entrepreneurship	Specialization*BUS	
Environmental Policy, Management and Law	Certificate	SPA

Environmental Sciences—Air Quality, Ecosystems, Environmental Health, Geospatial Analysis, Hazardous Waste, Water Quality	Certificate	CLAS
Finance	Specialization*	BUS
Financial Analyst	Specialization*	BUS
Geographic Information Systems (GIS)	Certificate	CEAS
Geospatial Information Science	Certificate	CAP
Historic Preservation	Certificate	CAP
History—Historic Preservation	Certificate	CLAS
Homeland Security and Emergency Management	Certificate	SPA
Human Resources Management	Specialization*	BUS
Information Systems	Specialization*	BUS
International Business	Specialization*	BUS
Investment Management	Specialization*	BUS
Literacy and Language Development for ELL	Certificate	SEHD
Local Government Administration	Certificate	SPA
Marketing	Specialization*	BUS
Math Education	Certificate	SEHD
Mathematics—Applied Statistics, Computational Biology	Certificate	CLAS
Nonprofit Management	Certificate	SPA
Physics—Scientific Foundations of Technical Innovation	Certificate	CLAS
Services Management	Specialization*	BUS
Social Sciences—Women’s Studies	Certificate	CLAS
Teacher Leadership	Certificate	SEHD
Teaching English to Speakers of Other Languages (TESOL)	Certificate	SEHD

## **At A Glance: Where to Find Financial, Registration and Admissions Information and Forms**

Not sure where to find residency forms or information about College Opportunity Fund vouchers? Don't know the difference between the registrar and the bursar? Here's a quick guide to finding what you need.

## **Admissions**

CU-Denver Building Annex

303-556-2704

[www.ucdenver.edu/Admissions](http://www.ucdenver.edu/Admissions)

### **The Office of Admissions can help you with:**

Applications for admission: pick up, drop off, application fee payment, how to apply, admission criteria, admission status

Information about establishing Colorado residency (domicile) for tuition purposes

Residency petitions and other forms

General transfer credit information

General UC Denver information

Scholarship guides

Talk to an admission counselor

Take a campus tour

## **Bursar**

North Classroom, 1003

303-315-2710

[www.ucdenver.edu/Bursar](http://www.ucdenver.edu/Bursar)

### **Visit the bursar's office for:**

Application fees payments by credit card

College Opportunity Fund (vouchers)

Departmental deposit transactions

Payment of tuition and fees

Refunds

Student account reconciliation

Student Service Center—one-stop processing for bursar, financial aid, registration and admission functions

Third-party billing

## **Financial Aid**

North Classroom, 1030

303-556-2886

[www.cudenver.edu/FinAid](http://www.cudenver.edu/FinAid)

### **The Financial Aid Office can help you find:**

Free Application for Federal Student Aid (FAFSA) [www.fafsa.ed.gov](http://www.fafsa.ed.gov)

Grant, work-study and student loan information

Short-term loans

University application for financial aid and other forms

Financial aid satisfactory academic progress policies  
General financial aid information, policies and procedures

### **Registrar**

CU-Denver Building Annex, 100  
303-556-2389  
[www.ucdenver.edu/Registrar](http://www.ucdenver.edu/Registrar)

#### **Visit the Office of the Registrar for:**

Class registration  
Course descriptions  
Diplomas  
Enrollment verification  
Grades and GPA  
Name and record update  
Schedule adjustment (drop/add) forms  
Schedule planner (online course schedule)  
SMART (online registration system)  
Special tuition rate information  
Student records, confidentiality request  
Transcripts  
Tuition appeals

### **Student Debt Management**

North Classroom, 1003  
303-556-2937  
[www.ucdenver.edu/admin/studentfinancialservices/debtmanagement](http://www.ucdenver.edu/admin/studentfinancialservices/debtmanagement)

#### **Representatives from Student Debt Management can help you with:**

Past due tuition collection  
Student loan processing for institutional loans

## **At A Glance: Downtown Denver and Auraria**

### **Location**

Speer Boulevard and Auraria Parkway

## **Auraria Campus Facts**

Opened in 1976

Serves three institutions and nearly 43,000 students

Largest campus in Colorado

Operates seven days per week

Students range in age from 16 to 80

27% are ethnic minorities

Approximately 80% work full- or part-time off campus

Local Attractions

**Denver Performing Arts Complex.** The second largest performing arts facility in the country and the site of countless symphony concerts, operas, regional theatre, Broadway shows, dance and cabaret performances.

The **Pepsi Center.** Home to the NBA Denver Nuggets, the Stanley-Cup winning Colorado Avalanche, the 2005 football arena champion Colorado Crush, the 2006 national lacrosse champions, the Colorado Mammoth and major concerts.

Unique shops and restaurants along Market Street in **LoDo** (Lower Downtown) and on the **16th Street Mall.**

**Coors Field.** Home of the Major League Colorado Rockies.

**Invesco Field at Mile High.** Home of the Super Bowl champion Denver Broncos

**Parking**

18 parking lots/structures on campus

6,800 parking spaces

Overflow parking at the Pepsi Center

**Dining on Campus**

*Tivoli First Floor Food Court*

Union Dog

Wok & Roll

McDonald's

Subway

Taco Bell

*Tivoli Second Floor*

Pete's Arena, 229

Quick Zone, 271

Cimarron Café & Grill, 240

*Around Campus*

Canteen-Stop Gap

South Classroom

Courtyard Café Express

and our latest professional lacrosse franchise, the Outlaws.

The **Denver Art Museum** with its fabulous Native American, contemporary and New World collections, and the stunning new Daniel Libeskind-designed addition.

The **Denver Public Library**, which according to Hennen's American Public Library Ratings, is one of the top 10 libraries in the country and is itself an architectural beauty.

The **Colorado Capitol**, the gold-domed seat of state government.

**Larimer Square**, located in downtown Denver's historic district, offers dining, shopping and nightlife.

## Campus Map

<http://www.ahec.edu/campusmaps/maps.htm>

## Transportation

### *Light Rail*

Colfax at Auraria Station (Lines D, F and H)

Auraria West Station (Lines C and E)

### *RTD (Bus) Routes*

Auraria Parkway, Routes 1 and AF

Larimer and 12th Street, Routes 2, 12 and 15

Auraria Library

Courtyard Café

North Classroom

Einstein Bros Bagels

The Mercantile, 906 Curtis Street

Good Stuff, crossroads between Library and Arts Building

Colorado Coffee South

N.E. Entrance

5th Street Café

Administration Building, first floor

Colfax at Osage, Routes 16, 16HD, 30 and 31

## At a Glance: Anschutz Medical Campus

### Students\*

#### Graduate School:

†Students below are shared with the Graduate School

#### School of Medicine: 1,297

Medical Students Subtotal: 620

DPT Students Subtotal: 137

†Graduate Students Subtotal: 354

MPAS Physician Asst Students Subtotal: 120

Nondegree Students Subtotal: 66

#### School of Dental Medicine: 221

Dental Students Subtotal: 200

Undergraduate Dental Hygiene Students

Subtotal: 21

#### College of Nursing: 650

DNP Students Subtotal: 38

†MS, PhD Graduate Students Subtotal: 198

Undergraduate Students Subtotal: 414

#### School of Pharmacy: 605

PharmD Students Subtotal: 551

†Graduate Student Subtotal: 54

#### Colorado School of Public Health: 226

### Student Organizations

Academy of Students of Pharmacy/ASP-APHA

All aBout Couples—ABC

Alternatives in Science

American Association of Dental Education

American Association of Women Dentists

American Society of Clinical Pharmacy

American Student Dental Association

American Medical Student Association/AMSA

Christian Health Fellowship  
Colorado School of Public Health Student Council

Colorado Society for Health-Systems Pharmacists

Colorado Student Nurses Association

Complementary, Alternative, and Integrative

Medicine Student Interest Group (CAIMSIG)

MPH Students Subtotal: 92

†Graduate Student Subtotal: 58

Nondegree Students Subtotal: 76

**Anschutz Medical Campus Total: 2,999**

Faculty-FT\*

**AMC Total: 1,842**

Dental Medicine: 64

Medicine: 1,617

Nursing: 65

Pharmacy: 58

Public Health: 38

**Degree Programs**

**GRADUATE SCHOOL**

§ Programs below are shared with the Graduate School

**SCHOOL OF DENTAL MEDICINE**

Dental Surgery: DDS

**SCHOOL OF MEDICINE**

Biochemistry: PhD§

Biophysics and Genetics: MS, PhD§

Cell and Developmental Biology: PhD§

Clinical Science: MSCS, PhD§

Experimental Pathology: PhD§

Child Health Associate/Physician Assistant: MPAS

Medical Science: BS

CU Student Nurses Association  
(CUSNA)

Cycling Team

Dental Student Council

Dental Student Fraternities:  
Alpha Omega,

Delta Sigma Delta

Emergency Medicine Interest  
Group

Graduate Student Council

Health Professionals for Social  
Responsibility

Medical Student Council

Melomania—HSC Orchestra

National Community  
Pharmacists Association

Nutrition and Preventive Health  
Student

Interest Group

Oyate—Diversity Student  
Council

Positive Approaches to  
Wellness for Students

(PAWS)—use of animals/pets  
in therapy

Pharmacists for Christ

Pharmacy Student Council

Phi Delta Chi—School of  
Pharmacy

Phi Delta Epsilon—School of  
Medicine

Phi Lambda Sigma/Alpha Xi  
Chapter—

Pharmacy

Medicine: MD

Microbiology and Immunology: PhD§

Neuroscience: PhD§

Pharmacology: PhD§

Physical Therapy: DPT

Physiology: PhD§

### **COLLEGE OF NURSING**

Nursing: BS, MS§, DNP, PhD§

### **SCHOOL OF PHARMACY**

Pharmaceutical Sciences: PhD§

Pharmacy : PharmD

Toxicology: PhD§

### **COLORADO SCHOOL OF PUBLIC HEALTH**

Analytic Health Sciences: PhD§

Biostatistics: MS§

Public Health: MPH

Phi Rho Sigma

Prism—GLBTI and Supporters

Reproductive Health Interest  
Group

Rho Chi—Pharmacy Honor  
Society

Rural Health Network

Sigma Theta Tau—International  
Honor Society of Nursing, Alpha  
Kappa Chapter-At-Large

Silver Society—Child Health  
Associate/

Physician Assistant Student  
Society

Student Academy of the  
American Academy

of Physician Assistants  
(SAAAPA)

Student Interest Group in  
Neurology

Student National Medical  
Association

Student National  
Pharmaceutical Association

Student Senate—HSC Student  
Governance

Students for Global Health

## **Bragging Rights**

*U.S. News & World Report,  
America's Best*

Graduate Schools: See At A  
Glance: UC Denver.

One of the country's most  
selective schools

of dental medicine.

Colorado's only School of  
Medicine.

Region's only school of public  
health.

The College of Nursing  
instituted the first

nurse practitioner and school  
nurse

programs in the U.S.

College of Nursing had the first  
doctor of

nursing practice (DNP)  
program in the

Rocky Mountain region, and  
one of the

first 10 DNP programs in the  
U.S.

Medical students collectively  
donate 22,000

hours of community service  
each year.

The Child Health  
Associate/Physician

Assistant Program is the only  
pediatric

physician assistant program in  
the country.

The College of Nursing has a  
30-year history

of distance education—with  
more than

50% of courses available  
online today.

Sidney Altman, PhD, 1989  
Nobel Prize

Winner in chemistry is an  
alumnus of the

Graduate School.

College of Nursing PhD  
program initiated in

1978 with over 200 graduates  
worldwide in

nursing research and  
leadership positions.

### **National Institutes of Health (NIH) Rankings**

In 2008, the School of  
Pharmacy ranked third

in percentage of PharmD  
faculty with NIH

funding; third in the nation for  
NIH individual

grant awards per PhD faculty;  
and ninth

in the nation for total NIH  
funding.

Together with its five affiliated  
hospital partners,

the School of Medicine ranks  
fourth of 75

public medical schools in the  
country for

NIH research expenditures  
(14th of 125

among all U.S. medical  
schools).

Physical Therapy Program has  
provided 60

consecutive years of  
accredited physical  
therapy education.

\*Fall 2008 end-of-term enrollment data

‡Fiscal Year 2007-2008 data

## At A Glance: International Affairs

### International Students\* (Fall 2008 data)

On the Downtown Campus: 629

Undergraduate: 251

Graduate: 378

### Number of international faculty in 2008–2009:

19 Downtown Campus

37 Anschutz Medical Campus

## International Student Organizations on Campus

American Indian Student Association

Asian Student Alliance

Chinese Student Association

Indian Student Organization

International Business Student Network (IBSN)

Korean Student Association

Mongolian Student Club

Muslim Intent on Learning and Activism (MILA)

Muslim Student Association

South Asian Student Association

Students hail from 135 nations including:

Albania Algeria Angola Antilles Argentina Armenia Australia Austria Azerba  
ijan Bahrain Bangladesh Barbados Belarus Belgium Benin Bosnia-  
Hercegovina Botswana Brazil Bulgaria Burkina Faso Cambodia Cameroon  
Canada Chad Chile China Colombia D.R. of Congo Costa Rica Cote  
D'Ivoire Croatia Cyprus Czech  
Republic Denmark Ecuador Egypt Eritrea Estonia Ethiopia Finland France  
Nigeria Norway Gambia Georgia Germany Ghana Greece Guatemala Guine  
a Guyana Haiti Hong Kong  
(S.A.R) Hungary India Indonesia Iran Israel Italy Jamaica Japan Jordan  
Kazakhstan Kenya Korea Kyrgyzstan Kuwait Laos Latvia Lebanon Liberia  
Lithuania Malaysia Mali Mexico Micronesia Moldova Mongolia Morocco Ne

pal Netherlands New Zealand Oman Pakistan Panama Paraguay Peru Philippines Poland Portugal Qatar Romania Russia Rwanda Saudi Arabia Sierra Leone Singapore Slovenia South Africa Spain Sri Lanka Sudan Swaziland Sweden Switzerland Syria Taiwan Tanzania Thailand Tunisia Turkey Uganda Ukraine United Arab Emirates United Kingdom Uzbekistan Venezuela Vietnam Yugoslavia Zambia Zimbabwe

**Companies that have hired our students**

University of Colorado Hospital  
 The Bell Policy Center  
 Kaiser Permanente  
 Echostar  
 Fusion Global Partners  
 Cascade Engineering Services, Inc  
 Protecto Wrap  
 Sunflower Trading Inc  
 Genentech, Inc.  
 Covidien  
 Maytas Solutions Inc  
 National Jewish Health  
 Navjoy Consulting Service, Inc  
 Parsons Brinckerhoff  
 CiviCore LLC  
 Stanley Consultants, Inc.  
 Anadarko Petroleum Corporation  
 Adecco Engineering & Technical  
 WealthTouch  
 Winter & Company  
 CVS/pharmacy  
 Willis of New York, Inc.  
 King Soopers Pharmacy  
 Geocal, Inc.  
 Glass & Lewis Co  
 Walgreens, Pharmacy  
 Aerotek, Inc.  
 Colorado Chinese Language School

**Bragging Rights**

Denver is known worldwide as the “Mile High City,” because it’s situated at an altitude of 5,280 feet (1.61 kilometers). It is home to 2.5 million people and is the Colorado state capital.

Denver is located at the base of the Rocky Mountains—25 ski resorts are located within a two-hour drive.

The sun shines in Colorado 300 days per year, so you’ll have beautiful weather to enjoy the nation’s largest park system.

In addition to an extensive public transportation system, you can bike along 650 miles (1,046 kilometers) of paved paths around Denver.

See Campus Life for additional information about the UC Denver campus.

**Testimonials**

“I consider myself highly privileged to be part of UC Denver. The Downtown Campus has the best of both worlds—it’s nestled right in the heart of the city and it’s a very self-sufficient campus... I am extremely happy with the conceptual knowledge and strength I have garnered from my courses.” Tina Rajiv Mathew, India

“I have received nothing but the most gracious attention to my needs as an international student at UC Denver—starting from the admissions process, moving through the orientation, and finally settling down in this place of beauty. I would like to thank the staff of International Admissions for making that easy, and all the people of UC Denver for their gentleness and support.” Ahmad Ali Al-Omari, Jordan

“I am not just pursuing academics in Denver: I have learned first-hand how to navigate cultural differences, have improved my English language, writing and speaking skills and have gained business insight. Because of my experiences in Denver and at the

Denver Montclair  
International School

university, when I graduate, I'll step into the world marketplace with confidence." Roman Buzinov, Russia

"Being at UC Denver, I can not only work closely with world famous research-oriented professors, but also enjoy the culturally enriched city, the Mile High Denver." WuWeijia, China

"Professors are not only teachers, they are friends who make the transition to the real world easier, especially for someone from a different culture. I will never forget my experience here." Juan Carlos Hernandez, Peru

\*Fall 2007 census enrollment data.

## At A Glance: CU Online

### Students\*

Online enrollments 2007-2008: 7,103

UC Denver students taking online courses in FY 2007-2008: 31%

### Faculty\*

152 professors

### Number of Online Courses

217

### Degree Programs

Bachelor of arts in English writing (BA)

Bachelor of arts in nursing, *RN to BS* (BS)

Bachelor of arts in sociology (BA)

### Bragging Rights

The Downtown Campus has had 69,915

online enrollments since CU Online's inception in

1996...That's enough to fill every seat in Coors field and still

Doctor of nursing practice (DNP)	have 1,200 extra people to sell peanuts and hotdogs!
Doctor of pharmacy, <i>Nontraditional pharmD (NTPD) - Extended studies</i>	
Doctor of philosophy (PhD) in nursing	CU Online started in 1996...two years later, Google, iMac
Master of arts in early childhood education (MA)	and MySpace were launched. Three years after that,
Master of arts in information and learning technologies (MA), <i>eLearning design and implementation</i>	Wikipedia, Windows XP and iPod were released.
Master of arts in information and learning technologies (MA),  <i>School library</i>	CU Online has won the "Eddy" as the best educational universitysite on the Web by the Northwest Center for Emerging Technologies.
Master of business administration (MBA)	
Master of engineering (MEng), <i>Geographic information systems</i>	
Master of public administration (MPA)	
Master of science in information systems (MS) <i>Enterprise technology management Systems development and implementation</i>	
Master of science in management and organization (MS), <i>Managing for sustainability</i>	

**Certificates, Modules and Other Online Programs**

Certificate in palliative care

Clinical educator certificate

Designing eLearning environments  
certificate

Early childhood special education, specialist  
license

Early literacy certificate

Health care informatics certificate

International certificate in human care and  
healing

Nonprofit management certificate

Professional writing certificate

Special education generalist endorsement

Teaching English to speakers of other  
languages (TESOL) certificate

## **Accreditation**

CU Online is accredited through the North  
Central Association of Colleges and  
Schools (NCACS) and each program is  
accredited through the individual school and  
college.

\*Fiscal Year 2007-2008 end-of-term data

Student statistics may or may not be duplicated in profiles of other schools and colleges. Faculty statistics are duplicated in other profiles.

## **Complete List of Courses—All Schools and Colleges (pdf may take some time to load)**

<http://catalog.ucdenver.edu/mime/media/1/469/09.10.CourseDescriptions.pdf>

## **At A Glance: Schools and Colleges**

# At A Glance: College of Architecture and Planning

The College of Architecture and Planning is a multi-campus college with graduate programs on the Downtown Campus and undergraduate programs on the Boulder campus. The statistics below apply to graduate programs only.

## Students\*

Graduate: 526

## Degrees Awarded 2008‡

359

Graduate: 183

Undergraduate (Boulder): 176

## Faculty\*†

Regular: 49

Lecturers: 51

## Student-Faculty Ratio‡

10:1

## Graduate Degree Programs

Architecture, MArch

Design and Planning, PhD

Landscape Architecture, MLA

Urban and Regional Planning, MURP

## Sample Companies Hiring Alumni

Bennett Wagner & Grody Architects

Buchanan Yonushewski Group

Cities of Aurora, Boulder, Lakewood  
and Longmont

Civitas

David Owen Tryba Architects

Davis Partnership

Design Workshop

DHM Design

EDAW

National Forest Service

New Town Builders

Pei Cobb Freed & Partners

## Research Centers

*Children, Youth and Environments  
Center for*

*Research and Design* helps design  
and

planning professionals around the  
world

to promote the health, safety and  
welfare

of children and youth.

*Colorado Center for Community  
Development*

Urban Design, MUD

**Key Areas**

Emerging Design Practices

Sustainable Urbanism

Healthy Environments

Cultural Heritage

**Accreditation**

Landscape Architecture Accreditation Board

(LAAB)

National Architecture Accrediting Board

(NAAB)

Planning Accreditation Board

(PAB)

**Student Organizations:**

American Institute of Architecture Students

(AIAS)

American Planning Association for Students

(APAS)

American Society of Landscape

Architecture Students (ASLAS)

**Alumni**

Graduate: 3,739

**Bragging Rights**

is a public service unit that for 30 years

has provided Colorado with design and

planning assistance on a wide range of

open space, development and community

service issues.

*Center of Preservation Research* helps

Colorado protect its heritage in the

built environment, through research

and documentation of historic buildings

and landscapes.

*Colorado Center for Sustainable Urbanism*

facilitates the conversation among

Colorado designers, planners, and

developers to envision future communities

and towns that will enhance our quality of

life and moderate the impact of the state's

explosive growth

<p>Solar powered houses designed and constructed by a team of CU architecture and planning and architectural engineering students won the first two national Department of Energy Solar Decathlon Competitions held in 2002 and 2005.</p> <p>A team of architecture and planning graduate students and Leeds Business School students won the prestigious national Urban Land Institute Gerald D. Hines Student Urban Design Competition in spring 2005. They received a \$50,000 prize from ULI and a proclamation from the Denver City Council.</p> <p>Our mentoring program was named one of three Best Practices in Mentorship nationally by the American Institute of Architects in 2005.</p> <p>For three years in a row, our students have won four of the top five awards in the regional U.S. Green Building Council Natural Talent Design Competition.</p>	<p>Two MArch students won first prize and third prize in the Metal Construction Association 2008 Student Design Competition.</p> <p>A 2007 MArch graduate had a design selected as House of the Month in the June 2008 edition of <i>Architectural Record</i>.</p> <p>Our "Trailer-Wrap" student-designed and student-built trailer house won several awards, including from AIA Denver and AIA Gulf States Region.</p> <p>Two MArch students won first place in the 2007 American Institute of Architecture Students (AIAS) national design review competition in the "open plan" category.</p>
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\*Fall 2008 end-of-term enrollment data

‡Fiscal year 2007-2008 data

†Faculty numbers represent both campuses

## At a Glance: College of Arts & Media

### Students\*

1,227

Undergraduate: 1,216

Graduate: 11

### Degrees Awarded 2008\*

213

Undergraduate: 208

Graduate: 5

### Faculty‡

Regular: 58

Lecturers: 49

### Student-Faculty Ratio‡

13:1

### Undergraduate Degree Programs

Fine Arts (BA)—Art History, Drawing, Painting, Photography, Sculpture

Fine Arts (BFA)—Drawing, 3-D

Graphics and Animation, Digital Design, Painting, Photography, Transmedia, Sculpture

Theatre, Film and Television (BA)

Theatre, Film and Television (BFA) —

Production, Development

and Direction; Film/Video

(Cinematography,

Post-Production,

Writing/Directing); Performance

### Accreditation

National Association of Schools of Music (NASM)

### Research Center

National Center for Media Forensics

### Student Organizations

MEISA—Music Entertainment Industry Student Association (MEIS)

CAM Records (MEIS)

AES—Audio Engineer Society (MEIS)

Sweetening Club (MEIS/TFVP)

AHSA—Art History Student Association

Sculpture Club

Theatre Buffs

Music (BS)—Music Industry Studies  
(technology  
or business focus), Performance,  
Recording Arts

**Alumni ‡**

1,183

Undergraduate: 98%

Graduate: 2%

**Graduate Degree Program**

Recording Arts (MS)

**Minors**

*Department of Visual Arts*

Art History

Digital Design

Photography

Sculpture

Studio Art

**Sample Companies Hiring Alumni**

Fox Sports

High Noon Productions

Lucas Arts

NBC

Starz-Encore

*Department of Music and Entertainment Industry Studies* **Bragging Rights**

General Musicianship

Music Industry Studies

*Department of Theatre, Film and Video Production*

Theatre, Film and Television

The alumni group, the Fray, won three 2006 Billboard awards and received two Grammy nominations in 2007.

The student record label, CAM Records released “Colorado Cuts, Vol. 2” in April 2009. Their last release, “Colorado Cuts,” was reviewed in *The New York Times*. The label has produced eight CDs to date.

Assistant Professor Judy Coe received a Fulbright scholarship award for research related to alternative expressions in Irish music and song.

Gregory Walker, associate professor of music, was given an ASCAPPLUS award in the Concert Music Division by the American Society of Composers.

Carol Golemboski, assistant professor of photography, won first prize in the prestigious Center's Project Competition (formerly known as the Santa Fe Center for Photography).

The Starz Film Center was named "Best of Denver" in the 2007 issue of *Westword* as "Best Movie Theatre—Programming."

\*Fall 2008 end-of-term enrollment data

‡Fiscal Year 2007-2008 data

## **At A Glance: Business School**

### **Students\***

2,584

Undergraduate: 1,484

Graduate: 1,100

### **Degrees Awarded 2008‡**

Total: 779

Undergraduate: 342

Graduate: 437

### **Faculty\***

Regular: 66

Lecturers: 37

### **Student-Faculty Ratio‡**

## **Undergraduate Majors in Business Administration**

Accounting

Finance

Human Resource Management

Information Systems

International Business

Management

Marketing

### **Areas of Emphases**

Accounting and Information Systems

Financial Management

Human Resources Management

Marketing

### **Graduate Degree Programs**

Master of Business Administration (MBA)

Master of Science (MS) in Accounting, Decision Sciences, Finance, Global Energy Management, Health Administration, Information Systems, Management and Marketing

Master of Science in International Business (MSIB)

Doctor of Philosophy (PhD)

### **MBA Program Formats**

Professional

Accelerated 11-month

Health Administration

### **Executive Programs**

## **Student Organizations**

African American Business Student Alliance (AABSA)

Aggressive Alliance of Competitive Marketers (AACM)

American College of Healthcare Executives (ACHE)

Beta Alpha Psi—national honorary scholastic fraternity in

accounting

Beta Gamma Sigma—national honorary scholastic fraternity in

business

Financial Management Association International (FMAI)

Health Administration Student Organization (HASO)

Information Systems Association (ISA)

International Business Student Network

MBA Student Organization (MBASO)

Medical Group Management Association

Minority Business Student Organization

Phi Chi Theta—national professional business and economics

fraternity

Society for Human Resources Management

MBA

UC Denver Marketing Club

MBA—health administration

**Accreditation**

Association for the Advancement of Collegiate Schools of

Business – International (AACSB International)

Commission on Accreditation of Healthcare Management

Education (CAHME)

**Research Centers**

Bard Center for Entrepreneurship Development

Center for Health Administration

Center for Information Technology Innovation

**Alumni‡**

19,915

Undergraduate: 43%

Graduate: 57%

Sample Companies Hiring Alumni

Coors

Ernst & Young

Federal Reserve Bank of Kansas City

IBM

Janus Capital Group

Johns Manville

Lockheed Martin

Price Waterhouse Coopers

Qwest Communication

Wells Fargo

**Advisory Boards representing more than 160 organizations/companies:**

Bard Center Advisory Council

Health Administration Executive Advisory Council

Center for Information Technology and Innovation (CITI)

Advisory Council

Board of Advisors for the Business School

## **Bragging Rights**

Entrepreneurship program among top 50 regional programs in

U.S. (*Entrepreneur* magazine)

Executive MBA in health administration one of top MBA

physician programs (*Modern Physician* magazine and

*U.S. News & World Report*)

AACSB accreditation places us among top 15 percent of

business schools internationally 150 partnerships with

business community

\*Fall 2008 end-of-term enrollment data ‡Fiscal Year 2007-2008 data

## **At A Glance: School of Education & Human Development**

### **Students\***

1,247

Graduate: 1,247

### **Degrees Awarded 2008‡**

Graduate: 467

### **Faculty\***

Regular: 64

Lecturers: 95

### **Research Centers**

Center for Continuing Education and Professional Learning

Center for Transforming Learning and Teaching (CTLT)

Colorado Principal's Center

Culturally Responsive Urban Education (CRUE)

Evaluation Center

Front Range Board of Cooperative Educational Services for

Teacher Leadership (BOCES)

## **Student-Faculty Ratio‡**

11:1

## **Initial Licensure Programs**

Administrator

Elementary Education

Secondary Education (all core subjects)

K-12 Special Education

Early Childhood Special Education

Principal

## **College of Liberal Arts and Sciences Degrees with Teaching Licenses**

Individually Structured Major with

Elementary Education License (BA)

English Literature with Secondary

English License (BA)

French with Secondary Foreign  
Language

(French) License (BA)

History with Secondary Math License  
(BS)

Mathematics with Secondary Math

License (BS)

Political Science with Secondary Social

Studies License (BA)

Laboratory for Educational Assessment  
Research and

innovation (LEARN)

Paraeducator Resource and Research Center  
(PAR<sub>2</sub>A)

Partnerships for Evidenced Based Practices in  
Early

Learning (PEBPEL)

Positive Early Learning Experiences Center  
(PELE)

Professional Development in Autism Center  
(PDA)

## **Alumni ‡**

9,849

Undergraduate: 3%

Graduate: 97%

## **Sample Companies Hiring Alumni**

Adams County School District 12

Adams County School District 50

Aurora Public Schools

Denver Public Schools

Jefferson County Public Schools

## **Bragging Rights**

Largest graduate school of education  
in Colorado.

The School of Education & Human  
focuses on diversity and equity

Spanish with Secondary Foreign Language

(Spanish) License (BA)

## **Graduate Programs**

Administrative Leadership and

Policy Studies

Counseling Psychology and Counselor

Education

Curriculum and Instruction

(English, linguistically diverse, literacy,

math, science and social studies)

Early Childhood Education

Educational Psychology

Educational Studies and Research<sup>+</sup>

Information and Learning Technologies

Leadership for Educational Equity<sup>+</sup>

(School Library)

School Psychology

Special Education

<sup>+</sup>Under review for approval at time of publication.

issues in education and counseling.

Faculty hold \$38 million in grants (about

\$8 million per year). Faculty research

focuses on diversity and equity

issues in education and counseling.

The school's professional development

schools are a national role model

in teacher education.

## **Accreditation**

Colorado Department of Education

Colorado Department of Higher Education

National Council for Accreditation of  
Teacher Education (NCATE)  
Council for Accreditation of Counseling  
and Related Educational Programs  
(CACREP)  
National Association of School  
Psychologists (NASP)

\*Fall 2008 end-of-term enrollment data

‡Fiscal Year 2007-2008 data

## At A Glance: College of Engineering and Applied Science

### Students\*

854

Undergraduate: 509

Graduate: 345

### Degrees Awarded 2008‡

224

Undergraduate: 124

Graduate: 100

### Faculty\*

Regular: 37

Lecturers: 34

### Student-Faculty Ratio‡

11:1

### Alumni‡

6,463

Undergraduate: 71%

Graduate: 29%

Strong alumni network for job  
placement.

### Engineering Leadership Council

*James D. Bartlett Jr.*, Sopheon

*Paul E. Bartlett*, Dean Emeritus

*Francis Lee Belisle*

*David Bennetts*, Urban Drainage &  
Flood Control District

*Stanley R. Bull*, National Renewable  
Energy Laboratory

*Ralph W. Christie Jr.*, Merrick &  
Company

*Robert L. Clevenger*, DMJM Harris

**Undergraduate Degree Programs**

Civil Engineering  
Computer Science and Engineering  
Electrical Engineering  
Mechanical Engineering

**Graduate Degree Programs**

Civil Engineering, MS, PhD  
Computer Science, MS  
Computer Science and Information  
Systems, PhD  
Electrical Engineering, MS  
Engineering, MEng  
Mechanical Engineering, MS

**Other Options**

BS in engineering and business administration  
Premedicine (bioengineering)  
Computational biology

**Research Centers**

Center for Geotechnical Engineering Science  
Colorado Advanced Photonics Technology  
Laboratory  
Facility for Advanced Spatial Technology  
Transportation Research Center

**Accreditation**

Accreditation Board for Engineering and Technology  
(ABET)

*Grady Cope*, Reata Engineering and  
Machine Works

*Lesley S. Craig*

*Carlos deMoraes*

*Michael J. Driver*, Patton Boggs, LLP

*Marcia Edwards*, Lockheed Martin

*Mary J. Gearhart*, Brown & Caldwell

*Mark Glidden*, CH2M HILL

*Richard Hepworth*, Hepworth-Pawlak  
Geotechnical, Inc.

*Tai-Dan Hsu*, Pacific Western  
Technologies, Ltd.

*Albert Knott*, Albert Knott &  
Associates

*Kathryn L. Lee*, Raytheon Company

*Tom Maceyka*, Sundyne Corporation

*Gary Meggison*, The Weitz Company

*J.J. O'Brien*, Washington Group  
International, Inc.

*Keith Platte*, R.W. Beck, Inc.

*Pedro C. Repetto*

*Arthur C. "Sandy" Riese*, EnSci, Inc.

*George Saliba*, Quantum

*Kristy Schloss*, Schloss Engineered  
Equipment, Inc.

*Barbara Schroeder*, Parsons  
Transportation Group, Inc.

*Narayan Shrestha*, SANN Research  
Institute

*Anne Stilson-Cope*, Corey Electrical  
Engineering, Inc.

*Doug Tashiro*

*George L. Thorn*, Mile High  
Development, LLC

*Donald G. White*

**Student Organizations**

American Society of Civil Engineers

American Society of Mechanical Engineers

Association for Computing Machinery

*Chi Epsilon*, honorary civil engineering  
society (invitation only)

Institute of Electrical and Electronic Engineers

Pi Tau Sigma, honorary mechanical  
engineering society (invitation only)

Student Advisory Panel

Society of Hispanic Professional Engineers

Society of Women Engineers

*Tau Beta Pi*, honorary engineering society  
(invitation only)

\*Fall 2008 end-of-term enrollment data ‡Fiscal year 2007-2008 data

**At A Glance: College of Liberal Arts and Sciences**

**Students\***

5,831

Undergraduate: 5,187

Graduate: 644

**Degrees Awarded 2008‡**

981

Undergraduate: 806

Graduate: 175

**Certificate Programs**

*Undergraduate*

Applied German Language Skills (Modern  
Languages)

Applied Statistics (Mathematical and Statistical  
Sciences)

Biotechnology (Biology)

Cultural Diversity Studies (Ethnic Studies)

## **Undergraduate Degree Programs**

Anthropology (BA)  
Biology (BS)  
Chemistry (BS)  
Communication (BA)  
Economics (BA)  
English (BA)  
    Creative Writing  
    Film Studies  
    Literature  
English Writing (BA)  
French (BA)  
    International Language and Culture  
    for the Professions  
Geography (BA)  
    Earth Sciences  
    Environmental Science  
    Environmental Studies  
    General  
    Urban Studies and Planning  
History (BA)  
Individually Structured Major (BA)  
International Studies (BA)  
Mathematics (BS)  
    Actuarial Science  
    Applied Mathematics

Ethics (Philosophy)  
Geographic Information Science  
(Geography/Environmental Sciences)  
Mediation (Communication)  
Professional Writing (English)  
Public Relations (Communication)  
Scientific Foundations of Technical Innovation  
(Physics)  
Technical and Professional Communication  
(Communication)

## *Graduate*

Applied Statistics (Mathematical and Statistical  
Sciences)  
Biotechnology (Biology)  
Computational Biology (Mathematical and  
Statistical Sciences)  
Environmental Sciences  
    Six options: air quality, ecosystems,  
    environmental health,  
    geospatial analysis, hazardous waste and  
    water quality  
Historic Preservation (History)  
Public Relations (Communication)  
Scientific Foundations of Technical Innovation  
(Physics)  
Teaching English to Speakers of Other  
Languages (English)  
Technical and Professional Communication  
(Communication)  
Women's Studies (Master of Social Science)

Computer Science

Discrete Mathematics

Mathematics Education

Probability and Statistics

Pure Mathematics

Philosophy (BA)

Physics (BS)

Biophysics and Medical Physics

Pure and Applied Physics

Political Science (BA)

Politics and Public Policy

Psychology (BA, BS)

Sociology (BA)

Spanish (BA)

International Language and Culture  
for the Professions

### **Minor Programs**

Anthropology

Astrophysics

Biology

Chemistry

Chinese Studies

Communication

Community Health Science

Creative Writing

Economics

### **Faculty\***

Regular: 233

Lecturers: 132

### **Student-Faculty Ratio‡**

17:1

### **Student Organizations**

Aristotle's Porch, online English community

Chemistry Club

Colorado International Forum student

organization (International Studies)

*Copper Nickel*, literary magazine published

by the students and faculty of UC Denver

Math Club

Phi AlphaTheta, national professional history

society, UC Denver chapter

Philosophy Club

Physics Club

Political Science Graduate Student Club

Pre-Law Society

Psi Chi National Honor Society, UC Denver

chapter (Psychology);

Sigma Delta Pi, Sigma Omicron Chapter

(National Collegiate Hispanic Honor Society)

Sociology Student Club

Educational Studies

Tri Beta Biological Society

English Literature

English Writing

**Alumni\***

Environmental Sciences

20,770

Ethics

Undergraduate: 81%

Ethnic Studies

Graduate: 19%

Film Studies

French

**Sample Companies Hiring Alumni**

Geography

AMC Cancer Research Center

Geology

American Humane Association

German

Amoco Oil

History

Channel 7 News

Law Studies

Colorado Prevention Center

Mathematics

Denver Museum of Nature and Science

Philosophy

Denver Public Schools

Physics

Harvard University

Political Science

Hughes Aircraft

Psychology

IBM

Religious Studies

Invesco

Social Justice

IPS-Zurich

Sociology

Kaiser Permanente

Spanish

Lawrence Livermore Labs

Sustainability

Level 3 Communications

Urban and Regional Planning

Lockheed Martin

Women's and Gender Studies

Los Alamos Labs

Merrill Lynch

**Graduate Degree Programs**

Optx Corporation

Anthropology (MA)

*Research concentrations:* medical anthropology, archaeological studies, biological anthropology, sustainable development and political ecology

Applied Mathematics (MS; PhD)

Biology (MS)

Chemistry (MS)

Clinical Health Psychology (PhD)

Communication (MA)

*Concentrations:* communication management, technical communication, doctoral preparation

Economics (MA)

English (MA)

*Concentrations:* literature, teaching of writing, applied linguistics

Environmental Sciences (MS)

*Concentrations:* air quality, ecosystems, environmental health, geospatial analysis, hazardous waste, water quality

Health and Behavioral Sciences (PhD)

History (MA)

*Concentrations:* European, global, public history, United States

Humanities (MH)

Oracle

Raytheon

StorageTek

The Children's Hospital

United States Geological Survey

### **Bragging Rights**

#### **CLAS Facts**

22 departments/programs

29% minority students

On the Downtown Campus, CLAS makes up 61% of undergraduate students, 14% of graduate students, 43% of faculty

48% success rate for medical school applications (five-year average)

### **Students and Faculty Nationally Recognized**

Harry Truman Scholar: Zara Snapp, undergraduate

National Science Foundation Graduate Fellow: Megan Wilson

Carnegie Foundation Teaching Award: Charlie Ferguson

Fulbright Fellows: Larry Anderson, John Brett, Jana Everett,

James Igoe, Steve Koester, Deborah Thomas, David Tracer

Elixir Press Award: Jake York

Published in *Nature and National Geographic*: Mike Greene

Integrated Sciences (MIS)

Political Science (MA)

*Concentration:* politics and public policy

Psychology (MA)

*Concentration:* clinical psychology

Social Science (MSS)

*Concentrations:* community health science,

international studies, society and

environment, women's and gender studies

Sociology (MA)

Spanish (MA)

Colorado Book Award for Fiction: Teague Bohlen

Bancroft Prize Winner: Thomas Andrews

### **Centers**

Center for Ethics and Community

Center for Computational Biology

Center for Computational Mathematics

Center for New Directions in Politics and Public Policy

Colorado Center for Public Humanities

Center for Research in Health and Behavioral Sciences

Fourth World Center for the Study of

Indigenous Law and Politics

### **Advisory/Leadership Councils**

Center for New Directions in Politics and

Public Policy Advisory Board

Ethnic Studies Community Advisory Board

Political Science Department Community

Advisory Board

### **Serving Colorado**

Denver Writing Project: Rick VanDeWeghe

Chase Community Service Award: Tony Robinson

"Dr. Colorado": Tom Noel

Smart-Girl Leadership Institute

Dinosaur Tracks Museum: Martin Lockley  
Urban Citizen Program: Political Science

\*Fall 2008 end-of-term enrollment data

‡Fiscal Year 2007-2008 data

## At A Glance: School of Public Affairs

### Students\*

427

Undergraduate: 95

Graduate: 332

### Degrees Awarded 2008‡

Graduate: 153

### Degree Programs

Bachelor of Arts in Criminal Justice (BA)

Master of Public Administration (MPA)

Optional concentrations in

local government

environmental policy, management and law

domestic violence

nonprofit management

### Accreditation

National Association of Schools of Public  
Affairs and Administration (NASPAA)

### Institutes and Centers

Institute for Policy Research  
and Implementation

Center on Domestic Violence

Wirth Chair in Environmental and  
Community Development Policy

Center for Education Policy Analysis

Center for Public/Private Sector Cooperation

Center for the Improvement of

Public Management

Center on Reinventing Public Education—  
Denver

### Bragging Rights

emergency management and homeland security

homeland defense

Executive and accelerated MPA options

Certificate in interpersonal violence and helath care

Master of Criminal Justice (MCJ)

Optional concentration in domestic violence

Doctor of Philosophy (PhD) in Public Affairs

Optional concentration in homeland security (pending funding)

The only public institution in Colorado authorized to grant graduate degrees in Public Affairs

Ranked 32nd nationally by *U.S. News & World Report*

Houses the editorial office of the *Public Administration Review* (PAR), the premier journal in the field of public affairs.

SPA students report a 100% job placement rate. (Survey respondents from 2002-2005)

Houses the *Policy Studies Journal* (PSJ), a cooperative production of The Public Policy Section of the American Political Science Association.

### **Faculty\***

Regular: 17

Lecturers: 22

### **Student-Faculty Ratio‡**

8:1

### **Alumni‡**

3,068

### **Sample Organizations Hiring Alumni**

State of Colorado

National Conference of State Legislatures

Arapahoe Library District

Environmental Protection Agency

Denver Public Schools

American Lung Association  
City and County of Denver  
Colorado Municipal League  
City of Aspen  
Colorado Coalition Against Domestic  
Violence  
Colorado Office of Legislative Auditing  
Bell Policy Center  
U.S. Park Service

\*Fall 2008 end-of-term enrollment data ‡Fiscal year 2007-2008 data

## Information for Undergraduate Students

*At UC Denver, five undergraduate schools and colleges (College of Arts & Media, Business School, College of Engineering and Applied Science, College of Liberal Arts and Sciences and School of Public Affairs) provide a diverse array of baccalaureate majors, minors, certificates and teacher licensure to meet the ever-challenging demands of a global society. Your undergraduate education consists of a core curriculum (general education), a major and elective courses (most areas of study). The campuswide core curriculum develops proficiency in writing and mathematics, cultivates a breadth of knowledge, promotes critical thinking, allows you the flexibility to meet your career goals and helps you develop sensitivity to cultural diversity and international perspectives.*

### Undergraduate Admissions

**Assistant Vice Chancellor for Enrollment Management:** Barbara Edwards

**Office:** 1250 West 14th Street—Annex

**Telephone:** 303-556-2704

**Fax:** 303-556-4838

**E-mail:** [admissions@ucdenver.edu](mailto:admissions@ucdenver.edu)

**Web site:** [www.ucdenver.edu/admissions](http://www.ucdenver.edu/admissions)

The UC Denver Downtown Campus seeks to identify applicants who are likely to be successful in an academic program of study. Admission decisions are based on many factors, the most important being:

- level of previous academic performance
- evidence of academic ability and accomplishment as indicated by scores on national aptitude tests
- evidence of maturity, motivation and potential for academic success

UC Denver may deny admission to new applicants or re-admission to former students whose credentials indicate an inability to assume obligations of performance and behavior deemed essential by the university.

After completing the application process, official notification of one's admissions status as an undergraduate, graduate or nondegree student is provided by the Office of Admissions. Letters from various schools and colleges indicating acceptance into a particular program are pending, subject to official notification of admission to the institution by the admissions office.

Students who are admitted pending receipt of additional documents or with unofficial documents will be permitted one term to submit the documents. If temporarily waived official documents are not received by the end of the initial term of attendance, registration for subsequent terms will be denied. If at any time additional credentials are received that affect the student's qualifications, the university reserves the right to change the admission decision.

Applicants who have not decided upon a major field of study will be considered for admission to the College of Liberal Arts and Sciences as undetermined majors. Students admitted as undetermined majors should declare a major as quickly as possible and no later than the end of their sophomore year.

All questions about admission to the Downtown Campus of UC Denver and requests for application forms should be directed to 303-556-2704 or [admissions@ucdenver.edu](mailto:admissions@ucdenver.edu). Send correspondence to:

Office of Admissions  
University of Colorado Denver  
Campus Box 167, P.O. Box 173364  
Denver, CO 80217-3364

## **Application Deadlines**

The university may change document/credential deadlines in accordance with enrollment demands. For the best scholarship and registration time considerations, applicants should apply and be admitted as early as possible. Admission to the university does not assure availability of specific courses. For an applicant to be considered for a specific term, all documents required for admission must be received in the Office of Admissions by the deadline for that term.

Applicants who are unable to meet the deadline may elect to be considered for a later term. Transfer students are reminded that they should allow sufficient time to have transcripts sent from institutions they have previously attended.

Advanced planning and early application are necessary for the timely admission of international students. International students are advised that it usually takes 60 days for credentials to reach admissions in the Office of International Affairs from international locations. See the Information for International Students chapter for more information.

## **Application Deadline for Priority Consideration (excluding music majors)**

*Fall:* July 22

*Spring:* December 1

*Summer:* May 3

Early application is strongly encouraged. Admission to the university does not assure specific course availability.

## **Minimum Academic Preparation Standards (MAPS)**

Students entering the University of Colorado who graduated from high school in 1988 or later are required to meet the following minimum academic preparation standards:

COLLEGE OF ARTS & MEDIA	<i>Years</i>
English (literature, composition, grammar), one year of speech/debate strongly recommended	4
Mathematics (excluding business and consumer mathematics)	3
Natural science	3
Social science	2
Foreign language (all units must be in a single language)	2
Academic elective or arts course	1
Total	15
BUSINESS SCHOOL	
English (one year of speech/debate and two years of composition are strongly recommended)	4
Mathematics (including at least two years of algebra and one year of geometry)	4
Natural science (including two years of laboratory science)	3
Social science (including history)	2
Foreign language (all units must be in a single language)	2
Academic electives (additional courses in English, foreign language, mathematics, natural or social science, not to include business courses)	1
Total	16

## COLLEGE OF ENGINEERING AND APPLIED SCIENCE

English (literature, composition, grammar), one year of speech/debate strongly recommended	4
Mathematics distributed as follows:	
Algebra	2
Geometry	1
Trigonometry and analytical geometry	1
Natural sciences (to include one unit physics and one unit chemistry; also to include two units of laboratory science)	3
Foreign language	2
Social science	2
Electives	1
Total	16

## COLLEGE OF LIBERAL ARTS AND SCIENCES

English (literature, composition, grammar) one year of speech/debate strongly recommended	4
Mathematics (excluding business and consumer mathematics)	3
Natural science	3
Social science	2
Foreign language (all units must be in a single language)	2
Academic elective	1
Total	15

## SCHOOL OF PUBLIC AFFAIRS

English (literature, composition, grammar) one year of speech/debate strongly recommended	4
Mathematics (excluding business and consumer mathematics)	3

Natural science	3
Social science	2
Foreign language (all units must be in a single language)	2
Academic elective	1
Total	15

Students with MAPS deficiencies may be admitted to the university provided they meet the other admission standards (e.g., test scores, rank in high school class, GPA) and provided they make up any deficiencies prior to graduation from the university. Students may make up MAPS deficiencies by successful completion of:

1. courses taken at CU
2. courses taken at other institutions of higher education
3. additional high school credits
4. credit-by-examination programs
5. other requirements as approved by each college on the Downtown Campus

## Admission Requirements for Freshmen

Freshman admission standards define the level of success and achievement necessary to be admitted to UC Denver and include factors that predict academic success, such as scores on the ACT or SAT, high school course work and GPA. Both the subjects the student has studied and how the student has performed will be factors that determine admission to the university.

New freshmen may apply for admission to the Colleges of Arts & Media, Engineering and Applied Science, Liberal Arts and Sciences, the School of Public Affairs and the Business School.

Applicants must be a high school graduates or have been awarded a High School Equivalency Certificate by completing the General Education Development (GED) test.

Freshman applicants who graduated from high school in spring of 2008 or later must meet the state of Colorado Higher Education Admission Requirements (HEAR).

For students who graduated in 2008 or 2009, the following minimum high school courses (units) are required:

English	4 years (units)
Mathematics	3 years (units)
Natural Science	3 years (units), 2 of which must be lab-based
Social Studies	3 years (units), 1 of which must be United States or world history
Academic Electives	2 years (units)

For students who graduate in 2010 or later, the following minimum high school courses (units) are required:

English	4 years (units)
Mathematics	4 years (units)
Natural Science	3 years (units), 2 of which must be lab-based
Social Studies	3 years (units), 1 of which must be United States or world history
Foreign Language	1 year (unit), must be in a single language
Academic Electives	2 years (units)

### **Admission Consideration**

Priority consideration for general admission is given to applicants who rank in the top 30 percent of their high school graduating class and present a composite score of 21 or higher on the ACT or a combined score of 950 or higher on the SAT. Applicants must have an admission index score of at least 93.

*Business applicants* will receive priority consideration if they graduated in the top 25 percent of their high school class and achieved a composite score of at least 26 on the ACT or 1100 on the SAT. Applicants who do not meet the admission requirements for direct admission to the Business School will be automatically considered for admission as prebusiness majors in the College of Liberal Arts and Sciences. For business admission, applicants must have an admission index score of 103.

*Engineering applicants* will receive priority consideration if they graduated in the top 25 percent of their high school class and achieved a composite score of at least 26 on the ACT with 28 on the mathematics section, or 1100 total on the SAT with 600 on the mathematics section. Applicants who do not meet the admissions requirements for direct admission to the College of Engineering will be automatically considered for admission as pre-engineering majors in the College of Liberal Arts and Sciences. For engineering admission, applicants must have an admission index score of 103.

All *music majors* in the College of Arts & Media (except music industry studies) are expected to have had previous experience in an applied music area. For performance students, two years of prior piano training are recommended. An audition is required, but can be deferred for students in the MIS track. In addition, students may apply only for fall semester and other application requirements as outlined on the music department Web site <http://cam.ucdenver.edu/meis> must be completed by the deadline date noted. Admission to the music major is selective, and qualified applicants are pooled and reviewed by an admissions committee. Interested students should contact the Department of Music at 303-556-3480, for audition and other application information.

Applicants for all departments who do not satisfy the requirements for priority consideration and/or HEAR unit requirements are reviewed on an individual basis.

## How to Apply

1. Students are encouraged to apply online at [www.ucdenver.edu/admissions](http://www.ucdenver.edu/admissions) or obtain an application for undergraduate admission from a Colorado high school counselor, from the Downtown Campus Office of Admissions in-person or by calling 303-556-2704, or at [www.ucdenver.edu/admissions](http://www.ucdenver.edu/admissions).
2. The application must be completed and sent to the Office of Admissions with a \$50 (subject to change) nonrefundable fee (check or money order only). For applicants who are granted admission but are unable to enroll for that term, the \$50 application fee will remain valid for 12 months, provided the Office of Admissions is informed of the intent to enroll for a later term and the student does not enroll at another college or university.
3. Students are required to have their high school send an official transcript of their high school grades, including class rank if available, to the Office of Admissions. Official transcripts are those sent by the issuing institution directly to: Office of Admissions, University of Colorado Denver, Campus Box 167, P.O. Box 173364, Denver, CO 80217-3364.  
*Hand-carried or faxed copies are not official.*
4. Students who did not graduate from high school are required to have a copy of their GED test scores and GED certificate sent directly from the certifying agency to the Downtown Campus Office of Admissions. Official high school transcripts must also be submitted but are not the basis of an admission decision.
5. Students are required to take either the ACT or the SAT and request that test scores be sent to the Downtown Campus (ACT code 0533, SAT code 4875). High school students may obtain ACT and SAT test dates and locations from their counselors. Students who took one of these tests while in high school may use the test scores reported on their official high school transcripts as an official test score report. Applicants who took one of these tests and did not designate UC Denver as the recipient of the scores must notify the testing agency to send scores to the Downtown Campus. A request for additional score reports may be requested from any of the offices listed below.

American College Testing Program (ACT)  
P.O. Box 168  
Iowa City, Iowa 52243  
319-337-1270  
[www.ACT.org](http://www.ACT.org) school code: 0533

The College Board (SAT)  
P.O. Box 6201  
Princeton, New Jersey 08541-6201  
609-771-7600  
[www.collegeboard.com](http://www.collegeboard.com) school code: 4875

6. Students who completed college course work while in high school must submit an official transcript from each college or university attended.
7. International students must submit an international student application for admission, \$75.00 application fee, and provide additional documentation (see the Information for International Students chapter of this catalog for more information).

## **Freshmen Housing Requirement**

First-time freshmen under age 20 not living at home with parents or otherwise receiving a housing exemption are required to live in Campus Village Apartments. See Student Housing in the Campus Life chapter of this catalog for additional information.

### **After Admission - Advising and Enrollment**

Several months before the start of each semester, freshmen accepted for admission to the university will receive information about activating their official University of Colorado Denver e-mail accounts, receiving required academic advising, attending freshmen orientation and timelines and procedures for course registration. For best course availability, students should attend orientation/and or advising sessions to receive required advisor approval and register for courses as early as possible.

## **Applicants Not Granted Admission**

An applicant who is not granted admission as an entering freshman may wish to consider transferring to the university after successful study elsewhere. To be considered for transfer student admission, such students must complete from one full semester (13 minimum semester hours) to one year (30 minimum semester hours) of college-level course work at another college or university. Students should select courses that will provide sound academic preparation for future transfer.

Freshman students who are not admissible will be encouraged to participate in a partners program that UC Denver has established with Colorado community colleges.

All credentials presented for admission become the property of the University of Colorado and must remain on file.

*Students who knowingly falsify transcripts or test scores or who fail to indicate all previously attended institutions will be denied admission to, or will be disenrolled from, the university.*

## **Admission Requirements for Transfer Students**

Applicants are considered as transfer students for admission purposes if they have completed any number of college courses since graduating from high school or earning a GED. Applicants with any number of college courses taken only prior to high school graduation are considered as freshmen for admission purposes and should consult the Admission Requirements for Freshmen section in this chapter. College credit taken before high school graduation can be considered for transfer to the Downtown Campus.

Students with 12 or fewer semester hours of completed college-level course work at the time of application are considered for admission based on high school GPA, high school courses/units completed, rank in class, ACT or SAT scores and college or university GPA.

Students with 13 to 29 semester hours of completed college-level course work at the time of application are considered for admission based primarily upon performance in college courses, but high school transcripts are still required. ACT or SAT scores are desirable, but not required. Students who graduated from high school in 2008 or later are subject to HEAR requirements as outlined in the Admission Requirements for Freshmen section in this chapter. HEAR unit deficiencies may be made up with certain college courses.

Students with 30 or more semester hours of completed college-level course work at the time of application are considered for admission based upon college course work alone and are not subject to HEAR requirements. High school records and ACT or SAT scores are not required.

## Admission Criteria by Academic Program

**College of Arts & Media, College of Liberal Arts and Sciences and School of Public Affairs (Criminal Justice).** A minimum 2.4 cumulative GPA is required, but anyone with at least a 2.0 cumulative GPA may be considered. Music majors are considered for fall semester only, have a required audition (applicants for music industry studies may request a deferment), and additional application requirements which must be completed by the Department of Music deadline. (Visit <http://cam.ucdenver.edu/meis>.) Admission to the music major is selective and qualified applicants are pooled and reviewed by an admissions committee.

**Business School.** Students must have a 3.0 cumulative GPA on at least 24 semester hours that apply to the business degree program, or a 3.0 in the 24 most recent semester hours that apply to the business degree program. Students with at least a 2.6 cumulative GPA are considered on an individual basis. Students with fewer than 80 college credits who are not offered admission to the Business School will be automatically considered for prebusiness admission in the College of Liberal Arts and Sciences.

**College of Engineering and Applied Sciences.** A full year of college calculus and calculus-based physics or calculus-based physics I and general college chemistry I must be completed with B or better grades. Grades of B are required in all other math and science courses and the cumulative GPA must be at least 2.75. Students meeting most, but not all of these standards are fully considered. Students with fewer than 80 college credits who are not offered admission to the College of Engineering and Applied Science will be automatically considered for pre-engineering admission in the College of Liberal Arts and Sciences.

**All Students.** The cumulative GPA is calculated as or converted to a 4.0 scale and will include all college or university course work attempted at any regionally accredited institution of higher education or comparable foreign institution.

## How to Apply

1. Submit the online application for undergraduate admission, available at [www.ucdenver.edu/admissions](http://www.ucdenver.edu/admissions) (preferred), or obtain a paper application for admission form from the Office of Admissions at 303-556-2704 or [admissions@ucdenver.edu](mailto:admissions@ucdenver.edu).
2. Complete and return the application along with the required nonrefundable \$50 application fee (check or money order only). If applying online, mail the application fee directly to the Office of Admissions according to Web instructions.
3. Request that one official transcript be sent directly from each college or university attended, including foreign institutions, directly to the Downtown Campus Office of Admissions. Transcripts are considered official only if received in this manner. If not in English, a certified English translation must accompany each official transcript. Official transcripts should be sent to:

Office of Admissions  
UC Denver Downtown Campus  
Campus Box 167  
PO Box 173364  
Denver, CO 80217-3364

4. If you have completed fewer than 13 college-level semester hours at the time of application, also submit official high school transcripts, GED scores if applicable and ACT or SAT scores. ACT or SAT scores recorded on the high school transcript are considered official.
5. If you have completed between 13 and 29 college-level semester hours at the time of application, also submit official high school transcripts and GED scores if applicable.

If a student is enrolled at a college or university at the time of application, official transcripts showing course work completed to date should be sent as indicated above. One official final transcript must also be requested by the student and sent directly to the Office of Admissions when grades are recorded after the student's final semester.

All credentials presented for admission consideration become the property of the University of Colorado and will not be copied for or returned to the student.

The University of Colorado Denver reserves the right to deny admission to transfer students not deemed to have completed college-level course work at the sending institution and/or those who are not eligible to return to their previous college or university campuses.

*Students who knowingly falsify transcripts or test scores or who fail to indicate all previously attended institutions will be denied admission to, or will be disenrolled from, the university.*

### **After Admission - Advising and Enrollment**

Accepted transfer students who have submitted official transcripts will receive a credit evaluation in the mail, which will include advising office contact information. Students should schedule an advising appointment or contact their advisor for assistance with applying transfer credits to degree requirements. Advisor approval is required for new students prior to registering for UC Denver courses.

Several months before classes begin, additional enrollment information will be provided. For best course availability, students are encouraged to register for courses as early as possible. If admitted for fall or spring semester, students will receive an invitation for the new student welcome program from the orientation office.

## **Transfer of College-Level Credit**

Course work taken at recognized accredited institutions of higher education will be considered for transfer to UC Denver. Courses are considered for transfer on the basis of having similar content to those offered by UC Denver. State of Colorado guaranteed transfer courses (gtPATHWAYS) are always accepted and apply to requirements. Developmental, remedial, vocational, technical, religious doctrinal, orientation, independent study, special topics and cooperative education courses are not accepted. Only courses in which a grade of C- or better was earned are considered for transfer. Courses in which a grade of Pass (P) was earned are considered for transfer only if a grade of Pass at the sending institution is defined as a C- or better. Students wishing to appeal transfer credit decisions should contact their academic department.

After all official transcripts have been received and the student is admitted as a degree-seeking student, the Office of Admissions will prepare a transfer credit report indicating which courses have been accepted in transfer by UC Denver. A copy of this report is mailed to the student as well as to the student's academic department on the Downtown Campus. Upon receipt of this transfer credit report, students should contact their academic department to meet with an advisor, who will determine how transferred credit applies to specific degree requirements. Transfer credit evaluations are valid only for programs offered entirely at the Downtown Campus.

The Office of Admissions considers course work for transfer regardless of the age of the academic credit. State guaranteed general education courses will be accepted in transfer and applied to graduation requirements for a period of at least 10 years after course completion. Individual departments, however, may have specific guidelines and policies about age of credit for courses not listed as "state guaranteed" and make the final decision about application of credit toward a degree program. Students are expected to have current working knowledge of prerequisite courses, regardless of when prerequisite courses were taken.

The Business School generally limits its transfer of business course credits to those that are offered as lower-division courses at the Downtown Campus. Students who have taken upper-division business courses from an American Assembly of Collegiate Schools of Business-accredited college of business may request review of these courses for possible transfer by contacting the Business School advising office. All courses taken in the business area of emphasis must be completed at the Downtown Campus.

The College of Engineering and Applied Science, in general, requires that engineering course transfer credit must come from an Accreditation Board for Engineering and Technology-accredited engineering program to be acceptable for degree purposes. Engineering technology courses are not considered equivalent to engineering courses.

A maximum of 60 semester hours is acceptable in transfer from community or junior colleges. A maximum of 90 semester hours is acceptable from four-year institutions or a combination of two- and four-year institutions.

### **Colorado Community College Transfer**

In compliance with Colorado's Statewide Transfer Policy, students may transfer credit from a Colorado community college on a course-by-course basis or by completing an associate of arts (AA) or associate of science (AS) degree. Students who complete an AA/AS degree may be guaranteed full transfer of the associate degree (60 credits maximum).

The guaranteed transfer program applies only to students who began Colorado community college studies in fall 2003 or later and who meet the following requirements:

- complete an AA/AS degree, which includes 31 credits of state-guaranteed general education courses
- earn credit only at Colorado community colleges within the last 10 years
- earn a grade of C- or better in each course

Statewide articulation agreements are in place governing transfer of students from Colorado community colleges into programs in the Business School, the College of Engineering and Applied Science and the elementary education teacher licensure program.

Transfer advising plans for Colorado Community College students are available from the Office of Admissions and at [www.ucdenver.edu/admissions](http://www.ucdenver.edu/admissions). In addition, an admissions representative can assist students with planning a transfer program. Representatives regularly visit Colorado community colleges. Call the Office of Admissions at 303-556-2704 or e-mail [admissions@ucdenver.edu](mailto:admissions@ucdenver.edu) for additional information.

### **Advanced Placement Program**

The Advanced Placement Program of the College Entrance Examination Board (CEEB) allows students to take advanced work while in high school and then be examined for credit at the college level. Students who take advanced placement courses and subsequently receive scores of 4 or 5 on the CEEB Advanced Placement Examination are generally given college credit for lower-level courses in which they have demonstrated proficiency. Credit is also granted for scores of 3 plus a course grade of A or A- in the corresponding subject. For more information, contact your academic advisor and click on the following chart. Original, official score reports are required for credit award consideration.

Advanced Placement Program Requirements (AP) chart

### **College-Level Examination Program**

Incoming students may earn university credit by examination in some subject areas in which they have demonstrated college-level proficiency. Interested students may take approved examinations through the College-Level Examination Program (CLEP) of the College Entrance Examination Board (CEEB) testing service.

Acceptable CLEP examinations and credit awards are outlined in the following chart. Original, official CLEP score reports are required for credit award consideration.

College Level Examination Program (CLEP) chart

### **International Baccalaureate Diploma Program**

The International Baccalaureate Diploma Program (IB), available at select high schools, is a rigorous, pre-university course of study emphasizing liberal arts from an international perspective.

In accordance with HB 03-1108, the University of Colorado Denver will grant at minimum 24 semester hours of credit for any student who has graduated from high school having successfully completed an International Baccalaureate diploma program with a minimum score of 4 on each exam. Credit may be granted for most individual IB courses where examinations are completed with at least a score of 4 for students who do not complete an IB diploma program. For additional information, students should contact their academic advisors and refer to the following chart. Original, official IB transcripts with exam scores are required for credit award consideration.

International Baccalaureate (IB) chart

### **Military Service and Schooling**

To have credit for educational experience evaluated, applicants with military experience should submit the Smart Transcript. Credit will be awarded as recommended by the Commission on the Accreditation of Service Experiences of the American Council on Education, to the extent that the credit is applicable to the degree the student is seeking at UC Denver.

Credit for courses completed through the U.S. Armed Forces Institute will be evaluated on the same basis as transfer credit from collegiate institutions.

### **Reserve Officers' Training Corps (ROTC)**

Students enrolled in Army, Air Force or Navy ROTC programs should consult with their college or school regarding the application of ROTC course credit toward graduation requirements. For information about ROTC programs, click on the links below.

Aerospace Studies - Air Force ROTC

Military Science - Army ROTC

Naval Studies – Naval ROTC (U.S. Navy and Marine Corps)

### **Intra-University Transfer**

Students on the Downtown Campus may change colleges or schools within the university provided they are accepted by the college or school to which they wish to transfer. Intra-university transfer forms may be obtained from the student's school or college or from the registrar's office. Decisions on intra-university transfers are made by the college or school to which the student wishes to transfer.

Students in continuing and professional studies programs wishing to enroll in regular courses or degree programs on the Downtown Campus should contact the Office of Admissions for a degree application.

### **Readmission Requirements for Former Students**

UC Denver students who have not registered and attended classes on the Downtown Campus for one year or longer and who have not attended another institution since the University of Colorado are considered returning students and must formally apply for re-admission. An additional application fee is only required if changing from undergraduate to graduate or nondegree to degree status, or if a degree was earned and the student is applying for a second degree. Application forms are available at the Office of Admissions and at [www.ucdenver.edu](http://www.ucdenver.edu).

Students who have attended another college or university since last attending the University of Colorado must apply as transfer students and meet the admission criteria and transfer student deadlines for receipt of documents. This requires payment of the \$50 (subject to change) nonrefundable application fee and submission of one official transcript from each college or university attended since last enrollment at UC Denver. Transcripts must be sent *directly* from the issuing institution to:

Office of Admissions  
University of Colorado Denver  
Campus Box 167  
P. O. Box 173364  
Denver, CO 80217-3364

Students who last attended another University of Colorado campus must formally apply for admission and meet the admission criteria of the Downtown Campus. An application fee is not required unless going from undergraduate to graduate status, from nondegree to degree status or if a degree was earned. Students may apply online or request an application from the Office of Admissions at [www.ucdenver.edu/admissions](http://www.ucdenver.edu/admissions). University of Colorado transcripts are not required, but official transcripts from each college or university attended prior to enrollment at the University of Colorado must be submitted.

## **Admission for Nondegree Students**

Persons who have reached the age of 20 and who want to take university courses, but do not plan to work toward a University of Colorado degree, may be admitted as nondegree students provided they are eligible to return to all collegiate institutions previously attended. A 2.0 cumulative GPA for all institutions attended is required to be a nondegree student. Questions regarding admission as a nondegree student should be directed to the Office of Admissions. Each school/college limits the number of semester hours taken as a nondegree student that may be transferred to a degree program.

Students considering changing from nondegree to degree status will need to apply as an undergraduate or graduate degree seeking student and meet the admission requirements of the intended program of study. Students under age 22 will be required to submit high school transcripts and ACT/SAT scores in addition to official college transcripts from each institution attended, regardless of the number of credit hours completed.

*Note:* International students are not admitted as nondegree students.

### **Financial Implications for Nondegree students**

Students with a baccalaureate degree who are admitted as nondegree students will be classified as nondegree graduate students and assessed graduate tuition regardless of the level of courses taken. If enrolling only in undergraduate courses, an adjustment may be requested

through the Office of the Registrar to pay the undergraduate tuition rate. However, the Colorado Opportunity Fund (COF) is not available to in-state nondegree graduate students. To utilize COF and pay the lowest tuition rate, students must apply as undergraduate degree-seeking students, even if a degree is not desired.

Nondegree students are not eligible to receive federal or state financial aid, student loans and most UC Denver scholarships.

### **How to Apply**

To apply for admission as a nondegree student, obtain a nondegree student application form from the Office of Admissions or submit one via the Web. Return the completed application by the deadline for the term desired. A \$25 (subject to change) nonrefundable application fee is required. No additional credentials are required. *Nondegree students are advised that registration for courses is on a space-available basis, and that admission as a nondegree student does not assure availability of specific courses.*

Continuation as a nondegree student with no prior undergraduate degree is contingent upon maintaining an overall GPA of 2.0 upon completion of 12 or more semester hours.

## **Admission for Students Seeking a Second Undergraduate Degree**

Students who already hold a bachelor's degree may apply for admission to a program in which they can earn a second undergraduate degree. Applicants for a second undergraduate degree must meet UC Denver admissions standards. These students may apply to the College of Arts & Media, College of Engineering and Applied Science, College of Liberal Arts and Sciences or the School of Public Affairs. Persons who already hold an undergraduate degree in any discipline generally may not apply for a second undergraduate degree in business. Rather, they should apply to a graduate MBA or MS business program. Contact the Business School at 303-556-5900 for additional information.

### **How to Apply**

1. Apply online or request an application for undergraduate admission from the Office of Admissions at [www.ucdenver.edu/admissions](http://www.ucdenver.edu/admissions).
2. Complete the application and send it to the Office of Admissions with a \$50 (subject to change) nonrefundable application fee.
3. Have one official transcript sent to the Office of Admissions from each collegiate institution attended. Official transcripts for enrollment at any campus of the University of Colorado are not required. Official transcripts are those sent by the issuing institution *directly* to:  
Office of Admissions  
University of Colorado Denver  
Campus Box 167, P.O. Box 173364  
Denver, CO 80217-3364  
*Hand-carried or faxed copies are not official.*

Transcripts from the institution where the first undergraduate degree was earned must have final grades posted for the semester that the student graduated and have the official notation of the degree awarded.

All credentials presented for admission become the property of the University of Colorado and must remain on file. Students who do not declare all previously attended institutions are subject to disciplinary action and/or dismissal.

*Students who knowingly falsify transcripts or test scores will be denied admission to, or will be disenrolled from, the university.*

## **High School Postsecondary and Concurrent Enrollment**

High school juniors and seniors with demonstrated academic abilities may be admitted to UC Denver with special approval for one term only. This approval may be renewed. Credit for courses taken may subsequently be applied toward a university degree program. For more information and application instructions, contact the Office of Admissions, 303-556-4524 or [admissions@ucdenver.edu](mailto:admissions@ucdenver.edu).

## **Admission Requirements for International Students**

The University of Colorado Denver is proud to have a diverse population of international students coming from more than 100 countries. Instructions for international students are available in the Information for International Students chapter of this catalog. International application forms are accessible on the international admissions Web site at <http://thunder1.cudenver.edu/InternationalAdmissions>.

## **New Student Orientation**

A welcome and general information program open to all new students is held at the beginning of the fall and spring semesters. The program provides an introduction to the campus, information about student services and student activities available through UC Denver and services provided to all students on the Auraria Campus, including information on getting an ID and parking.

New freshmen will also receive information regarding academic advising and specific orientation sessions for students and parents, which are held at various times during the year. Transfer and graduate students should contact their schools and colleges for additional information on academic advising, as well as special orientation sessions that may be held for a particular program.

Orientation information is sent to admitted students from the orientation office. For more information, call 303-352-3520 or visit North Classroom, 2024.

## **Four-Year Graduation Guarantee**

The University of Colorado Denver has adopted a set of guidelines to define the conditions under which an undergraduate student will be guaranteed to graduate in four years. More information is available through the undergraduate advising offices for each college and the major program offices. The Downtown Campus has five undergraduate colleges in which this

guarantee applies: College of Arts & Media, Business School, College of Engineering and Applied Science, College of Liberal Arts and Sciences and School of Public Affairs.

UC Denver's Downtown Campus guarantees that if a student begins studies in a fall semester and lack of scheduling of essential courses is found to have prevented a student from completing all course work necessary for a BA, BFA or BS degree from the university by the end of the student's eighth consecutive fall and spring semester, the college/school shall provide tuition plus any course fees for all courses required for completion of the degree requirements. This applies *only* when needed courses are *not offered* by the college/school and does not apply to scheduling conflicts for individual students. *Students must satisfy all the requirements described below to be eligible for this guarantee.*

This guarantee applies to all students who enroll beginning in a fall term as first-semester, full-time freshmen without admission deficiencies, who do not need remedial course work and who satisfy all the requirements described below. This guarantee does not include completion of all options within the major, a second major, a double degree, a minor or a certificate program. The four-year graduation guarantee does not apply to programs in which the degree has been discontinued or is in the process of being phased out. In these cases, every effort will be made to allow students to fulfill requirements by taking courses at other universities and colleges to facilitate timely completion of the degree.

Some study abroad programs may not provide a sufficient range of courses to allow students to meet the requirements, thus, students who participate in study abroad programs during the fall or spring semesters may not be eligible for this guarantee. A student may be able to participate in a study abroad program during the summer semester and still meet all the requirements of this guarantee. It is essential that a student work closely with an advisor to determine if the student can participate in a study abroad program and still meet all the requirements of this guarantee.

## Requirements

*Students must satisfy all of the following requirements to be eligible for this guarantee.*

1. Students must begin studies in a fall semester and enroll in UC Denver course work as specified on the student plan of study for eight consecutive fall and spring semesters.
2. Students must complete all required course work by the end of the eighth semester.
3. No fewer than 60 semester hours of applicable course work must be completed successfully by the end of the second year (24 calendar months); 90 semester hours by the end of the third year (36 calendar months); and 120 semester hours by the end of the fourth year (48 calendar months). Students must successfully complete an average of 15 semester hours each semester.
4. Students must meet with their college advisor and their major advisor for academic advising during the first, third, fifth and seventh semesters of study.
5. The major must be declared no later than the end of the first semester of study and students must not change their major or any options within the major.
6. A required plan of study toward the major must be agreed upon and signed by the student and advisor at the end of the first semester. Thereafter students must make

satisfactory progress toward completing the major, as defined by each major, and the general education requirements. Courses with certain grades may not meet the satisfactory progress requirement of this guarantee. A statement of what constitutes satisfactory progress and what grades are acceptable is available from the major or departmental office at the time the major is declared.

7. A minimum of 30 semester hours of college general education courses should be completed by the end of the second year, including core curriculum courses that also meet major requirements and foreign language proficiency.
8. All lower-division graduation requirements must be successfully completed by the 90-semester-hour mark.
9. Students must remain in good academic standing according to their school/college academic policies.
10. Grades of C-, C or C+, as defined by the college/school, must be earned in all course work required for the major, and students must have a cumulative GPA of 2.0 in all major course work attempted.
11. Students must register each semester within one week of the student's specified eligibility to register.
12. Students must take courses that are specified in the student plan of study approved by their advisor.
13. Elective courses must be avoided if they conflict with required major or general education courses. Elective courses must not be given a higher priority than required courses.
14. Students must meet all departmental, school or college and university policies regarding graduation requirements.
15. The college/school must be notified in writing of the student's intent to graduate no later than the beginning of the seventh semester of study. A graduation application must be filed no later than the deadline for the appropriate graduation date. The student must complete a graduation checkout/senior audit with their advisor.
16. The student is responsible for and must keep documentation proving that these requirements were satisfied (e.g., records of advising meetings attended, advising records and instructions, etc.).

## **Undergraduate Experiences**

**Assistant Vice Chancellor for Undergraduate Experiences:** John Lanning,  
john.lanning@ucdenver.edu

**Assistant to the AVC for Undergraduate Experiences:** Nadine Montoya,  
nadine.montoya@ucdenver.edu

**Office:** Lawrence Street Center, 300

**Telephone:** 303-315-2133

**Fax:** 303-315-5829

**Web site:** [www.ucdenver.edu/ue](http://www.ucdenver.edu/ue)

The Office of Undergraduate Experiences coordinates and implements undergraduate education programs to promote access for all undergraduate students to high-quality and innovative UC Denver programs, improve the recruitment and retention of undergraduate

students and coordinate programs between academic and student affairs to better serve and engage undergraduate students.

This includes coordination of programs that aim to improve the quality of undergraduate experiences.

- The core curriculum is an academic program of required general education courses that gives UC Denver students a quality educational foundation for a lifetime of success.
  - UC Denver Undergraduate Core and gtPATHWAYS Curriculum
- The Colorado Commission on Higher Education initiated the gtPATHWAYS program to ensure that students could transfer credit for core courses to any other higher education institution in the state.
- The University Honors and Leadership program combines leadership and scholar components to prepare students for the new challenges of the 21st century.
- The Experiential Learning Center coordinates internships and supports undergraduate research, interdisciplinary learning, e-portfolio support, civic engagement, etc. on the Downtown Campus.
- Early Alert assists students early in the semester who are having trouble adjusting personally or academically to their new environment.
- First-year seminars teach academic and study skills and ease the transition both socially and academically for incoming students.
- Living/learning communities involve combinations of courses, some of which take place in the residence halls, that focus around a single academic theme.
- Supplemental instruction is a peer-facilitated academic support program that targets historically difficult courses so as to improve student performance and retention.

Other responsibilities of this office include ensuring the quality of new undergraduate degree programs, promoting cross-college academic programs, training faculty and working in many other capacities to ensure that students have a positive and productive academic career at UC Denver.

## University Honors and Leadership Program (UHL)

**Director:** Steven G. Medema

**Assistant to the Director:** Susi Tattershall

**Office:** 1047 Ninth Street Park

**Telephone:** 303-556-5297

**Fax:** 303-556-6744

**E-mail:** [UHL@ucdenver.edu](mailto:UHL@ucdenver.edu)

**Web site:** [www.ucdenver.edu/uhl](http://www.ucdenver.edu/uhl)

University Honors and Leadership (UHL) is a program of excellence designed for outstanding students who have demonstrated superior achievement in academic performance and/or outstanding leadership qualities. The program is founded on the premise that the integration of rigorous programs of academic excellence and leadership education provides the ideal environment in which to develop the gifts of the next generation of leaders in academia, business, policymaking and service to communities local, national and global.

The UHL program is unique in integrating academic honors and leadership education within a highly selective learning community of outstanding students and faculty. The UHL program allows students to complement their major field of study with a traditional honors experience in the academic honors track or program of leadership education in the leadership studies track. Students move through the UHL program in cohorts that simultaneously promote community, teamwork and individual initiative. All of the UHL courses are multidisciplinary, reflecting our view that the ability to effectively analyze the challenges faced in all sectors of society can be enhanced by the integration of appropriate pieces drawn from a broad base of perspectives and problem-solving skills. The UHL program complements this with an emphasis on the development of exceptional oral and written communication skills, projects that steep the students in sophisticated research methods and the opportunity to work in teams to solve practical problems in the community.

## **The Academic Program**

UHL is a multidisciplinary cohort program consisting of 27 semester hours of course work to be completed over four years. The UHL courses will substitute for most of the UC Denver general core curriculum requirements.

UHL students are given the opportunity to pursue a traditional honors experience through the academic honors track of the UHL program or to focus on leadership education through the UHL leadership studies track. UHL students have a common first-year experience, taking a core of course work common to both tracks. The second and third years of the UHL program offer programs designed specifically for the academic honors and leadership studies tracks. The UHL students come together for a two-semester capstone research seminar in the fourth year.

Students who successfully complete the academic honors track will receive a university honors designation on their diploma and on their university transcript. Students who successfully complete the leadership studies track will graduate with a minor in leadership studies.

## **Admission**

Admission to the UHL program is competitive. In addition to meeting published requirements for admission to UC Denver, students must have a high school GPA, class ranking and SAT/ACT scores commensurate with an honors educational experience. For example, we would expect that applicants would rank in the top ten percent of their high school class and/or have scored in the 90th percentile or above on the SAT/ACT.

Students who wish to be considered for admission to the UHL program must submit the following application materials:

- A completed UHL application form
- A written essay
- Three letters of recommendation
- High school transcripts and transcripts for all college-level work completed to date
- SAT and/or ACT scores

We require a personal interview with all students who are selected as finalists for admission.

Applicants for admission to the UHL program should show evidence of ability and desire to:

- take responsibility for their own learning, for self-discovery and for personal and intellectual growth.
- learn about and understand diverse, competing perspectives, viewpoints and values.
- profit from varied modes of learning.
- become responsible and contributing members of the UHL program, the university and society.

Application information can be found on the UHL Web site at [www.ucdenver.edu/UHL](http://www.ucdenver.edu/UHL).

## First-Year Seminars

**Director:** Ken Bettenhausen

**Office:** CU-Denver Building, 202

**Telephone:** 303-556-5816

**Fax:** 303-315-5829

**E-mail:** [kenneth.bettenhausen@ucdenver.edu](mailto:kenneth.bettenhausen@ucdenver.edu)

UC Denver offers an optional program of First-Year Seminars (FYS) designed to assist students to successfully make the transition from high school to college, improve student retention and boost new student confidence. The FYS courses integrate rigorous academic content with academic skills such as library usage, campus resources, information literacy, time management, communication skills and career counseling. Class size is capped at 24 students to facilitate interaction between student and instructor and to allow the instructor to serve as a mentor in the student's first semester of college.

An important objective of the FYS program is to both challenge and support so students can excel academically and socially at UC Denver. FYS classes engage students in active learning beyond the traditional classroom, laboratory or studio classes. In the FYS courses, students learn about themselves and their abilities. The experiences obtained from the FYS program aim to promote academic exploration and interdisciplinary learning, civic engagement, cultural awareness, leadership, problem solving and other professional skills.

Why should entering high school students participate in a First-Year Seminar course?

- higher first semester grades
- higher student satisfaction facilitated by small class size and a faculty mentor
- better utilization of campus resources paid for through student fees
- early exploration of career paths and a suitable major

The strong academic component of the UC Denver FYS courses allows the course to count toward graduation requirements in the UC Denver Core Curriculum, or general education program, required of all undergraduate students. Students are encouraged to use the FYS program to explore areas either within or outside their major. Students should work with their academic advisor during orientation to select an appropriate FYS course.

## Experiential Learning Center

**Director:** Lissa Gallagher  
**Location:** Tivoli Student Union, Suite 260  
**Telephone:** 303-556-6656  
**Web site:** [www.cudenver.edu/exl](http://www.cudenver.edu/exl)

Experiential learning, broadly defined as hands-on learning, engages students in active learning beyond traditional lectures, discussions and laboratory exercises. Well-planned, supervised and evaluated learning experiences outside the classroom can stimulate academic inquiry while promoting interdisciplinary learning, civic engagement, career development, cultural awareness, leadership, problem solving and other professional and intellectual skills.

The Experiential Learning Center is committed to developing, expanding and promoting applied learning options for students. They support students, faculty and community partners by facilitating quality learning experiences that enhance the undergraduate experience.

## **Early Alert Program**

The UC Denver Downtown Campus participates in a campuswide Early Alert program to identify undergraduate students needing assistance from academic and student service offices. Providing assistance early in the semester is very important to student success in their baccalaureate program.

The Early Alert program is designed for faculty to identify students in the fifth and sixth weeks of the semester who need assistance because of academic performance, class participation and/or behavior issues. Students who are identified by faculty for an alert are contacted by the advising office in the student's home college, and it is important for students to respond to Early Alert communication with their advisors. Assistance is then provided to students through academic advising and through referrals to appropriate UC Denver student service offices. Goals of the early alert program are to:

- increase student academic success
- improve student persistence and graduation rates
- increase communication between students and faculty
- increase communication between students and academic advisors
- increase student utilization of student service offices

Further information about the UC Denver early alert program is available from the Office of Undergraduate Experiences, 303-315-2133, [www.cudenver.edu/ue/](http://www.cudenver.edu/ue/).

# UC Denver Undergraduate Core and gtPATHWAYS Curriculum

View the UC Denver Undergraduate Core and gtPATHWAYS Curriculum table

## Core Curriculum

All undergraduate students at UC Denver's Downtown Campus must complete a 34-to-38-semester-hour core curriculum of general education course work. The UC Denver core curriculum is specifically designed as the foundation for academic success for the baccalaureate degree as well as for a lifetime of success.

The undergraduate core curriculum is based on a philosophy of a liberal arts education. The phrase "liberal arts" originates from Latin roots *liber*, "to be free," and *ars*, "skill or ability to do something." Thus, a liberal arts education develops a set of skills to set one free. Course work in a traditional liberal arts education is designed to provide an understanding of ourselves, ours and other cultures and our environment.<sup>1</sup>

The undergraduate core curriculum emphasizes intellectual competencies and provides optional choices to develop a skill base in the broad knowledge areas that make up the undergraduate curriculum. A detailed chart of faculty-approved core courses and college core requirements is available at the following link: [UC Denver Undergraduate Core and gtPATHWAYS Curriculum Table](#).

The Core Curriculum Oversight Committee, composed of faculty in each undergraduate school and college, monitors the curriculum.

<sup>1</sup> H. Thorne Compton, "The Liberal Arts and Critical Thinking: Building Blocks of the Educated Person," in *A Student Guide to Higher Education*, John N. Gardner and A. Jerome Jewler, Editors, Wadsworth Publishing Company, Belmont, CA, Chapter 1988.

## Intellectual Competencies

### English Composition (two courses)

- English composition courses develop critical thinking, reading, writing, information literacy and research-based writing skills.

### Mathematics (one course)

- Mathematics courses develop critical thinking, logic, quantitative reasoning and numerical relationships/patterns in behavioral/social and physical phenomena.

## Knowledge Areas

### **Arts and Humanities (two courses)**

- Arts courses develop creativity, self-expression, aesthetics and stimulation of thought. Topic areas include arts, fine arts, music, professional music and theatre.
- Humanities courses develop ethics and priorities, human experience and development, contemporary life issues and responsibilities and impacts of social actions. Topic areas include English literature, modern languages, history, philosophy and religious studies.

### **Behavioral and Social Sciences (two courses)**

- Behavioral science courses develop an understanding of human behavior, communication and an analysis of human experience and development. Topic areas include anthropology, communication and psychology.
- Social science courses develop an understanding of human society and the interrelationship of social phenomena. Topic areas include economics, geography, political science, sociology and ethnic studies.

### **Biological and Physical Sciences, Mathematics (two courses)**

- Biological and physical science courses develop knowledge through the scientific method, scientific reasoning and solutions to complex phenomena in nature. Topic areas include biology, chemistry, geology, physics and environmental science.
- Mathematics courses are typically not classified as a science but provide the tools and models to investigate science and to formulate hypotheses and laws.

### **International Perspectives (One Course)**

- International perspectives courses develop insight into globalization impacts and the influence of an expanding multicultural society.

### **Cultural Diversity (One Course)**

- Cultural diversity courses provide insight and analysis of race and gender issues within the United States.

The value of a liberal arts-oriented core curriculum greatly exceeds its basic economic value, providing personal life and workforce skills necessary for a dynamic 21st century. Students should work closely with academic advisors to choose courses from the core curriculum that compliment their majors and future careers.

## **Guaranteed Transfer: gtPATHWAYS Program**

The Colorado Commission on Higher Education (CCHE) has charged each Colorado public institution of higher education with providing undergraduate students a set of general education courses guaranteed to transfer as core credit to any other Colorado public institution. This program is called gtPATHWAYS, with “gt” referring to guaranteed transfer.

Transferring students are able to apply up to 31 semester hours of gtPATHWAYS approved courses with grades of C- (1.7) or higher toward their general education program at the receiving institution. Students may also apply gtPathways-approved courses to courses in their major, depending on policies at UC Denver.

Students transferring to UC Denver with an associate's degree from a Colorado community/junior college in the gtPATHWAYS program are guaranteed fulfillment of all lower-division core curriculum requirements. Students planning to transfer in/out of UC Denver under the gtPATHWAYS program should work with their academic advisor to obtain details of transfer credit.

General education courses approved for the gtPATHWAYS program are identified in the UC Denver Undergraduate Core and gtPATHWAYS Curriculum Table. gtPATHWAYS-approved courses are also identified in the Courses chapter of this catalog. For example, the suffix GT-SC1 in "BIOL 1550-4. Basic Biology: Ecology and the Diversity of Life: GT-SC1" identifies the course as a gtPATHWAYS approved science course with a laboratory.

Further information about the statewide transfer program, including the list of approved courses and distribution requirements, is available at <http://highered.colorado.gov/Academics/Transfers/gtPathways/default.html>.

## Information for Graduate Students

*Welcome to the Graduate School on the UC Denver Downtown Campus. Almost half of our students on the UC Denver Downtown Campus are enrolled in graduate programs. We have a higher ratio of graduate to undergraduate students than most other universities in the country. This special emphasis on graduate education provides a strong culture of graduate studies on the campus and has engendered a number of innovative programs and teaching methods, such as dual master's degrees or classes that are entirely online. Graduate programs on the Downtown Campus also benefit from UC Denver's immediate proximity to Denver, which provides rich opportunities for internships and employment, collaborations between the university and the city and a wealth of real world problems that can test and elaborate ideas gained in the classroom.*

The UC Denver Downtown Campus Graduate School offers 25 master's programs and nine PhD programs. In addition, schools and colleges offer other master's programs that are independently accredited and are not housed in the Graduate School. For students in those programs, most of your needs will be met by the department in which your program resides. Information about these graduate programs is available under the specific school or college in this catalog. In the At A Glance: Graduate Areas of Study table, all Downtown Campus graduate programs are listed. However, those having a diamond designation are programs within the Graduate School and follow the rules outlined in this section.

The colleges and schools offering graduate opportunities on the Downtown Campus include:

College of Architecture and Planning  
College of Arts & Media

Business School  
School of Education & Human Development  
College of Engineering and Applied Science  
College of Liberal Arts and Sciences  
School of Public Affairs

Individual graduate programs are described under the school/college chapters later in this catalog and online at [www.cudenver.edu/Academics/Colleges/GradSchool/](http://www.cudenver.edu/Academics/Colleges/GradSchool/).

## Graduate School

**Dean:** Robert Damrauer, PhD

**Administrative Assistant:** Carie Carroll

**Apply Yourself Manager:** Krystal Allen

**Office:** 1380 Lawrence Street, Suite 300

**Telephone:** 303-315-5826

**Fax:** 303-315-5829

**Web site:** [www.cudenver.edu/Academics/Colleges/GradSchool/](http://www.cudenver.edu/Academics/Colleges/GradSchool/)

**Mailing Address:** P.O. Box 173364, Campus Box 163, Denver, CO 80217

Graduate education is a critical component of the Mission of the University of Colorado Denver (UC Denver). The Graduate School is one of several schools within UC Denver and its mission is to facilitate and enhance the educational experiences and opportunities for all graduate students and to encourage excellence in research, creative and scholarly work.

In accordance with its mission, the Graduate School leadership and the graduate faculty, plan, develop, approve, evaluate and administer graduate programs (PhD and master's degree programs). The Graduate School also ensures that graduate programs comply with the standards of excellence and sound academic administration established by the rules and policies of the Graduate School and adopted by the University Board of Regents and the Colorado Commission on Higher Education. In particular, the Graduate School is charged with maintaining high standards and quality of both the graduate programs and the faculty of the Graduate School. Other functions of the Graduate School include:

- a) Fostering multidisciplinary, interdisciplinary and innovative programs and promoting collaboration that creates unique opportunities for student learning, research and discovery;
- b) Formulating and maintaining uniform standards for academic excellence in graduate-level courses and research experiences offered for credit;
- c) Promoting a supportive environment for the graduate student community;
- d) Providing a voice for graduate education in the planning processes of the university; and
- e) Publishing a current Graduate School Student Handbook on the Graduate School Web site.

The Graduate School Rules can be accessed online at [www.cudenver.edu/Academics/Colleges/GradSchool/](http://www.cudenver.edu/Academics/Colleges/GradSchool/) by clicking on "School Rules."

## Requirements for Admission

Note that the following are minimum requirements. College and school regulations, if more stringent, take precedence over the minimum guidelines as set forth by the Graduate School.

## Regular Degree Students

Students are admitted by the Graduate School as regular degree students provided they meet the following criteria:

- Hold a baccalaureate or master's degree from an accredited college or university or demonstrate completion of work equivalent to the baccalaureate or master's degree given at UC Denver. Applicants whose credentials include studies or course work at an institution outside the U.S. must include a validated English translation and an evaluation of the transcript by a professional accrediting service (such as World Education Services).
- Usually have an undergraduate grade point average of 3.00 or better ("A" is equal to 4.0) and/or a 3.00 or better GPA in a completed or partially completed (at least 1/3) master's degree program. Applications from individuals who attended a college or university that does not issue grades or a GPA will be evaluated by the Graduate School on a case-by-case basis.
- Have adequate preparation to enter graduate study in the chosen program as demonstrated by their performance in the GRE or an appropriate substitute, or an earned MS/MA or PhD from a school in the U.S.A., or completion of at least 12 credit hours of transferable graduate-level course work. Although the Graduate School recommends that applicants take the GRE or other standardized test, it is not a requirement for admission as a regular degree student if one of the other two indicators of preparedness is present. Some graduate programs, however, may require that all applicants take the GRE or an equivalent.
- Meet any additional requirements (such as particular undergraduate course work) for admission as established by the program.

International students must meet ALL of these requirements and also must provide:

- Documentation in English (or a certified English translation) of the completion of a bachelor's degree, master's degree or the equivalent at the time of matriculation as evaluated by the International Admissions Office.
- Applicants whose native language is not English must take either the Test of English as a Foreign Language (TOEFL) or the International English Language Testing System (IELTS) exam and must score above 525 (paper) or 192 (computer) or 71 (Internet based) on the TOEFL or 6.0 on the IETLS. Schools or colleges or individual graduate programs may require higher standards on these tests.
- Applicants whose native language is not English are not required to take the TOEFL test if they have completed a baccalaureate or graduate-level degree program at an English-speaking college or university or have completed at least two semesters at a college or university in the United States as a full-time student and obtained a "B" average (3.0 GPA) or higher.
- Financial and other documents required by the International Scholars and Students Office to process immigration documents.
- A certified English translation of all records and references not in English.

Additional requirements and documentation may also be required.

## Provisional Degree Students

A graduate program that wishes to admit an applicant who does not meet the criteria for admission as a regular degree student can petition the Graduate School to admit the applicant as either a regular or provisional degree student. The petition must include a letter from the graduate program director to the dean that outlines the rationale to support such an admission. If the student is to be admitted as a provisional student, then the petition must include a description of the conditions that the student must meet in order to become a regular degree student. The admission of the applicant as a provisional degree student requires the approval of the dean.

Based on the requirements of the graduate program and the recommendations of the graduate program director, the dean will determine and advise the program director and the student of the conditions that the student must satisfy to be transferred from provisional to regular status. The dean, in consultation with the program director, will also determine the time period (one or two semesters for full-time students and a maximum of four semesters for part time students) in which these conditions be met.

Provisional students are subject to the same standards of performance required of regular degree students, plus any other requirements imposed by program faculty as conditions of admission. At the end of the specified probationary period, the dean, in consultation with the program director will review the performance of the provisional student. The student must either have satisfied the requirements for conversion and be admitted to regular degree status or be dismissed from the graduate program to which they were provisionally admitted. The Graduate School will notify both the program director and the student whether the provisional student has satisfied the requirements and that their status has been transferred to that of a regular student, or has failed to meet the requirements and has been dismissed.

## Application Procedures

Applicants seeking admission to UC Denver's graduate programs should apply directly to the appropriate department rather than the Graduate School or the Office of Admissions. See specific departments/programs for more information. Read all application instructions carefully before completing the online application. Online applications are submitted electronically to the department. Supplementary application materials (if applicable) should be mailed to the department to which you are applying. Make sure to clearly mark the materials indicating your full name, social security number, the department in which you are applying and contents of the supplementary material. In addition, sufficient postage must be included if the materials are to be returned to the applicant. If applying to more than one department, you must submit a complete application and separate fee to each department. Students will receive offers of admission or rejection from the graduate department.

An applicant for admission must present:

- Parts I and II of the Downtown Campus Graduate School application form, including the tuition classification form, which may be obtained from the departmental program coordinator.

- Two official transcripts for all academic work in colleges and universities completed to date.
- Three letters of reference. Have the nominators include the applicant's name and social security number in their letters of reference.
- A nonrefundable application fee (check or money order) of \$50 for domestic students or \$75 for international students. *No application will be processed until this fee is paid.*
- Any other material required specifically by the program faculty. This may include scores from the GRE or other examination. Check with program coordinators in the departments for additional information that may be required.

Again, the student must check with the program to determine the deadline for submitting the application and application fee to the program of interest.

When a prospective degree student applies for admission, the chairperson or a student admissions committee of the department will decide whether the applicant shall be admitted and make that decision known to the Office of Admissions.

Students who wish to apply for a graduate student award (e.g., fellowship, scholarship, assistantship) should contact their department before the application deadline for information, since deadlines are usually earlier for aid requests than for admission.

## **Readmission/Changing Programs**

Former and current students who wish to be re-admitted or change from one degree program to another must meet the requirements of the new degree program and provide all items required of students applying to the Graduate School on the Downtown Campus for the first time. These applicants, however, may petition the program to which they were initially admitted to secure a release of transcripts and letters of recommendation supplied at the time of their initial application.

## **Transferring**

Students transferring from another University of Colorado campus to the Downtown Campus must apply and be accepted by the program on this campus.

A student who has completed a master's program at UC Denver must resubmit parts I and II of the graduate application for acceptance into the doctoral program.

## **Nondegree Students**

A student who wishes to take graduate courses, but is not interested in earning a specific advanced degree, may apply as a nondegree student. Contact the Office of Admissions at 303-556-2704 for further information. Nondegree students will be allowed to register only on the campus to which they have been admitted.

Nondegree students who later desire to pursue a graduate degree program at this university are encouraged to submit the complete graduate application and supporting credentials to their

department as soon as possible. Note that the GPA for courses taken as a nondegree student is calculated separately and is not incorporated in the official graduate GPA.

A department *may* recommend the transfer of as many as 9 semester hours toward the requirements of a master's degree for courses taken either as a student at another accredited graduate school, as a nondegree student at the University of Colorado or a combination.

A grade of B- or better must be earned. A 10-year time limit is in effect.

## **New Student Orientation**

An orientation program for new students is held at the beginning of the fall and spring semesters, during the week prior to the first day of classes. The orientation program provides information to new students about activities and services available on the Downtown Campus. Information on the expectations, opportunities, registration process, parking and securing ID cards is also provided. Academic advising sessions are held before registration for the term. Students should contact their schools and colleges for additional information on advising, as well as special orientation sessions that may be scheduled for their programs.

## **Registration**

On the regular registration days of each semester, students who have been admitted to a graduate program are required to follow appropriate registration procedures.

Students should register for classes the semester they are accepted as graduate students. If unable to attend that semester, they must notify the Office of Admissions in addition to the department that has accepted them.

## **Withdrawal**

A graduate student who desires to withdraw from the university must apply to the dean of his/her school or college for permission to withdraw in good standing. *A student who discontinues attendance in a course without official withdrawal will be marked as having failed the course. After the 10th week of the class, the student must have the associate dean's signature to drop a course.*

## **Assistantships and Fellowships**

## **Graduate Student Teaching Appointments**

Many departments employ graduate students as part-time instructors or teaching assistants. The instructorship is reserved for those advanced graduate students already possessing appropriate degrees who may be independently responsible for the conduct of a section or course. Contact the department for further information.

## **Research Assistantships**

Research activities provide opportunities for graduate students to obtain part-time work as research assistants in many departments. Such funds are from external grants obtained by faculty members. Contact the department for further information.

Additional information about registration and financial aid are available in separate sections of this catalog. For information about tuition and fees, please visit the Bursar's office Web site at [www.ucdenver.edu/bursar](http://www.ucdenver.edu/bursar).

## **Requirements for Advanced Degrees**

### **Graduate Student Handbooks**

Each graduate program is expected to provide students with a handbook—electronic, paper or both—indicating in some detail the curricular requirements, the expectations for satisfactory progress toward the degree completion, a timeline for the steps needed to meet these expectations and other features unique to each program, such as the composition and formation of student committees to guide and review the student's progress.

### **GPA Requirements and Quality of Graduate Work**

A student is expected to maintain at least an overall 3.0 GPA in all work attempted while enrolled in a graduate program and to make satisfactory progress toward a degree in other respects as determined by his or her department.

For all graduate degrees, a grade below C is unsatisfactory and will not be counted toward the minimum requirements for these degrees.

### **Credit by Transfer**

A limited amount of high-quality resident graduate work done in a recognized graduate school elsewhere within the time allowed may be accepted, provided it is recommended by the department concerned and approved by the school or college dean. The maximum amount of work that may be transferred to this university is 12 semester hours or 40 percent of the number of credits required for the master's degree, whichever is higher, and 30 hours for PhD degrees.

The school or college shall determine if graduate classes taken by an undergraduate can be transferred to a graduate program. They shall also determine if courses taken in the University of Colorado System are considered resident or transfer courses.

Courses taken as pass/fail or satisfactory/unsatisfactory will not be transferred. In addition, a grade of B- or above must be earned for a course to be transferred. Courses taken some time ago will need to be validated by the program director.

### **Use of English**

A student who is noticeably deficient in the use of standard English in all oral and written work may not obtain an advanced degree from the University of Colorado. Ability to use the language with precision and distinction should be cultivated as an attainment of major importance.

The university reserves the right to test English proficiency for nonnative speakers of English to confirm and validate sufficiency for credit-bearing course work and degree programs.

Each department will judge the qualifications of its advanced students in the use of English. Reports, examinations and speech will be considered in estimating the candidate's proficiency.

## **Graduate Appeals**

Details may be found in the Graduate School Rules which can be accessed online at [www.cudenver.edu/Academics/Colleges/GradSchool/](http://www.cudenver.edu/Academics/Colleges/GradSchool/) by clicking on "School Rules."

## **Master's Degree**

A student regularly admitted to a graduate program and later accepted as a candidate for the master of arts, master of science or other master's degrees will be recommended for the degree only after certain requirements have been met.

The requirements stated below are minimum requirements; additional conditions may be set by the individual programs.

Students planning to graduate should ascertain current deadlines with their graduate programs. It is the graduate student's and the department's responsibility to see that all requirements and deadlines are met (e.g., changing of *IW* grades, notification of final examinations, etc.).

Departments or program committees may have deadlines that must be met by the graduate students in that department or program. It is the student's responsibility to ascertain and meet these requirements.

## **Minimum Requirements**

The minimum requirement is 30 (semester) credits. While it is expected that most of this course work will be at the graduate (5000 and above) level, some graduate programs may allow particular undergraduate courses that are outside the discipline of their program to count toward the graduate degree. The proportion of undergraduate credit hours cannot exceed 20% of the course requirement of the graduate program and must be approved by the program director on a case-by-case basis. Undergraduate courses within the same discipline as the graduate program cannot be credited toward a graduate degree. If the program has a thesis option, the thesis must count for 3-6 credits. Independent study course work cannot exceed 25 percent (7.5 credits) of the 30 credits of course work required for the master's degree.

## **Admission to Candidacy**

Details may be found in the Graduate School Rules which can be accessed online at [www.cudenver.edu/Academics/Colleges/GradSchool/](http://www.cudenver.edu/Academics/Colleges/GradSchool/) by clicking on "School Rules."

## **Master's Thesis Credit**

Details may be found in the Graduate School Rules which can be accessed online at [www.cudenver.edu/Academics/Colleges/GradSchool/](http://www.cudenver.edu/Academics/Colleges/GradSchool/) by clicking on "School Rules."

## **Thesis Requirements**

Details may be found in the Graduate School Rules which can be accessed online at [www.cudenver.edu/Academics/Colleges/GradSchool/](http://www.cudenver.edu/Academics/Colleges/GradSchool/) by clicking on "School Rules."

## **Time Limit**

Master's degree students have seven years from the date of the start of course work to complete all degree requirements.

## **Doctor of Philosophy**

The doctor of philosophy (PhD) degree is the highest academic degree conferred by the university. To state the requirements for the degree in terms of semester hours would be misleading, because the degree is not conferred merely upon the satisfactory completion of a course of study, however faithfully pursued.

Students who receive this degree must demonstrate that they are proficient in some broad subject of learning and that they can critically evaluate work in this field. Furthermore, they must have shown the ability to work independently in their chosen field and must have made an original contribution of significance to the advancement of knowledge. The technical requirements stated below are minimal requirements for all candidates for the degree; additional conditions set by the departments or schools will be found in the announcements. Any department may make additional regulations consistent with these general rules.

Studies leading to the PhD degree must be chosen so as to contribute to special competence and a high order of scholarship in a broad field of knowledge. A field of study chosen by the student may be in one department or it may include two or more closely related departments. The criterion as to what constitutes an acceptable field of study shall be that the student's work must contribute to an organized program of study and research without regard to the organization of academic departments within the university.

## **Minimum Course Dissertation Requirements**

Details may be found in the Graduate School Rules which can be accessed online at [www.cudenver.edu/Academics/Colleges/GradSchool/](http://www.cudenver.edu/Academics/Colleges/GradSchool/) by clicking on "School Rules."

## **Examinations**

Each PhD program will require at least comprehensive and final examinations. Notice of all examinations must be filed with the dean of the Graduate School at least two weeks prior to administration.

## **Comprehensive Examination**

Details may be found in the Graduate School Rules which can be accessed online at [www.cudenver.edu/Academics/Colleges/GradSchool/](http://www.cudenver.edu/Academics/Colleges/GradSchool/) by clicking on "School Rules."

## **Continuous Registration Requirements for Doctoral Candidates**

Details may be found in the Graduate School Rules which can be accessed online at [www.cudenver.edu/Academics/Colleges/GradSchool/](http://www.cudenver.edu/Academics/Colleges/GradSchool/) by clicking on "School Rules."

## **Dissertation Requirements**

Details may be found in the Graduate School Rules which can be accessed online at [www.cudenver.edu/Academics/Colleges/GradSchool/](http://www.cudenver.edu/Academics/Colleges/GradSchool/) by clicking on "School Rules."

## **Final Examination/Defense**

Details may be found in the Graduate School Rules which can be accessed online at [www.cudenver.edu/Academics/Colleges/GradSchool/](http://www.cudenver.edu/Academics/Colleges/GradSchool/) by clicking on "School Rules."

## **Time Limit**

Doctoral degree students have eight years from the date of start of the doctoral program.

## **Graduate Faculty**

The graduate programs at the Downtown Campus Graduate School are delivered by faculty who are especially qualified by education and experience for graduate teaching and scholarship.

The university and college/school qualifications are published in the "Graduate Faculty" section of the Graduate School Rules. These rules distinguish between regular faculty, who are typically full-time members of the UC Denver faculty, and special faculty who may not be full-time, but who have special skills that enhance a college/school's graduate course offerings. Faculty who meet these qualifications are admitted to membership in the graduate faculty of UC Denver. These are the only faculty members permitted to teach graduate courses or to serve on thesis, dissertation or graduate student committees at either campus of UC Denver.

## **Research Opportunities**

UC Denver is strongly committed to discovering new knowledge and novel creative expressions through the research and creative efforts of its faculty. Such activities not only advance knowledge and enhance the quality of life, but strengthen teaching by grounding instruction in scholarship and professional practice. These activities constitute an important component of UC Denver's service to the community at large. Externally funded projects are a major priority at the Downtown Campus.

Research projects, training and public service programs encompass both traditional and nontraditional fields of study, focusing on issues important at all levels—city, state, national and international. The benefits to campus are substantial. Externally funded activities

- assist in sustaining scholarly discourse and creative work
- enable faculty members to engage in the advancement of knowledge,
- provide the foundation for solving pressing practical problems of vital concern to society
- enhance the educational opportunities of students both at undergraduate and graduate levels

In addition, a great deal of research at the university is conducted without substantial external support. This research also yields important insights that are conveyed to a national audience through faculty publications, presentations, exhibits, performances and professional activities. Many members of the faculty are leaders within the national scholarly community. All these pursuits bring recognition to the university, establish the credibility of its faculty and enhance the value of the degree it confers.

The active engagement of graduate students in these scholarly and creative activities is the center piece of a vibrant program in graduate education. The mentorship of graduate students by the graduate faculty is a major objective of the educational process. In addition, the consolidation of the Downtown Campus with the Anschutz Medical Campus is opening new opportunities for collaborative, interdisciplinary work.

## Information for International Students

*The University of Colorado Denver provides a variety of international programs and educational opportunities and services for international and domestic students, scholars, faculty, staff and the greater Denver community. The goals of the Office of International Affairs are to raise international awareness on the campus, to provide opportunities for students to gain global competency needed in today's interdependent world and to create a campus community that is welcoming to international students and scholars.*

### International Admissions

**Director:** Derrick Alex

**Telephone:** +1-303-315-2234

**Fax:** +1-303-315-2246

**Web site:** [www.internationaladmissions.cudenver.edu](http://www.internationaladmissions.cudenver.edu)

The Department of International Admissions at the University of Colorado Denver assists all international students with the international application process from first contact through issuance of initial immigration documents. The conversion of foreign grades into the United States system is done in-house. At the request of academic departments, International Admissions also evaluates course work completed at foreign institutions by domestic applicants.

International Admissions representatives travel overseas to recruit qualified international students. The department also advises staff and faculty traveling overseas on possible networking with prospective international students, visiting Fulbright offices and foreign universities with UC Denver brochures and information.

## **International Admissions Application Deadlines**

### **Undergraduate**

*Term Preferred Deadline Final Deadline*

Summer January 15 May 3

Fall March 15 July 22

Spring October 1 December 1

### **Graduate**

*Term Preferred Deadline*

Summer January 15

Fall February 15\*, March 15

Spring October 1

Final deadlines vary by department and by programs. Please contact the academic department for final deadline.

\* *College of Architecture & Planning*

## **English Language Requirement**

Both Test of English as a Foreign Language (TOEFL) scores and the International English Language Testing System (IELTS) scores are accepted at UC Denver as proof of English language proficiency.

The UC Denver institutional code for TOEFL is 4875. Test information and registration materials for TOEFL may be obtained from the Ministry of Education, American Culture Center or

educational institutions in the applicant's country. Information may also be obtained directly from:

Educational Testing Services, CN6151  
Princeton, NJ 08541-6151 USA  
606-921-9000

**Web site:** [www.toefl.org](http://www.toefl.org)

**E-mail:** [toefl@ets.org](mailto:toefl@ets.org)

To receive test information and registration materials for IELTS please visit [www.ielts.org](http://www.ielts.org) or send an e-mail to [ielts@ieltsintl.org](mailto:ielts@ieltsintl.org).

## Live-In Residence Requirement

UC Denver Downtown Campus requires that all first-time international undergraduate students live in the Campus Village at Auraria apartments. Additional information about the facilities, policies and programming at Campus Village are available in the Campus Life section of this catalog.

Exemptions to the campus residency policy will be evaluated and made on a case-by-case basis. Exemption forms are available through the Office of Student Life, Tivoli room 303, or online at <http://thunder1.cudenver.edu/housing/exemption.html>. It is not mandatory for international graduate students to live on campus. For further information, please call the Office of Student Life at 303-556-3399 or via e-mail at [housing@ucdenver.edu](mailto:housing@ucdenver.edu).

## Minimum Requirements for International Applicants

### Undergraduate Freshman (First-Year) Students

College	TOEFL*			or IELTS ACT/SAT	
	Computer Based	Internet Based	Paper Based		
Arts & Media**	197	71	525	6.0	Not required
Business	197	71	525	6.0	Not required
Criminal Justice	197	71	525	6.0	Not required
Engineering	197	71	525	6.0	25/1150
Liberal Arts and Sciences	197	71	525	6.0	Not required

\* *The English language requirement can be satisfied with one of the three TOEFL exams or the IELTS exam.*

\*\* *Some programs in Arts & Media require an audition.*

## Undergraduate Transfer Students

College	TOEFL*			or IELTS GPA	
	Computer Based	Internet Based	Paper Based		
Arts & Media**	197	71	525	6.0	2.0
Business †	197	71	525	6.0	3.0
Criminal Justice	197	71	525	6.0	2.0
Engineering‡	197	71	525	6.0	2.75
Liberal Arts and Sciences	197	71	525	6.0	2.0

\* *The English language requirement can be satisfied with one of the three TOEFL exams or the IELTS exam.*

\*\* *Some programs in Arts & Media require an audition.*

† *Must meet the same GPA requirements as domestic students.*

‡ *A minimum of one year's course work in calculus and calculus-based physics is required for engineering.*

## Graduate Students

College	TOEFL			IELTS
	Computer Based	IBT Based	Paper Based	
Architecture & Planning	197	71	525	6.0
PhD Design & Planning	233	90	575	6.5
Business	197	71	525	6.0
Education & Human Development				
Master's	197	71	525	6.0
PhD	213	79	550	6.5
Engineering	197	71	525	6.0
Public Affairs	213	79	550	6.5
Criminal Justice	197	71	525	6.0



government as they are in many countries. International students at UC Denver must recognize this fact and protect themselves against high medical costs by purchasing insurance.

## Applying to Undergraduate Programs

1. Submit a complete International Application form along with a \$75 nonrefundable application fee, **payable to the University of Colorado Denver**. DO NOT SEND CASH. The application fee must be in U.S. funds only. (Use an international money order or your personal check payable in U.S. currency). Please send it to the following address:

### **By Air Mail:**

University of Colorado Denver  
International Admissions  
P.O. Box 173364, Campus Box 185  
Denver, CO 80217-3364  
USA

### **By Courier (FedEx, DHL, UPS, etc.):**

University of Colorado Denver  
International Admissions  
1380 Lawrence Street, 9th Floor, Suite 932  
Denver, CO 80204-2029  
USA  
Telephone: 303-315-2230

2. Applicants must submit complete and “official” academic records of all course work from secondary schools and any universities attended. Official academic records are records that are directly sent by the issuing institution to the university or are issued to the student in a sealed envelope to be delivered by the student to the university. If the documents are not written in English, they must be translated by a certified translator. The translation must be literal and no conversion of grades should be attempted by the translator. Undergraduate applicants who have more than one year full-time course work in a post secondary institution are not required to submit high school transcripts.
3. Both Test of English as a Foreign Language (TOEFL) scores and the International English Language Testing System (IELTS) scores are accepted at UC Denver as proof of English language proficiency. Applicants must submit an official TOEFL or IELTS score report that is no more than two years old. The UC Denver institutional code for TOEFL is 4875. The English language requirement may be waived if the applicant has completed six hours of college-level English composition with a B average (3.0 GPA or higher) from an accredited U.S. institution.
4. A financial statement and a bank statement from the sponsor showing the amount of funds available for support must be submitted to the university. If the student has been

awarded a scholarship from a private source or government agency, enclose the award letter. All financial support documents and documentation from banks must be original and should not be more than six months old.

5. The Scholastic Aptitude Test (SAT) or American College Test (ACT) score is required for undergraduate freshman engineering applicants. **Please be advised that all documents submitted along with the application become the property of the university and will NOT be returned to the applicant.**

The student's file will not be considered complete, nor will it be submitted to the admissions committee, until all requested materials are received. To expedite processing, all the information should be sent at least five months before the semester in which you wish to enroll.

## Applying to Graduate Programs

1. Submit a complete international application form along with a \$75 nonrefundable application fee, **payable to the University of Colorado Denver**. DO NOT SEND CASH. The application fee must be in U.S. funds only. (Use an international money order or your personal check payable in U.S. currency.) Please send it to the address on the application form.
2. Certified copies of "official" academic records from each college or university, and/or professional schools attended, should be submitted to the university. These official academic records should include courses completed, grades or marks obtained and certificates or degrees awarded. Official academic records are records which are directly sent by the issuing institution to the university or are issued to the student in a sealed envelope to be delivered by the student to the university. If documents are not in English, they must be translated by a certified translator. The translation must be literal and no conversion of grades should be attempted by the translator.
3. Both Test of English as a Foreign Language (TOEFL) scores and the International English Language Testing System (IELTS) scores are accepted at UC Denver as proof of English language proficiency. (Applicants must submit an official TOEFL or IELTS score report which is no more than two years old.) The UC Denver institutional code for TOEFL is 4875. The English language requirement may be waived if the applicant has attended a college or university in the United States as a full-time student and has completed two semesters of academic work with a B average (3.0 GPA or higher). Some departments may also waive the English language requirement if the language of instruction for the student's bachelor degree was English. An official letter from the academic institution may be requested to grant this waiver.
4. A financial statement and a bank statement from the sponsor showing the amount of funds available for support must be submitted to the university. If you have been awarded a scholarship from a private source or government agency, enclose the award letter. All financial support documents and documentation from banks must be original and should not be more than six months old.

5. Three letters of recommendation\* (two letters for the Business School) from college or university professors must accompany the international application form. If you have been out of school for several years, we will also accept recommendations from your employer or supervisor. The admissions committee prefers academic recommendations over employer/supervisor recommendations.

\*The Department of Electrical Engineering requires that at least two of the letters be from university faculty.

6. The Graduate Management Admission Test (GMAT) is required if you are applying to the Business School. For more information, please visit [www.mba.com](http://www.mba.com). The GMAT institutional codes for Business School programs are:

<b>Program</b>	<b>Code</b>
MBA	MPB-0G-78
11-Month MBA	MPB-0G-65
MS Programs	MPB-0G-75
PhD Program	MPB-0G-29

The Graduate Record Examination (GRE) is a requirement for admission consideration in many graduate departments and considered valuable for other programs. For more information, visit [www.gre.org](http://www.gre.org). You can also e-mail [gre-info@ets.org](mailto:gre-info@ets.org) or call +1.609.771.7670. The UC Denver institutional code for the GRE is 4875.

If you are applying for a master's degree in public administration or the criminal justice program, you must take the GMAT or GRE.

## **Departmental Requirements**

Graduate applications are reviewed by a faculty committee in the department in which the student wishes to enroll. Only those students who have completed an undergraduate program that is equal to a U.S. bachelor's degree are considered for admission. Please check with academic departments for specific program requirements.

To access department Web sites, go to [www.ucdenver.edu](http://www.ucdenver.edu) and click on Schools and Colleges.

**Please be advised that all the documents submitted along with the application become the property of the university and will NOT be returned to the applicant.**

The student's file will not be considered complete, nor will it be submitted to the admissions committee, until all requested materials are received. All students applying to any graduate program should contact their academic department for specific departmental requirements.

## **Department of Biology**

Please visit the department Web site for admissions information:  
[www.cudenver.edu/clas/biology/grad.html](http://www.cudenver.edu/clas/biology/grad.html).

## **Business School**

The Business School also requires that you answer the following essay questions as part of your application. The essays should be limited to 200 words per question and included on a separate sheet of paper. Sign and date the pages and include them with your application:

1. How will the MBA/MS degree enhance your career plans? Project the kinds of positions you anticipate having five years after earning the degree. What experiences have you had that form the foundation of your goals?
2. Give a candid appraisal of yourself. Include some discussion of your strengths and weaknesses.
3. Discuss three of your achievements or accomplishments.
4. Describe your level of commitment to education and the ways in which you might make a special contribution to the learning experience of others.

## **School of Education & Human Development**

Please visit the school Web site for additional application requirements:  
[www.ucdenver.edu/education](http://www.ucdenver.edu/education).

## **Department of Electrical Engineering**

Students applying for the MS in electrical engineering are required to chose an area of specialization from the following:

- Systems and Controls
- Signal Processing
- Communication Systems
- Microelectronic and VLSI
- Computer Engineering
- Photonics
- Power Systems

## **Expenses**

The estimated tuition, living expenses which include room, board, books and insurance, for the fall 2009, spring 2010 and summer 2010 (9 months) semesters for international students is listed below. Expenses are subject to change without notice. Personal expenses and travel costs are not included. The tuition costs may change yearly, and fees, books and supplies vary according to program. Taking more credits may also increase the cost of the program. If summer is your first term on the Downtown Campus, you are required to be registered as a full-time student to maintain immigration status.

Estimated Undergraduate Costs\* (12 credits)

Tuition and Fees	\$19,610
Room and Board	\$9,464
Books and Insurance	\$2,080
<hr/>	
Total Shown on Immigration Document	\$31,154

For each dependent, estimate an additional \$4,250

Estimated Graduate Costs\* (6 credits)

Tuition and Fees	\$14,718
Room and Board	\$7,904
Books and Insurance	\$2,080
<hr/>	
Total Shown on Immigration Document	\$24,702

For each dependent, estimate an additional \$4,250

\*Estimated costs are for fall 2009 and spring and summer 2010. These figures are for budgeting purposes only. Expenses are subject to change at any time without notice. Personal expenses and travel costs are not included.

## International Student and Scholar Services

**Director:** Laura Welch

**Telephone:** +1-303-315-2235

Since the first few months in a new country and a new city can be particularly difficult for international students, the Office of International Affairs (OIA) offers a number of special services to ease this transition, such as an orientation program for new international students and answers to visa questions. All international students and scholars meet with an international student advisor (ISA) in OIA upon arrival in Denver to have visas and other paperwork reviewed. OIA provides a friendly place to ask questions and express concerns about many

issues, including U.S. social customs, as well as an avenue for communicating with other UC Denver international student clubs and organizing social activities. For more information on immigration matters, advising or services for international students and scholars, visit our Web site at [www.cudenver.edu/international](http://www.cudenver.edu/international) or contact an international student advisor at 303-315-2230.

## Health Professions

### Undergraduate Health Careers Advisors

(Downtown Campus)

Charles Ferguson  
303-556-4350

or

Kent Nofsinger  
303-556-6218

Not sure what health specialty to enter?  
Visit the Health Careers Web site for  
information:

[www.cudenver.edu/clas/healthcareers](http://www.cudenver.edu/clas/healthcareers)

### Graduate Advisors

See contact information  
under each school or  
college in this chapter.

Denise Leberer, CLAS  
Advising  
303-556-2868

Pre-nursing, pre-pharmacy and dental  
hygiene advising

*Unlike most chapters in this catalog that focus on all programs for a particular school, this chapter provides information about programs within the schools and colleges that prepare students for a career in the health professions. On the Downtown Campus, two colleges offer health-related undergraduate programs. Students who complete their prerequisites or undergraduate degrees on this campus may choose to apply to graduate and health professional programs on the Anschutz Medical Campus. Three schools on the Downtown Campus offer health-related graduate programs. Downtown Campus students may choose to stay and complete a master's or PhD degree on this campus or apply to programs on the Anschutz Medical Campus. The new state-of-the-art clinical and research facilities on the Anschutz Medical Campus offer students unparalleled training in the health professions. Admission to these programs is very selective, and admission to the Downtown Campus does not assure admission to Anschutz Medical Campus programs. All programs on the Anschutz Medical Campus require incoming students to have either a bachelor's degree or minimum of 60 semester hours of undergraduate work completed before applying.*

## Undergraduate Programs on the Downtown Campus

Two colleges on the UC Denver Downtown Campus offer health-related programs for undergraduate students seeking careers in the health sciences. *Admission to the Downtown*

*Campus, however, does not assure admission to any professional health career program. Admission to those programs is a separate, competitive process open to qualified applicants from any accredited college or university.*

## **College of Liberal Arts and Sciences**

### **Department of Biology**

**Contact:** Lisa Johansen  
**Telephone:** 303-556-6250  
**E-mail:** Lisa.Johansen@ucdenver.edu  
**Web site:** [www.cudenver.edu/biology/](http://www.cudenver.edu/biology/)

To serve the needs of students who wish to obtain recognition for the acquisition of specialized skills in biology and to better prepare students for graduate school, health careers and jobs in industry, the Department of Biology offers a certificate program in biotechnology .

### **Health Careers**

**Advisor:** Charles Ferguson  
**Telephone:** 303-556-4350  
**Advisor:** Denise Leberer  
**Telephone:** 303-556-2868  
**Advisor:** Kent Nofsinger  
**Telephone:** 303-556-6218  
**Web site:** [www.cudenver.edu/clas/healthcareers](http://www.cudenver.edu/clas/healthcareers)

Health career advisors on the Downtown Campus assist in planning a course of study designed to improve your chances of success in the health career of your choice, including: dentistry and dental hygiene, medicine, medical technology, nursing, optometry, osteopathy, pharmacy, physical therapy, physician assistant, podiatry or veterinary medicine. A comprehensive list of health career options and additional information to help you mold your academic experience to your specific goals is available on the health careers Web site.

### **Health and Behavioral Sciences**

**Contact for minor:** Sharry Erzinger  
**Telephone:** 303-556-6793  
**Web site:** [www.cudenver.edu/hbsc/](http://www.cudenver.edu/hbsc/)

The health and behavioral sciences department offers a minor in community health science that is designed to provide undergraduates with the basic intellectual and methodological tools needed for public health. The minor in community health science supplements graduate degrees in a broad range of fields, including the biomedical sciences, social and behavioral sciences, public health, law, medicine, dentistry, pharmacy, business administration and health services research. The program is especially appropriate for students intending to pursue

careers in public health, as well as the primary care specialties in medicine, nursing or health policy and administration.

While a major is not currently available, students may develop an individually structured major (ISM) that combines course work in community health sciences with that of related fields such as anthropology, biology and psychology. For details see the Individually Structured Major BA section in the College of Liberal Arts and Sciences chapter of the catalog.

## **College of Engineering and Applied Science**

**Contact:** Engineering Student Services (advising)

**Telephone:** 303-556-4768

**Web site:** [ucdenver.edu/engineering](http://ucdenver.edu/engineering)

The desirability of obtaining an engineering education prior to undertaking a study of medicine is increasing continually as medicine itself is evolving. A great deal of new equipment, most of it electronic, is being developed to assist the medical practitioner in treatment of patients. Bioengineering, engineering systems analysis, probability and communication theory are highly applicable to medical problems. The College of Engineering and Applied Science offers students a pre-medicine option.

## **Graduate Programs on the Downtown Campus**

### **Business School**

**Director:** Errol L. Biggs

**Telephone:** 303-556-5845

**E-mail:** [Errol.Biggs@ucdenver.edu](mailto:Errol.Biggs@ucdenver.edu)

**Web site:** [www.business.cudenver.edu/Graduate/index.htm](http://www.business.cudenver.edu/Graduate/index.htm)

The Business School offers three degree options for those interested in health administration—MBA, MS and an executive MBA. These three degree options are outlined in the Business School chapter of this catalog.

## **College of Engineering and Applied Science**

**Contact:** Lynn E. Johnson

**Telephone:** 303-556-2372

**E-mail:** [MEngGIS@ucdenver.edu](mailto:MEngGIS@ucdenver.edu)

There are numerous ways in which geographic information systems (GIS) are used throughout health care and public health, including environmental health and epidemiology, disease surveillance and health services research. The College of Engineering and Applied Science offers a master of engineering degree with a GIS option, which emphasizes quantitative methods in the development and application of GIS technologies to a spectrum of discipline-specific settings having significant spatial dimensions.

# College of Liberal Arts and Sciences

## Department of Anthropology

**Graduate Director:** John Brett

**Telephone:** 303-556-8497

**Fax:** 303-556-8501

**Web site:** [www.cudenver.edu/anthropology](http://www.cudenver.edu/anthropology)

Students may earn an MA with a research concentration in medical anthropology or pursue an integrated MA/PhD in health and behavioral sciences. Details of these programs are included in the Department of Anthropology section in the College of Liberal Arts and Sciences chapter of this catalog.

## Health and Behavioral Sciences

**Program Director:** Richard Miech

**Telephone:** 303-556-4300

**E-mail:** [Richard.Miech@ucdenver.edu](mailto:Richard.Miech@ucdenver.edu)

**Web site:** [www.cudenver.edu/hbsc/](http://www.cudenver.edu/hbsc/)

The interdisciplinary PhD program in health and behavioral sciences provides an overarching framework integrating social and behavioral science perspectives on health and health care, while allowing the student to select and fully develop a particular research interest and professional career. This program has become a leader regionally in the application of GIS to health-related research.

Depending upon a student's chosen area of concentration, the successful graduate will gain expert knowledge of:

- research design and methods
- the determinants of health and disease
- the structure and organization of health care systems
- behavioral choices and how to use them to enhance wellness
- the contribution of individual, social and cultural factors to health behavior
- how guided change in health care systems may enhance quality, efficacy and access

The significance of these skills in addressing our current health care crisis will insure that graduates will be in demand in a number of employment sectors, ranging from community and public health organizations to nonprofit research organizations and private health care settings.

## Programs on the Anschutz Medical Campus

Information about Anschutz Medical Campus programs are in this chapter is for reference only. Contact individual schools and program directors for details.

## Graduate School

**Contact:** Office of the Dean

**Telephone:** 303-724-2915

**Web site:** [www.uchsc.edu/gs](http://www.uchsc.edu/gs)

**Degree Programs:** Master of science programs in: biostatistics; biophysics and genetics—genetic counseling; clinical science; nursing—nurse midwifery, nurse practitioner (women's health care, family, adult, geriatric and pediatric), adult clinical nurse specialist, health care informatics, nursing leadership; pediatric special needs

Doctor of philosophy in: biochemistry and molecular genetics; biomedical sciences program; biostatistics; biomolecular structure, cancer biology; cell biology, stem cells and development; clinical science; computational bioscience; epidemiology; health services research; human medical genetics; immunology; microbiology; molecular biology; neuroscience; nursing; pharmacology; pharmaceutical sciences; physiology and biophysics; reproductive sciences; toxicology

At the University of Colorado Denver Anschutz Medical Campus Graduate School, students learn to push the frontiers of human health and disease in more than a dozen basic science, clinical and nursing disciplines. In conjunction with the UC Denver School of Medicine, the Graduate School offers a joint MD/PhD in the medical scientist training program which develops investigators with a broadly-based knowledge of both basic and clinical biomedical sciences. The school's personal mentor-student emphasis provides a distinctive learning experience.

Health Sciences Programs

## School of Dental Medicine

**Contact:** Office of Admissions and Student Affairs

**Telephone:** 303-724-7120

**Web site:** [www.uchsc.edu/sod](http://www.uchsc.edu/sod)

**Degree Programs:** doctor of dental surgery, international student program, orthodontics, periodontics and general practice residency programs

In this nationally recognized, award-winning program, students graduate with the ability to offer a broad range of dental services. It is the most selective dental school in the United States with more than 1,500 applicants annually for only 52 positions in the freshman class. In a program unique in the country, the 202 dental students, as a graduation requirement, also provide an academic year's dental clinical care to underserved populations throughout Colorado. In addition to the dental students, 45 students are enrolled in the international student program, eight in the general practice residency, nine in the periodontics graduate program and 31 in the orthodontic graduate program. Home to the region's only university-based dental implant center, the school pioneers research in oral cancer, salivary gland disease, neurobiology and pain control.

## School of Medicine

**Contact:** Office of Admissions

**Telephone:** 303-724-8025

**Web site:** [www.uchsc.edu/som/admissions](http://www.uchsc.edu/som/admissions)

**Degree Program:** Doctor of medicine

The University of Colorado Denver School of Medicine is nationally and internationally respected for its education, research, patient care and community service programs. Faculty members teach and care for patients at University of Colorado Hospital, The Children's Hospital, Denver Health, National Jewish Health and the Denver V.A. Medical Center, working side by side with nearly 1,000 graduate doctors in training in medical specialties and generalist care at the university. In addition to providing exceptional patient care and education, the medical school's greatest achievement has been the ability to attract gifted faculty and students. The school's physicians and research scientists have pioneered medical breakthroughs that have become national and world models.

## Child Health Associate/Physician Assistant

**Contact:** Office of Admissions

**Telephone:** 303-724-7963

**E-mail:** [chapa-info@ucdenver.edu](mailto:chapa-info@ucdenver.edu)

**Web site:** [www.uchsc.edu/chapa](http://www.uchsc.edu/chapa)

**Degree Program:** Master of physician assistant studies (MPAS)

Ranked eighth in the nation, the child health associate/physician assistant (CHA/PA) is a primary care PA with specialized training in the care of infants, children and adolescents as well as training in the care of adult patients. Program graduates are prepared to provide comprehensive medical care to patients of all ages and practice under state and national guidelines established for all PAs. Graduates are employed in many settings including managed care organizations, community health centers, physician's offices, public health agencies, hospitals, school-based adolescent clinics, emergency departments and rural and inner city health care delivery sites.

## Physical Therapy

**Contact:** Physical Therapy Program

**Telephone:** 303-724-9144

**E-Mail:** [betti.krapfl@ucdenver.edu](mailto:betti.krapfl@ucdenver.edu)

**Web site:** [www.uchsc.edu/pt](http://www.uchsc.edu/pt)

**Degree Program:** Doctor of physical therapy (DPT)

The University of Colorado Denver physical therapy program offers a three-year, post-baccalaureate professional education program of didactic learning and extensive clinical experiences culminating in a doctor of physical therapy degree. Graduates are prepared to excel in the physical therapy profession and adapt to the ever-evolving health care environment.

As part of the School of Medicine, our entry-level program has been continuously accredited for 60 years. Foundational elements of our curriculum include movement science, evidence-based practice, patient-centered care and the delivery of interprofessional health care services as doctors of physical therapy.

## **Graduate Medical Education (Residency and Fellowship Programs)**

**Telephone:** 303-724-6031

**Web site:** [www.uchsc.edu/gme](http://www.uchsc.edu/gme)

The University of Colorado Denver School of Medicine and affiliated hospitals provide graduate medical education (training of residents and fellows) in more than 60 specialties and subspecialties. The Graduate Medical Education Manual provides details about these opportunities on the Anschutz Medical Campus.

## **Continuing Medical Education**

**Telephone:** 303-724-3552

**Web site:** [www.uchsc.edu/cme/](http://www.uchsc.edu/cme/)

The School of Medicine provides continuing education opportunities for physicians and other health care professionals worldwide. The mission is to enhance the knowledge, skills and performance of physicians and other health care professionals and, in the process, to improve the health care of the populations they serve.

## **College of Nursing**

**Contact:** Office of Student Affairs and Diversity

**Telephone:** 303-724-1812

**Web site:** [www.nursing.ucdenver.edu](http://www.nursing.ucdenver.edu)

**Degree Programs:** BS in nursing, MS in nursing, doctor of nursing practice (DNP), PhD in nursing

In 2008, the College of Nursing celebrated 110 years of contributions to nursing education, practice and research. The college offers four degrees: BS, MS, DNP and PhD, and is one of 15 U.S. nursing schools selected to pilot a program advancing quality and safety education in nursing (QSEN). The college's BS graduates consistently place well above the state and national average on the nursing licensure examination. The college annually ranks in the top schools of nursing in the country for the quality of its graduate programs. The College of Nursing is a leading educator of doctorally prepared nurses, internationally recognized for the quality of its graduates as nurse scientists, educators and clinical leaders.

## **School of Pharmacy**

**Contact:** Office of Student Services

**Director:** Beverly Brunson

**PharmD Telephone:** 303-724-2882

**PhD Telephone:** 303-315-0565

**Fax:** 303-724-7330

**Web site:** [www.uchsc.edu/sop](http://www.uchsc.edu/sop)

**Degree Programs:** Doctor of pharmacy (PharmD), PhD in toxicology, PhD in pharmaceutical sciences

As drug products become more potent, more complex and more numerous, the need for pharmacists to assume a more active role in consultation and patient counseling has increased remarkably. The University of Colorado Denver School of Pharmacy is one of the nation's top-ranked pharmacy schools and is committed to pharmaceutical education, research and patient care. The school's more than 500 professional and graduate students learn about the chemical and physical properties of medicinal agents, the biology of disease and the actions of drugs on the human body, while pursuing either a doctor of pharmacy or PhD degree. The school also provides continuing education programs to pharmacists and other health practitioners throughout the state.

## Colorado School of Public Health

**Contact:** Colorado School of Public Health

**Telephone:** 303-724-4613

**Web site:** <http://publichealth.ucdenver.edu>

**Degree Programs:** Master of public health (MPH) professional degree; master of science (MS) in biostatistics; doctor of philosophy (PhD) in analytical health sciences—biostatistics, epidemiology, health services research

The Colorado School of Public Health is the first and only school of public health in the Rocky Mountain region. Collaboratively formed by University of Colorado Denver, Colorado State University and University of Northern Colorado, the school supports students, practitioners and communities, with access to educational programs, innovative research and community services.

The new school offers professional, graduate, residency and certificate programs. Each program provides the training that students need to succeed in general and specialized public health careers. Programs of study focus on a variety of professional interests including epidemiological and health services research; biostatistics and medical informatics; community needs assessment; environmental and occupational health; health policy; health promotion; and administration of public health programs. Students entering the public health programs have access to the collective resources and expertise offered by the collaborating universities and multiple community and government partnerships.

# CU Online

## Frequently Asked Questions

**Q. What is CU Online's Web site address?**

A. [www.cuonline.edu](http://www.cuonline.edu).

**Q. I'm not a UC Denver student. Can I take a course through CU Online?**

A. If you are not currently a student or attending a university other than UC Denver, you may enroll in an online course after applying and getting accepted as either a degree- or nondegree-seeking student. Visit the schools' and colleges' sections in this catalog for specific admission requirements for each school. If you are a student at another institution, contact your school to find out if the online course (and credit) will transfer as intended.

**Q. What kind of credit will I receive for online courses?**

A. The credits you earn through CU Online are identical to credits earned through traditional on-campus courses. UC Denver is a fully accredited institution, making credits easily transferable to other universities. And if you graduate solely by taking online courses—the degree is the same.

**Q. Does CU Online offer any core curriculum courses?**

A. Yes. Approximately half of the courses offered are core curriculum and can be applied toward an undergraduate degree program.

**Q. Does my online course require textbooks?**

A. Unless the instructor waives textbook requirements, all online courses are supplemented with textbooks. Further documentation may also be provided by the instructor, in a free downloadable format.

**Q. What times does my online course meet?**

A. Unless the instructor has designated a specific login time for a live chat session, you may login at any time, day or night.

**Q. When does my hybrid course meet on campus?**

A. Hybrid courses have varying campus meeting dates so it is integral that you attend the first campus meeting to receive the schedule. If you miss the first campus meeting, you should contact the instructor immediately either by phone or e-mail.

**Q. How long do online courses last?**

A. Online courses typically follow the duration of the respective semester in which it is offered. Some instructors may opt to provide a shortened intensive semester course, which would be indicated in your course schedule.

**Q. How do I sign up for an online course?**

A. If you've already applied to the university, you may register for online courses directly through the SMART system, [www.cudenver.edu/registrar](http://www.cudenver.edu/registrar). If you are not a UC Denver student, you may apply as either a degree- or nondegree-seeking student through the university's main site, [www.ucdenver.edu](http://www.ucdenver.edu).

**Q. What are the tuition differences for online courses?**

A. The tuition is the same between on-campus courses and online courses. There is, however, a standard course fee for online courses (per course, not per semester hour) that goes to pay for the online technology, support and 24-7 customer service.

- Online course fee for in-state students - \$100; online course fee for out-of-state students - \$125
- Hybrid course fee for in-state students - \$50; hybrid course fee for out-of-state students - \$75

**Q. Are there tuition breaks for online courses?**

A. Yes. If you are registered for only online courses, you are simply responsible for the information technology fee and the student information system fee. **All other traditional fees are waived**, along with the incidental fees associated with driving, mass transit, parking, etc. There is also a special tuition discount if you are an out-of-state student signed up for only online courses.

**Q. I dropped my online courses, why do I still owe tuition?**

A. If an online course is not dropped within the initial add/drop period, you will not be able to receive tuition reimbursement. Be sure to check the drop/add dates stated online at [www.cudenver.edu/registrar](http://www.cudenver.edu/registrar) and in the printed schedule of courses.

**Q. Will my degree say CU Online?**

A. No. Degrees are awarded through the University of Colorado.

**Q. What if I have questions about CU Online?**

A. If you have further questions about courses, degrees, registration, tuition and fees or computer requirements, e-mail them to [help@cuonline.edu](mailto:help@cuonline.edu) or call Naomi Wahls, 303-315-3700.

## Computer Requirements

In order to make the most of your online learning experience, there are

several technical requirements you will need to fulfill. Refer to the guidelines below.

### eCollege System Requirements

**Microsoft Windows**

\* Windows 2000 or XP

\* 64 MB RAM

### Blackboard System Requirements

**Microsoft Windows**

\* Windows 2000 XP, or Vista (Vista users, please see below.)

\* 2 Gigabytes of RAM and 20 Gigabytes of free disk space on your primary hard drive (usually labeled the "C" drive)

\* 28.8 kbps modem  
(56K Recommended)

\* 28.8 kbps modem (56K recommended)

\* SoundCard &  
Speakers

\* SoundCard & Speakers

\* Recommended Software

At least one of the  
recommended PC  
browsers with Java  
needs  
to be enabled, although  
we recommend having  
two browsers:

At least one of the recommended PC browsers with Java needs to  
be enabled,  
although we recommend having two browsers:

\* Internet Explorer 6.0  
(supported)

\* Internet Explorer 6.0 (supported)

\* Internet Explorer 7.0  
(recommended)

\* Internet Explorer 7.0 (supported)

\* Internet Explorer 5.5  
(supported)

\* Internet Explorer 5.5 (supported)

\* Netscape  
Communicator 7.1  
(supported)

\* Netscape Communicator 7.1 (supported)

\* Firefox 1.x (supported)

\* Firefox 1.x (supported)

\* Firefox 2.0 (supported)

\* Firefox 2.0 (supported)

\* Firefox 3  
(recommended)

\* Firefox 3 (recommended)

### **Macintosh OS**

\* MacOS 9.1 and OS X  
\* 32 MB RAM (64  
Recommended)

Vista users: Blackboard has tested Release 7 of the Blackboard  
Academic Suite with Microsoft Windows Vista using both the  
Microsoft Internet Explorer 7.0 Web browser and the Firefox 2.0 Web  
browser. The results of the testing show that Microsoft Windows  
Vista is compatible.

\* 28.8 kbps modem  
(56K Recommended)  
\* Sound Card &  
Speakers

Compatible configurations are partially tested by Blackboard and  
should function as expected. In this instance, Blackboard has  
conducted several weeks of testing to determine compatibility. Users  
that have upgraded to Microsoft Windows Vista should feel  
comfortable using it with Microsoft Internet Explorer 7 or Firefox 2.0  
to access the Blackboard Academic Suite, Release 7.

At least one of the recommended MAC browsers with Java needs to be enabled, although we recommend having two browsers:

\* Netscape Communicator 7.1 (supported)

However, please be aware of the following issues uncovered during testing:

\* Netscape Communicator 6.2 (supported)

\* Safari 3.0 (supported for OS X)

\* Safari 2.0 (recommended for OS X)

\* Safari 1.2 (supported for OS X)

AS-102054: The Visual Text Box Editor controls do not function correctly in Internet Explorer 7 because they require a component not available in Windows Vista. Users using Internet Explorer 7 when interacting with UC Denver's Blackboard, should turn off the Visual Text Box Editor in their personal preferences or use Firefox version 2.0, or higher.

\* Firefox 1.x (supported)

\* Firefox 2.0 (supported) **Macintosh OS**

\* Firefox 3 (supported) \* MacOS 9.1 and OS X

\* 2 Gigabytes of RAM and 20 Gigabytes of free disk space on your primary hard drive (usually labeled the "C" drive)

\* 28.8 kbps modem (56K Recommended)

\* Sound Card & Speakers

\* Recommended Software

At least one of the recommended MAC browsers with Java needs to be enabled, although we recommend having two browsers:

\* Netscape Communicator 7.1 (supported)

\* Netscape Communicator 6.2 (supported)

\* Safari 3.0 (supported for OS X)

\* Safari 2.0 (recommended for OS X)

\* Safari 1.2 (supported for OS X)

- \* Firefox 1.x (supported)
- \* Firefox 2.0 (supported)
- \* Firefox 3 (supported)

### **Internet Service Provider (ISP)**

An ISP is a company that provides you with the software and access necessary for getting onto the Internet. You will need Internet access to take your courses.

### **E-mail Account**

Your e-mail address is established when you sign up with an ISP. Check with your ISP if you do not know what your e-mail address is. Special characters can cause problems with some systems that make it difficult to reach the intended mailbox. We suggest that you do not use special characters, for example +, &, \$, etc., in your e-mail address.

### **Java Capable Browser**

We support Microsoft Internet Explorer 5.5 and 6.0 for Windows and Internet Explorer 5.1 through 5.2 for Macintosh. Netscape Communicator 6.2 and 7.1 for Windows and Netscape Communicator 7.1 and Safari 1.x for Macintosh, are also supported.

For additional information, go to [www.cuonline.edu](http://www.cuonline.edu).

*You have a life filled with family and friends. A life filled with work and responsibilities. A life—filled... which makes a rigid school schedule seem even more impractical and unrealistic. That's why, in 1996, the University of Colorado Denver developed CU Online for its Downtown Campus, making a sought-after education not only convenient, but conceivable. And since becoming one of the first fully accredited online programs in the country, CU Online has continued to grow and evolve into the respected and renowned institution it is today.*

Essentially, CU Online allows you the opportunity to attend the University of Colorado Denver on your time, at your convenience, while also providing the recognition and respect that only a

brick and mortar university can offer. So besides the safety net of an actual campus, once you graduate you can proudly display your diploma with a level of honor and admiration that sometimes isn't found with virtual institutions.

But it's not only one or two electives or random courses; you can actually complete an entire degree (or 15) all online, without stepping a foot on campus. CU Online allows you to enjoy the same stimulating courses, top-notch faculty and dedicated resources as the on-campus students...but with the freedom and convenience that online courses naturally provide.

However, CU Online didn't always have the number of degree programs (15), certificates (11) or courses (350+) that are currently available. In that first semester in 1996, you could choose from up to three courses. Slightly less than the 217 courses that were available fall 2008. And that's only the beginning. CU Online is well on its way to achieving its initial goal of providing students like you with the most comprehensive set of online courses, services and resources of any institution of higher education in the world.

So whether you're looking to start a degree, finish one or just take the occasional course or two, CU Online provides the opportunity to tailor courses around your life...rather than tailor life around your courses.

## Delivery Media

CU Online courses run on a traditional semester schedule and, although courses are not self-paced, they are flexible. As a student, you're able to log into your courses on a regular basis, at your convenience. You will be assigned a home page to access courses, find lectures and assignments and participate in class discussions and real-time course chat rooms.

Each course is developed to offer everything you would expect from UC Denver. But online, instead of on-campus. So instructors deliver course content and lectures through cutting edge technology, such as streaming audio, video and multimedia slide shows.

Some professors offer weekly assignments to help ensure you are right on track with the materials being taught. Quizzes and tests can be timed to help affirm your mastery of the material. In addition, assignments may be uploaded to the site, which is like creating an attachment in e-mail.

Exams are taken and administered in a variety of ways. They can be administered online by using your course software with an Internet browser, as a take-home exam where you print out a hard copy and hand it in, or proctored by an outside party, an instructor or the teacher's assistant (TA).

As a bonus, if you are registered for only online courses, you are simply responsible for the information technology fee and the student information system fee. **All other traditional fees are waived**, along with the incidental fees associated with commuting to campus, parking, child care, etc. There is also a special tuition discount if you are an out-of-state student enrolled only in online courses.

## Programs

CU Online offers courses in liberal arts and sciences, arts and media, business, education, engineering, public affairs and architecture and planning. Below are the complete degree programs and certificates that can be completed exclusively through online courses:

## Degree Programs

- Bachelor of arts in English writing (BA)
- Bachelor of arts in nursing, *RN to BS*
- Bachelor of arts in sociology (BA)
- Doctor of nursing practice (DNP)
- Doctor of pharmacy,  
*Nontraditional pharmD (NTPD) - Extended studies*
- Doctor of philosophy (PhD) in nursing
- Master of arts in early childhood education (MA)
- Master of arts in information and learning technologies (MA),  
*eLearning design and implementation*
- Master of arts in information and learning technologies (MA),  
*School library*
- Master of business administration (MBA)
- Master of engineering (MEng),  
*Geographic information systems*
- Master of public administration (MPA)
- Master of science in information systems (MS),  
*Enterprise technology management*  
*Systems development and implementation*
- Master of science in management and organization (MS),  
*Managing for sustainability*

## Certificates, Modules and Other Online Programs

- Certificate in palliative care
- Clinical educator certificate
- Designing eLearning environments (DeE) certificate
- Early childhood special education, specialist license
- Early literacy certificate
- Health care informatics certificate
- International certificate in human care and healing
- Nonprofit management certificate
- Professional writing certificate
- Special education generalist endorsement
- Teaching English to speakers of other languages (TESOL) certificate

The semester hours you earn through online courses are **identical to those earned through traditional on-campus courses**. UC Denver is a fully accredited institution, making semester

hours easily transferable to other universities. And if you graduate solely by taking online courses, the degree is the same.

## **Business School**

### **Master of Business Administration (MBA)**

The professional MBA program at the UC Denver Business School is outstanding in its ability to integrate leading-edge research with practical business applications in an intellectually challenging environment. Business courses are accredited through the Association to Advance Collegiate Schools of Business International (AACSB).

The professional MBA program emphasizes active learning through case studies, computer simulations, real-world group projects, class discussions and involvement with Colorado businesses. A master's in business administration degree from UC Denver prepares you with the management and leadership skills required to achieve your personal career goals.

The professional MBA can be individualized and tailored to your specific interests and career goals. Below are the four MBA specializations that you can complete entirely online.

- Enterprise technology management (ETM)
- Finance (FNC)
- Information systems (IFS)
- Managing for sustainability (MNS)

The professional MBA program requires the completion of 48 semester hours, including 30 semester hours of required MBA core courses, 3 semester hours in international business and 15 semester hours of electives, which you'll choose from other graduate business courses. The following are examples of Business School courses available online from spring 2007 through spring 2009 along with proposed courses. Visit [www.cuonline.edu/catalog](http://www.cuonline.edu/catalog) for up-to-date information about online degrees and available courses. All courses are 3 semester hours.

- Analysis, Modeling and Design
- Analyzing and Interpreting Accounting Information
- Applied Economics for Managers
- Business Forecasting
- Business Intelligence Systems
- Business Process Management
- Data Analysis for Managers
- Data Base Management Systems
- Emerging Technologies
- Enterprise Knowledge Management
- Entrepreneurial Financial Management
- Financial Decisions and Policies
- Financial Management
- Financial Modeling
- Global Enterprise Systems
- Information Systems Management and Strategies

- Information Systems Security and Privacy
- International Corporate Governance
- Internet Marketing
- Investment Management Analysis
- IT Infrastructure
- IT Project Management
- Legal and Ethical Environment of Business
- Macroeconomics and Financial Markets
- Management of Financial Institutions
- Management of Operations
- Managing Individuals and Teams
- Marketing Management
- Object-Oriented Business Programming
- Quantitative Methods for Finance
- Security Analysis and Firm Valuation
- Service Oriented Architecture
- Short-term Financial Management
- Strategic Management
- Web Site Development Practice and Technologies

Program contact: Shelly Townley, Shelly.Townley@ucdenver.edu.

## **Master of Science in Information Systems — *Enterprise Technology Management (ETM)***

The information systems (IS) program in the Business School has established UC Denver as a leader and innovator in the field. As part of that innovation, the online master of science (MS) program has been developed to help keep you one step ahead of your collegiate peers when pursuing your information based field of choice. You can now complete two distinct specializations completely online

The first specialization (enterprise technology management) focuses on information technology as the prime driver and enabler of business strategy. Courses cover the emerging technologies and the evolving role and importance of IT in modern organizations while concentrating on the strategic, technological, financial and organizational issues involved with the effective management of information technology within an enterprise.

The following are examples of courses available online from spring 2007 through spring 2009 along with proposed courses. Visit [www.cuonline.edu/catalog](http://www.cuonline.edu/catalog) for up-to-date information about online degrees and available courses. All courses are 3 semester hours.

- Analysis, Modeling and Design
- Analyzing and Interpreting Accounting Information
- Business Intelligence Systems
- Business Process Management
- Data Analysis for Managers
- Data Base Management Systems

- Emerging Technologies
- Financial Management
- Global Enterprise Systems
- Information Systems Management and Strategies
- Information Systems Security and Privacy
- IT Infrastructure
- IT Project Management
- Legal and Ethical Environment of Business
- Management of Operations
- Managing Individuals and Teams
- Marketing Management
- Strategic Management

Program contact: Shelly Townley, [Shelly.Townley@ucdenver.edu](mailto:Shelly.Townley@ucdenver.edu).

## **Master of Science in Information Systems — *System Development and Implementation (SDI)***

The second IS specialization (system development implementation) provides insight in building and managing large systems using client/server, multimedia, distributed and service oriented architectures. The courses provide expertise in C#, multimedia, data warehousing, decision support, expert systems and business intelligence systems, management of large databases and systems integration. Project management course work enables you to successfully handle highly complex systems development projects in the business world.

The following are examples of courses available online from spring 2007 through spring 2009 along with proposed courses.

Visit [www.cuonline.edu/catalog](http://www.cuonline.edu/catalog) for up-to-date information about online degrees and available courses. All courses are 3 semester hours.

- Analysis, Modeling and Design
- Analyzing and Interpreting Accounting Information
- Business Intelligence Systems
- Business Process Management
- Data Analysis for Managers
- Data Base Management Systems
- Emerging Technologies
- Financial Management
- IT Infrastructure
- IT Project Management
- Legal and Ethical Environment of Business
- Management of Operations
- Managing Individuals and Teams
- Marketing Management
- Object-Oriented Business Programming
- Service Oriented Architecture

- Strategic Management
- Web Site Development Practice and Technologies

Program contact: Shelly Townley, Shelly.Townley@ucdenver.edu.

## **Master of Science in Management and Organization - *Managing for Sustainability***

The MS in management focuses on group and organizational effectiveness, organizational design and organizational change. The MS in management and organization program prepares you for upper-level managerial positions in the public and private sectors. Upon completion of this program you will:

- Create effective strategies for success in today's complex and constantly changing business environment
- Effectively design organizations
- Learn how to manage interpersonal dynamics
- Implement planned change and organizational transformations

The course work for the MS in management degree consists of 10 courses (30 semester hours). The four required courses will provide you with a broad perspective and solid foundation in management. The following are examples of courses available from spring 2007 through spring 2009 along with proposed courses. Visit [www.cuonline.edu/catalog](http://www.cuonline.edu/catalog) for up-to-date information about online degrees and available courses. All courses are 3 semester hours.

- Accounting and Finance for Sustainability
- Business and the Natural Environment
- Designing Effective Organizations
- Managing for Sustainability
- Managing Individuals and Teams
- Managing People for Competitive Advantage
- Organizational Development
- Social Marketing

Program contact: Shelly Townley, Shelly.Townley@ucdenver.edu.

## **College of Engineering and Applied Science**

### **Engineering - *Geographic Information Systems***

The master of engineering degree—geographic information systems (MEng-GIS) option is directed to engineers and other environmental and urban infrastructure professionals seeking skills in using and managing these rapidly developing spatial data technologies.

The MEng-GIS degree at UC Denver is multidisciplinary involving civil engineering (environmental, geodesy and remote sensing, water resources, geotechnical and transportation), geography and environmental sciences (remote sensing, ecology, air quality, environmental impact assessment), urban and regional planning (spatial analysis, community development), information systems (data structures, database systems and software

engineering), applied mathematics (probability and statistics, networks, simulation and optimization) and engineering management strategic planning, project management, policies).

The MEng-GIS degree program consists of 30 graduate semester hours - 9 courses, plus one course of and advanced applications project. The following are examples of courses available online from spring 2007 through spring 2009 along with proposed courses. Visit [www.cuonline.edu/catalog](http://www.cuonline.edu/catalog) for up-to-date information about online degrees and available courses. All courses are 3 semester hours.

- Advanced Remote Sensing
- GIS Analyses—Theory and Practice
- GIS Laboratory (two or more versions may be available)
- GIS Management and Policies
- GIS Relational Database Systems
- GIS Spatial Database Development
- Introduction to Geographic Information Systems
- Master's Report Multiple Factor GIS Analysis

Program contact: Lynn Johnson, [MEngGIS@ucdenver.edu](mailto:MEngGIS@ucdenver.edu).

## **College of Liberal Arts and Sciences**

### **Bachelor of Arts in English Writing (BA)**

The Department of English writing major offers you the knowledge and skills necessary to write well in a number of contexts including nonprofit organizations, industry and academia. This is accomplished through a combination of traditional and new media courses and through the service learning and internship opportunities provided for you. The flexible and interdisciplinary nature of this degree is designed to prepare students wishing to enter graduate school or pursue jobs in education, law, editing, professional writing and other areas.

If you're majoring in writing, you must present a total of 39 hours for the major, of which 27 hours must be earned in upper division courses. The following are examples of courses available online from spring 2007 through spring 2009 along with proposed courses. Visit [www.cuonline.edu/catalog](http://www.cuonline.edu/catalog) for up-to-date information about online degrees and available courses. All courses are 3 semester hours.

- Advanced Composition
- Argumentation and Logic
- Business Writing
- Grammar, Rhetoric and Style
- Introduction to Creative Writing
- Language Theory
- Senior Seminar in Writing
- Special Topics in Rhetoric and Writing
- Technical Writing

Program contact: Joanne Addison, [Joanne.Addison@ucdenver.edu](mailto:Joanne.Addison@ucdenver.edu).

## **Bachelor of Arts in Sociology (BA)**

Sociology is the study of group life: its characteristics, changes, causes and consequences. It combines scientific and humanistic perspectives in the study of urban and rural life, family patterns and relationships, social change, intergroup relationships, social class, environment, technology and communications, health seeking behavior and social movements.

A major in sociology is accomplished by completing a general core of 19 hours, plus a minimum of 15 electives in sociology, for a total of 34 hours with an average grade of C (2.0) in all courses. The following are examples of courses available online from spring 2007 through spring 2009 along with proposed courses. Visit [www.cuonline.edu/catalog](http://www.cuonline.edu/catalog) for up-to-date information about online degrees and available courses. All courses are 3 semester hours.

- Contemporary Sociological Theory
- History of Sociological Theory
- Introduction to Research Methods
- Introduction to Sociology
- Introduction to Statistics
- Urban Sociology

Program contact: Rachel Watson, [Rachel.Watson@ucdenver.edu](mailto:Rachel.Watson@ucdenver.edu).

## **Professional Writing Certificate**

This professional writing certificate focuses on skills you'll need as a professional writer, as well as simply those skills you'll need to enhance your communication skills in such varied professions as:

- Editing
- Education
- Law

The certificate consists of 12 semester hours that may be completed in two to four semesters. Enrollment is open to undergraduates, graduates, working professionals and returning students, and the certificate has no prerequisites. The following are examples of courses available online from spring 2007 through spring 2009 along with proposed courses. Visit [www.cuonline.edu/catalog](http://www.cuonline.edu/catalog) for up-to-date information about online degrees and available courses. All courses are 3 semester hours.

- Advanced Composition
- Argumentation and Logic
- Business Writing
- Grammar, Rhetoric and Style
- Introduction to Creative Writing
- Language Theory
- Senior Seminar in Writing
- Special Topics in Rhetoric and Writing
- Technical Writing

Program contact: Joanne Addison, Joanne.Addison@ucdenver.edu.

## **Teaching English to Speakers of Other Languages (TESOL) Certificate**

If you're a nondegree-seeking student, this certificate program allows you the opportunity to receive a credentialed certificate in teaching English to speakers of other languages (TESOL). The certificate courses can also be applied to the graduate degree program in Applied Linguistics without increasing the minimum number of semester hours required to graduate.

This certificate is 12 semester hours and is geared toward either native English speakers who want to teach overseas or international students who want to teach English in their home country or other countries. The following are examples of courses available online from spring 2007 through spring 2009 along with proposed courses. Visit [www.cuonline.edu/catalog](http://www.cuonline.edu/catalog) for up-to-date information about online degrees and available courses. All courses are 3 semester hours.

- Cross Cultural Communication
- Language Theory
- Principles and Practices of Second Language Acquisition
- Teaching Second Language and Second Dialect

Program contact: Ian Ying, hongguang.ying@ucdenver.edu.

## **College of Nursing (Anschutz Medical Campus)**

### **Bachelor of Science in Nursing - RN to BS**

The RN-bachelor of science degree program, based on the Colorado Nursing Articulation Model, is an educational pathway available for registered nurses who desire career mobility and professional development.

The following are examples of courses available online from spring 2007 through spring 2009 along with proposed courses. Visit [www.cuonline.edu/catalog](http://www.cuonline.edu/catalog) for up-to-date information about online degrees and available courses.

- Health Assessment for RN's (Available in Summer)
- Nursing Care/ Case Management (Available in Spring)
- Nursing Research (Available in Spring)
- Professional Nursing: Environmental Context for Practice: Bioethical and Legal Foundations (Available in Spring)
- Professional Nursing: Reflective Practice, Social Justice, Issues & Trends (Available in Fall)
- Public Health Nursing (Available in Fall Block II, Spring Block I & II)
- Senior Integrated Practicum (Available in Fall Block I, Spring Block I & II)

Program contact: Nina Sanchez: Ninali.Sanchez@ucdenver.edu.

## **Certificate in Palliative Care**

Palliative care refers to the comprehensive management of the physical, psychological, social, spiritual, and existential needs of patients with progressive illness and their families. This program integrates palliative care principles into the practice of health care professionals for those working in acute and long-term care in both rural and urban settings in Colorado and beyond, and to provide theory review for the HPNA Palliative Care Nursing Credentialing Examination.

The following are examples of courses available online from spring 2007 through spring 2009 along with proposed courses. Visit [www.cuonline.edu/catalog](http://www.cuonline.edu/catalog) for up-to-date information about online degrees and available courses.

- Advanced Concepts in Palliative Care
- Complex Symptoms Management in Palliative Care

Program contact: Judy Campbell: [Judy.Campbell@ucdenver.edu](mailto:Judy.Campbell@ucdenver.edu).

## **Clinical Educator Certificate**

The clinical educator certificate is a comprehensive program that provides the knowledge and skills needed to successfully develop clinical education programs for nurses in your facility. Graduates with this certificate assume professional roles in clinical education, including:

- Clinical/nursing education director/manager
- Community and public health educator
- Perioperative educator clinical nurse specialist educator/manager
- Clinical instructor

The following are examples of courses available online from spring 2007 through spring 2009 along with proposed courses. Visit [www.cuonline.edu/catalog](http://www.cuonline.edu/catalog) for up-to-date information about online degrees and available courses.

- Clinical Teaching Theory
- Planning and Evaluation
- Writing a Business Plan

Program contact: Judy Campbell: [Judy.Campbell@ucdenver.edu](mailto:Judy.Campbell@ucdenver.edu).

## **Doctor of Nursing Practice (DNP)**

As a DNP graduate, you will be prepared to be a clinical leader who designs models of health care delivery, evaluates clinical outcomes, identifies and manages health care needs of populations, and uses technology and information to transform health care systems.

In fall 2005, the University of Colorado Denver College of Nursing became the first school in the Rocky Mountain region to initiate the doctor of nursing practice (DNP) degree. The University of Colorado's DNP program has approval from the Board of Regents and the Colorado Commission on Higher Education (CCHE).

The following are examples of courses available online from spring 2007 through spring 2009 along with proposed courses. Visit [www.cuonline.edu/catalog](http://www.cuonline.edu/catalog) for up-to-date information about online degrees and available courses.

- Applied Evidence-based Practice
- Context of Practice, Population and Patient Management
- Cultural Competence for Advanced Practice
- Designing Theory-guided Models of Care
- DNP Capstone Clinical Evaluation Project
- DNP Capstone Clinical Evaluation Proposal Development
- DNP Leadership Role Residency
- Emerging Therapies for Advanced Nursing Practice
- Epidemiology and Environmental Health
- Inferential Statistics
- Leadership, Management, Innovation and Entrepreneurship
- Management Information for Decision Support
- Practice Epistemology: Expanding Ways of Knowing for Reflective Practice

Program contact: Judy Campbell: [Judy.Campbell@ucdenver.edu](mailto:Judy.Campbell@ucdenver.edu).

## **Doctor of Philosophy (PhD) in Nursing**

As a nurse scholar, this PhD program prepares you to advance the art, science and practice of the discipline. PhD preparation in nursing promotes knowledge development for reflective, theory-based and research-guided nursing practice. The PhD program equips you to conduct knowledge development and scholarly inquiry and to be actively engaged in many roles including:

- Administrator
- Clinician-scholar
- Educator
- Health care policy analyst
- Researcher

The following are examples of courses available online from spring 2007 through spring 2009 along with proposed courses. Visit [www.cuonline.edu/catalog](http://www.cuonline.edu/catalog) for up-to-date information about online degrees and available courses.

- Experimental Design and Analysis
- Methods of Disciplined Inquiry in Nursing
- Multivariate Design and Analysis
- Philosophy of Human Science
- Qualitative Empirical Research
- Quality and Cost Effective Outcomes: Macro-level
- Quality and Cost Effective Outcomes: Micro-level
- Quantitative Interpretive Research
- Research Practicum & Ethics of Inquiry
- Selected Topics in HEHIH

- Seminar in HEHIH
- The Discipline of Nursing
- Theory and Knowledge Development

Program contact: Judy Campbell: [Judy.Campbell@ucdenver.edu](mailto:Judy.Campbell@ucdenver.edu).

## **Health Care Informatics Certificate**

As a health care professional, this health care informatics program provides an opportunity for health care professionals to acquire knowledge and skills in the rapidly progressing field of informatics. With recent movements toward the adoption of the electronic health record and the need for IT infrastructure to increase patient safety and facilitate evidence-based practice, there is a growing need for more informatics specialists. This certificate provides opportunities for those new to the field and those who may be practicing in the field and need a professional update.

The certificate is a 9 semester hour program. The following are examples of courses available online from spring 2007 through spring 2009 along with proposed courses. Visit [www.cuonline.edu/catalog](http://www.cuonline.edu/catalog) for up-to-date information about online degrees and available courses.

- Database Management Systems
- Decision Support
- e-Health
- Foundations of Healthcare Informatics
- HCI Design Principles
- IT Systems Life Cycle
- Knowledge Management
- Semantic Representation

Program contact: Judy Campbell: [Judy.Campbell@ucdenver.edu](mailto:Judy.Campbell@ucdenver.edu).

## **International Certificate in Human Care and Healing**

The human caring and healing certificate is a unique program that is the "next generation" of the pioneering education offered in the UC Denver College of Nursing and the original Center for Human Caring.

The following are examples of courses available online from spring 2007 through spring 2009 along with proposed courses. Visit [www.cuonline.edu/catalog](http://www.cuonline.edu/catalog) for up-to-date information about online degrees and available courses.

- Aesthetics and Sacred Traditions of Caring and Healing
- Caring Inquiry, Narrative as Exemplar
- Ethics of Caring
- Foundations of Healing Practice
- Health Care as Spiritual Practice
- Theories and Philosophies of Caring and Healing

Program contact: Judy Campbell: [Judy.Campbell@ucdenver.edu](mailto:Judy.Campbell@ucdenver.edu).

## **Master of Science in Nursing - Informatics Option**

The College of Nursing's master of science program in nursing is designed to prepare you for advanced nurse practice roles. You're taught to formulate clinical, administrative or policy decisions to promote health with clients experiencing wellness, acute or chronic illness, and to develop, manage, and evaluate the care within communities and health care systems.

The program is structured to provide a foundation for career paths for future leaders in advanced nursing practice and to prepare lifelong learners who demonstrate knowledge, skill, critical thinking and flexibility. The master of science program also provides the foundation for doctoral study in nursing.

The following are examples of courses available online from spring 2007 through spring 2009 along with proposed courses. Visit [www.cuonline.edu/catalog](http://www.cuonline.edu/catalog) for up-to-date information about online degrees and available courses.

- Advanced Practicum: Healthcare Informatics
- Database Management Systems
- Decision Support
- E-Health
- Foundations of Health Care Informatics
- Health Systems, Policy & Social Justice
- Human Computer Interaction Design
- Human Technology Interface
- Information Systems Life Cycle
- Knowledge Management
- Philosophic, Theoretic & Ethical Foundations of APN
- Research Methods for Advanced Practice
- Semantic Representation

Program contact: Connie Franklin: [Connie.Franklin@ucdenver.edu](mailto:Connie.Franklin@ucdenver.edu).

## **School of Education & Human Development**

### **Designing eLearning Environments Certificate**

This is an exciting time if you're an instructional design and technology professional. There is a growing demand for your eLearning expertise, knowledge and skills, and you will find limited competition in this growing field. The designing eLearning environments (DeE) certificate program focuses specifically on the skills needed to design and facilitate online learning opportunities for learners in K–12, higher education and corporate settings. This program is perfect if you're not interested in a graduate degree.

The DeE certificate program is a sequence of three online courses. The following are examples of courses available online from spring 2007 through spring 2009 along with proposed courses.

Visit [www.cuonline.edu/catalog](http://www.cuonline.edu/catalog) for up-to-date information about online degrees and available courses. All courses are 3 semester hours.

- Designing and Teaching in eLearning Environments
- Developing eLearning Instruction
- Integrating Media in eLearning Environments

Program contact: Jannette Noonan, [Jannette.Noonan@ucdenver.edu](mailto:Jannette.Noonan@ucdenver.edu).

## **Early Childhood Special Education, Specialist License**

As a graduate earning the early childhood special education specialist license you'll have the theoretical background and skills in assessment, teaching and collaboration necessary to work with young children with disabilities. As a graduate with this license you can assume professional roles like lead teacher, early interventionist, service coordinator, Child Find team member, special education consultant and behavior specialist.

The ECSE specialist course sequence consists of 40 semester hours. A total 800 hours of fieldwork/practica is required for the license. Approximately 290 hours of fieldwork are associated with course assignments; 510 hours of intense, culminating practica occur toward the end of the second year of study. The following are examples of courses available online from spring 2007 through spring 2009 along with proposed courses. Visit [www.cuonline.edu/catalog](http://www.cuonline.edu/catalog) for up-to-date information about online degrees and available courses. All courses are 3 semester hours.

- Administrative Seminar
- Advanced Child Growth and Development
- Approaches to Young Children's Learning
- Basic Statistics
- Curriculum and Program Development in ECE
- Early Childhood Profession
- Early Intervention Strategies
- Infant/Toddler Practicum (170 clock hours—online option not possible)
- Language and Literacy in Young Children
- Literacy and Mathematics K–12
- Measurement and Evaluation in ECE
- Medical/Physiological Aspects of Developmental Disabilities
- Preschool Practicum (170 clock hours—online option not possible)
- Primary Practicum (170 clock hours—online option not possible)
- Screening and Assessment in Young Children
- Seminar: Research and Current Issues in ECE
- Social and Cognitive Development and Disorders
- Working with Parents and Families

Program contact: Jannette Noonan, [Jannette.Noonan@ucdenver.edu](mailto:Jannette.Noonan@ucdenver.edu).

## **Early Literacy Certificate**

This certificate program allows you to take courses in the specialty area of early literacy and apply these courses directly toward the full master's degree. The MA programs (K–6 and 7–12) in the School of Education & Human Development provide you with a means for completing a master's degree in curriculum and instruction with an emphasis in reading/writing while simultaneously fulfilling the requirements toward a Colorado reading teacher endorsement. In light of federal NCLB and state CBLA initiatives, this supplementary certificate offers primary grade teachers, preschool teachers and para-educators greater background in the development, assessment and instruction of literacy for young children.

The certificate program allows teachers to take 9 semester hours in the specialty area of early literacy and apply them directly toward the full master's degree. The following are examples of courses available online from spring 2007 through spring 2009 along with proposed courses. Visit [www.cuonline.edu/catalog](http://www.cuonline.edu/catalog) for up-to-date information about online degrees and available courses. All courses are 3 semester hours.

- Early Literacy Instruction
- Early Literacy Routines and Assessment
- Literacy Development PreK–3rd Grade

Program contact: Jennifer Ream, [Jenna.Ream@ucdenver.edu](mailto:Jenna.Ream@ucdenver.edu).

## **Master of Arts in Early Childhood Education**

The mission of the early childhood education online program is to provide substantive support if you're preparing to become a leader in professional practice as an early childhood accomplished teacher, with the master's degree in ECE. This degree prepares you to work in settings which include public schools, child care programs, private preschools and kindergartens, early intervention programs including Head Start and Early Head Start, family support and home-based programs.

The ECE program is composed of 40 semester hours. A total of 425 hours of fieldwork/practica is required. The following are examples of courses available online from spring 2007 through spring 2009 along with proposed courses. Visit [www.cuonline.edu/catalog](http://www.cuonline.edu/catalog) for up-to-date information about online degrees and available courses. All courses are 3 semester hours.

- Administrative Seminar
- Advanced Child Growth and Development
- Approaches to Young Children's Learning
- Basic Statistics
- Curriculum and Program Development in ECE
- Early Childhood Profession
- Early Intervention Strategies
- Language and Literacy in Young Children
- Literacy and Mathematics K-2
- Measurement and Evaluation in ECE
- Medical/Physiological Aspects of Dev. Disabilities
- Screening and Assessment in Young Children
- Seminar: Research and Current Issues in ECE

- Social and Cognitive Development and Disorders
- Working with Parents and Families

Program contact: Jannette Noonan, [Jannette.Noonan@ucdenver.edu](mailto:Jannette.Noonan@ucdenver.edu).

## **Master of Arts in Information and Learning Technologies -**

### *eLearning Design and Implementation*

The eLearning design and implementation (eDI) program offers an ILT MA degree that is specifically designed to meet your needs as a practicing professional educator as you confront the increasingly important role electronic and online technologies play within post-secondary, K–12 and corporate education. The eDI MA program is for K–12 teachers, higher education instructors, trainers, content experts and corporate instructional developers.

The eLearning program is composed of 36 semester hours. The following are examples of courses available online from spring 2007 through spring 2009 along with proposed courses. Visit [www.cuonline.edu/catalog](http://www.cuonline.edu/catalog) for up-to-date information about online degrees and available courses. All courses are 3 semester hours.

- Developing Educational Web Sites
- Instructional Message Design
- Learning Processes in Instructional Technology
- Managing Instructional Development
- Media for Web-based Learning Environments
- Policies and Planning for eLearning Programs
- Research in Information and Learning Technologies
- Strategies for Online Learning

Program contact: Jannette Noonan, [Jannette.Noonan@ucdenver.edu](mailto:Jannette.Noonan@ucdenver.edu).

## **Master of Arts in Information and Learning Technologies —**

### *School Library*

This MA prepares you with the knowledge-management skills and information access points for school library resources. Courses will integrate information and learning technology strategies, along with courses on school library management, instructional design and instructional leadership.

All topics covered will be close to your heart as a school librarian as you collaborate with teachers on instructional units and create user-friendly school library programs that support the love for reading and information literacy. Finally, for this nationally recognized NCATE-AASL-approved school library media education program, you will complete field experience in both elementary and secondary schools for the K–12 school library endorsement.

The program is comprised of 36 semester hours and can be completed in 14 months on an intensive track (summer term to the next summer term) or a standard two-year schedule taking one course each semester. The following are examples of courses available online from spring 2007 through spring 2009 along with proposed courses. Visit [www.cuonline.edu/catalog](http://www.cuonline.edu/catalog) for up-

to-date information about online degrees and available courses. All courses are 3 semester hours.

- Adolescent Literature
- Children's Literature Through the Ages
- Collection Development
- Field Experience-Elementary
- Field Experience-Secondary
- Foundations of School Librarianship
- Information Literacy and Reference
- Information Storage and Utilization
- Instructional Development and Production
- Leadership and Practice in ILT
- Management in ILT
- Research in Information and Learning Technology

Program contact: Jannette Noonan, [Jannette.Noonan@ucdenver.edu](mailto:Jannette.Noonan@ucdenver.edu).

## **Special Education Generalist K–12 Endorsement**

This program is designed for teachers already licensed in elementary or secondary general education. Specifically, this program is geared toward teachers without the formal credentials required to serve students with disabilities, as well as teachers who want to improve their ability to meet the needs of all learners.

A 10-course (26 semester hours) sequence represents the program plan of study. The following are examples of courses available online from spring 2007 through spring 2009 along with proposed courses. Visit [www.cuonline.edu/catalog](http://www.cuonline.edu/catalog) for up-to-date information about online degrees and available courses. All courses are 3 semester hours.

- Advanced Assessment in Special Education
- Collaboration and Consultation
- Instructional Strategies for Students with Special Needs
- Literacy Intervention for Students with Special Needs
- Positive Behavior Supports
- Special Education for the School Professional
- Special Education Generalist Internship and Site (Online option not possible)
- Special Education Generalist Internship and Site Seminar (Online option not possible)
- The Use of Technology in Special Education
- Transition/Secondary Planning

Program contacts: Meredith Lopez, [Meredith.Lopez@ucdenver.edu](mailto:Meredith.Lopez@ucdenver.edu).

## **School of Pharmacy**

## **Doctor of Pharmacy, Nontraditional PharmD (NTPD) – Extended Studies**

As a working and licensed pharmacist in the United States or Canada, this nontraditional PharmD (NTPD) program is a part-time and flexible program that meets clerkship requirements through a combination of challenge credit for professional practice experiences and through clerkships performed in traditional or nontraditional formats. The NTPD program is fully accredited by the Accreditation Council for Pharmacy Education. No visits to campus are currently required.

## **School of Public Affairs**

### **Public Administration (MPA)**

This master of public administration (MPA) degree will help you manage government and nonprofit organizations as well as nourish the related skills needed to thrive in this growing field. The curriculum is built upon core courses that develop essential problem-solving and decision-making skills. The required curriculum will help hone skills in management and analysis, but you may gain specific insights into an area of interest by pursuing one of three concentrations available. Each is designed to equip you with the management and analysis skills demanded of managers in challenging public affairs positions.

All students must complete a minimum of 36 semester hours of graduate course work, excluding preparatory workshops, with a grade point average of 3.0 or better. The following are examples of courses available online from spring 2007 through spring 2009 along with proposed courses. Visit [www.cuonline.edu/catalog](http://www.cuonline.edu/catalog) for up-to-date information about online degrees and available courses. All courses are 3 semester hours.

- Advanced Seminar in Public Policy and Management
- Economics and Public Finance
- Introduction to Public Administration and Public Service
- Leadership and Professional Ethics
- Organizational Management and Change
- Research and Analytic Methods
- The Policy Process and Democracy

Program contacts: Annie Davies, [Annie.Davies@ucdenver.edu](mailto:Annie.Davies@ucdenver.edu).

### **Nonprofit Management Certificate**

The nonprofit management certificate prepares you to become an innovative and critical thinker in the areas of nonprofit organizational management and public policy. The nonprofit certificate's unique design bridges theoretical knowledge with real-world experience. As you prepare to start

your career (or advance in your current position), you'll gain insight into the interdependence between the nonprofit, public and for-profit sectors.

You must complete 15 semester hours from courses offered and approved by the faculty in the nonprofit program. The following are examples of courses available from spring 2007 through spring 2009 along with proposed courses. Visit [www.cuonline.edu/catalog](http://www.cuonline.edu/catalog) for up-to-date information about online degrees and available courses.

All courses are 3 semester hours.

- Collaboration Across Sectors
- Nonprofit Boards and Executive Leadership
- Nonprofit Financial Management
- Nonprofits and Public Policy
- Seminar in Nonprofit Management
- Social Entrepreneurship
- Strategic Management for Nonprofit and Public Managers
- Understanding and Achieving Funding Diversity

Program contact: Stephen Block, [Stephen.Block@ucdenver.edu](mailto:Stephen.Block@ucdenver.edu).

## Hybrid Courses

A hybrid course is just like it sounds. It is half on-campus and half online. The best of both worlds. So if you're taking online courses and enjoy the scheduling flexibility but feel that you're missing out on some of the intangibles of being in a classroom, then the hybrid courses are for you. Hybrid courses meet approximately 50 percent of the normal classroom hours on campus, and the remainder of the course work is completed online.

## Supplemental Courses

An online technology supplemented campus course uses technology delivered instruction and materials (e.g. Web, CD ROM, etc.) to supplement classroom or laboratory instruction. CU Online also supports faculty using Web-based courseware to augment their traditional classes. Many faculty use instructional technology to post their syllabi, lecture notes, hold online quizzes and practice exams, and to coordinate Web resources and library media. But these materials do not substitute for or reduce the amount of traditional on-campus instructional contact time.

Contact CU Online at 303-315-3700, visit the Web site at [www.cuonline.edu](http://www.cuonline.edu) or send an e-mail to [help@cuonline.edu](mailto:help@cuonline.edu).

## Faculty

The professors and faculty of traditional classes are the same ones teaching online courses. That might not immediately evoke your applause and admiration, but it's actually great news. Four out of five full-time faculty hold doctoral degrees with many years of teaching experience, and many are actively engaged in their fields outside the classroom. Not only do they have real-world experience, but many of our faculty are consultants, advisors and partners to the leading organizations that frequently hire UC Denver graduates.

# Tuition, Fees and Financial Aid

*At UC Denver, we have a longstanding belief that finances should never stand in the way of motivated, talented individuals who want to better themselves and make a positive impact on the world around them. Through a tradition providing strong financial assistance and aid programs, we enforce this belief every day.*

## Tuition and Fees

**Bursar:** Evan Icolari

**Office:** North Classroom, 1003

**Telephone:** 303-556-2710

**E-mail:** [bursar@ucdenver.edu](mailto:bursar@ucdenver.edu)

**Web site:** [www.ucdenver.edu/bursar/](http://www.ucdenver.edu/bursar/)

**Student Service Center:** North Classroom, 1001

**Telephone:** 303-556-2710

All tuition and fee rates are established by the Board of Regents, the governing body of the University of Colorado, in accordance with legislation enacted annually by the Colorado General Assembly. The regents set tuition rates and fees at a budget retreat in June for the coming fall, spring and summer terms, but reserve the right to change rates at any time. Rates for the current year are available online to assist prospective students in anticipating costs. Please refer to the Web site at [www.ucdenver.edu/bursar](http://www.ucdenver.edu/bursar) in July for new rates.

## Registration Advance Payment

All students will be required to pay a nonrefundable \$200 registration advance payment each term prior to registering. Students may register for a term once that term's registration advance payment is made. This advance payment will be applied to that term's tuition and fees cost.

To not disadvantage students who have significant financial need, a waiver of the term's registration advance payment will be allowed if the student has applied for financial aid and has met other financial aid eligibility criteria for that term. If the student pays the registration advance payment and later applies for and receives full tuition and fees from financial aid, the excess paid will be refunded to the student.

For more information, please visit [www.ucdenver.edu/bursar](http://www.ucdenver.edu/bursar).

## Drop Charge

Beginning the second Tuesday of the fall and spring terms until census date (the sixth day of summer term), a \$100 drop transaction charge will be assessed each time a student drops a course. This includes student initiated drops done in order to change sections within a course. Section changes done for an administrative purpose through the deans' offices will be exempted from drop charges. If a student withdraws (therefore dropping all classes), a drop charge will be assessed for each course.

For more information, please visit [www.ucdenver.edu/bursar](http://www.ucdenver.edu/bursar).

Special tuition rates are available for nondegree graduate students taking undergraduate courses only. Contact the Office of the Registrar at 303-556-2389 to request this special tuition rate.

## **Payment of Tuition and Fees**

All tuition and fees (except the application fee) are due on the day indicated on your billing statement. Students may choose the payment plan that is available on the Downtown Campus. Specific information on the deferred payment plan is included on the Web site, published before each semester.

Students who register for courses are liable for payment of tuition and fees if they withdraw from school after census date. Refund policies for students who withdraw from the university both before and after census date are included in the academic calendar, available by going to [www.ucdenver.edu](http://www.ucdenver.edu) and clicking Academic Calendars under Academic Life. A student with financial obligations to the university will not be permitted to register for any subsequent term, to graduate, to be issued transcripts or to be listed among those receiving a degree or special certificate. The only exception to this regulation involves loans and other types of indebtedness that are due after graduation. Personal checks are accepted for any university obligation. Any student who pays with a check that is not acceptable to the bank will be assessed an additional service charge. Students may also pay tuition and fees by credit card, or through the SMART system by credit card or an electronic withdrawal directly from a checking or savings account.

Students who register in a nondegree status, and who later apply and are admitted to a degree status for that term, are responsible for the difference in tuition between the nondegree program and their applicable degree program and will be billed accordingly.

Undergraduate tuition for resident students is based on the total number of completed semester hours. The rate increases once a student has completed 60 hours.

## **Tuition Appeals**

Students are responsible for abiding by the published deadlines. Tuition is not refundable when students drop or withdraw from courses after the published deadlines. If circumstances beyond the student's control have made the late drop or withdraw necessary, the student may file a tuition appeal.

Instructions and forms for submitting a tuition appeal are available on the registrar's Web site, [www.ucdenver.edu/registrar](http://www.ucdenver.edu/registrar), in the Student Services Center in North Classroom or in the Office of the Registrar in the CU Building Annex. Completed tuition appeals packets must be submitted to the tuition appeals coordinator in the registrar's office within three months following the end of the term being appealed.

## **Past Due Tuition and Fees**

Past due student accounts are referred to the Office of Student Debt Management (SDM) for collection. If accounts are not paid in full, a 20 percent internal collection cost will be assessed on the unpaid balance. This is in addition to the 1.75 percent service charge per month that all past due accounts are subject to. If your account is referred to a third-party agency, you must pay any collection costs and attorney fees allowed by the Uniform Consumer Credit Code.

## **College Opportunity Fund (Vouchers)**

An act of the Colorado state legislature in May 2004 established a new way for the state to provide state tax dollar support for higher education at the undergraduate level. The state is no longer appropriating monies to institutions for undergraduate education, but is providing direct funding to undergraduate students through the College Opportunity Fund (COF). This program is also known as “vouchers” or “stipends.” If an undergraduate in-state student applies for and authorizes use of the voucher, COF vouchers will be applied to the student’s university bill.

For details, see [www.CollegeinColorado.org](http://www.CollegeinColorado.org).

## **Residency Classification for Tuition Purposes**

Tuition classification is governed by Colorado statutes that apply to all state-funded institutions in Colorado. Institutions are bound by the provisions of this statute and are not free to make exceptions to the rules set forth.

Students are initially classified as in-state or out-of-state for tuition purposes at the time of application. The classification is based upon information furnished by the student and from other relevant sources. After the student’s status is determined, it remains unchanged in the absence of satisfactory evidence to the contrary.

Once a student is classified as a nonresident for tuition purposes, the student must petition for a change in classification. Petitions must be submitted **NO LATER THAN THE FIRST OFFICIAL DAY OF CLASSES** of the term for which the student wishes to be classified as a resident. It is preferred that petitions be received 30 days prior to the beginning of the term. Late petitions will not be considered until the next semester. Specific information may be obtained from the Office of Admissions.

The final decision regarding tuition status rests with the university. Questions regarding residence (tuition) status should be referred only to the tuition classification officer. Opinions of other persons are not official or binding upon the university. Additional information is available in the brochure *Classification of Students for Tuition Purposes*, which may be obtained from the admissions office.

## **Basic Requirements**

The statute provides that an in-state student is one who has been a legal domiciliary of Colorado for one year or more immediately preceding the beginning of the term for which the in-state classification is being sought. Persons over 23 years of age or who are emancipated establish their own legal domicile. Those who are under 23 years of age and unemancipated

assume the domicile of their parent or court-appointed legal guardian. An unemancipated minor's parent must, therefore, have a legal domicile in Colorado for one year or more before the minor may be classified as an in-state student for tuition purposes.

## Establishing Domicile

Domicile is established when one has a permanent place of habitation in Colorado and the intention of making Colorado one's true, fixed and permanent home and place of habitation. The tuition statute places the burden of establishing a Colorado domicile on the person seeking to establish the domicile. The question of intent is one of documentable fact and needs to be shown by substantial connections with the state sufficient to evidence such intent. Legal domicile in Colorado for tuition purposes begins the day after connections with Colorado are made sufficient to evidence one's intent. The most common ties with the state are (1) change of driver's license to Colorado, (2) change of automobile registration to Colorado, (3) Colorado voter registration, (4) permanent employment in Colorado and most important, (5) payment of state income taxes as a resident by one whose income is sufficient to be taxed. Caution: payment or filing of back taxes in no way serves to establish legal domicile retroactive to the time filed. In order to qualify for in-state tuition for a given term, the 12-month waiting period (which begins when the legal domicile is established) must be over by the first day of classes for the term in question. If one's 12-month waiting period expires during the semester, in-state tuition cannot be granted until the next semester.

## Resident Tuition for Active Duty Military Personnel

The Colorado legislature approved resident tuition for active duty military personnel on permanent duty assignment in Colorado and for their dependents. **ELIGIBLE STUDENTS MUST BE CERTIFIED EACH TERM.** Students obtain a completed verification form from the base education officer and submit the form with their military ID to the registrar's office after they have registered but before the end of the drop/add period. At the time the verification form is certified in the registrar's office, the student's bill will be adjusted to reflect the resident tuition rate. Students who have been certified remain classified as nonresidents for tuition purposes and must petition to change their status once they establish permanent ties to Colorado.

## Financial Aid

**Director of Financial Aid:** Patrick McTee

**Office:** North Classroom, 1030

**Telephone:** 303-556-2886

**E-mail:** [finaid@ucdenver.edu](mailto:finaid@ucdenver.edu)

**Web site:** [www.ucdenver.edu/finaid](http://www.ucdenver.edu/finaid)

The Financial Aid Office offers more than \$70 million in financial aid awards to qualified students at the Downtown Campus each year. If the student's financial aid application materials are received before the April 1 priority date, then the student is considered for a package of need-based grant, work-study (part-time employment), and/or student loan funds. If the financial aid application materials are received after the April 1 priority date, then the student is usually considered only for a Federal Pell Grant and student loans.

## Eligibility

Each student must qualify for financial aid as follows:

1. Be a U.S. citizen or be admitted to the United States by the INS on a permanent basis.
2. Be classified as a degree-seeking student by the Downtown Campus Office of Admissions (Teacher certification students are eligible to apply for financial aid and are considered undergraduate students according to federal guidelines).
3. Be enrolled for a minimum number of credits as specified on the financial aid award letter.
4. Meet the minimum requirements of Financial Aid Academic Standards.
5. Apply for financial aid by submitting all of the required documentation. The Free Application for Federal Student Aid (FAFSA) is required for all programs.
6. Not be in default on any student loan or owe a refund on any educational grant.
7. Male applicants must be registered with the Selective Service.

## Applying

Each applicant must complete the financial aid application materials for submission to the Financial Aid Office. Complete information must be available to the office before eligibility can be determined.

*Limited Funds*—The majority of general financial aid funds are awarded on a **first-come, first-served** basis to eligible students who document significant financial need and who complete their application materials in the Financial Aid Office by the April 1 priority date. Application completion is defined as having the results of the FAFSA (Free Application for Federal Student Aid) and all other required documents into the Office of Financial Aid. The FAFSA is available at [www.fafsa.ed.gov](http://www.fafsa.ed.gov). Financial aid is awarded to needy students who meet the priority date until all of the funds are committed for the year. If the file is completed after April 1, then awards will be limited to Federal Pell Grant (for needy undergraduate students only) and/or student loans. Application for financial aid must be made each year; application materials are available in January of each year.

It is the student's responsibility to be sure application materials are complete. Please contact the Financial Aid Office for application forms and complete details. You may also obtain this information online at [www.ucdenver.edu/finaid](http://www.ucdenver.edu/finaid). All financial aid policies and procedures are subject to change due to revisions in federal and state laws, regulations and guidelines and applicable institution policies.

## Qualifying

## Financial Need

Most financial aid awards are based on the concept of financial need. Financial need is calculated as cost of attendance (tuition, fees, books, living expenses) minus family contribution (student/spouse contribution and parents' contribution for dependent students).

The cost of attendance is the estimated total cost to attend UC Denver, including tuition and fees, room and board, books and supplies, transportation and personal expenses. The Financial Aid Office determines standard budgets based upon average tuition and fees charged and other budget items established by the Colorado Commission on Higher Education. Current cost-of-attendance figures are available on our Web site at [www.ucdenver.edu/finaid](http://www.ucdenver.edu/finaid).

The contributions from the student/spouse and from the parents are calculated by a standardized formula that is required by federal law. The formula considers income, savings and other assets, family size, number of children in postsecondary school and other factors.

If the student/spouse contribution plus the parents' contribution is equal to or greater than the cost of attendance, then the student will not qualify for need-based financial aid. Students may appeal for special consideration if they are experiencing unusual circumstances. Financial aid is intended to supplement and not replace financial contributions from the student and parents.

## Determining Dependency Status

The federal government provides specific guidelines that define dependency status for financial aid purposes. Dependency status is determined by a series of questions on the FAFSA that can be reviewed at [www.fafsa.ed.gov](http://www.fafsa.ed.gov). Students classified as *dependent* are required to provide student and parent household and financial information from their parents when applying for financial aid. If a student is classified *independent*, then the student's parental information is not considered when the calculation of family contribution is made. Current law defines an *independent student* as one who meets at least one of the following conditions:

1. Age 24 or older (born after January 1, 1986)
2. Graduate student
3. Married student
4. Student with legal dependents other than a spouse
5. Student has children who receive more than half their support
6. Veteran of the U.S. armed forces or currently on active duty
7. At age 13 or older was an orphan, ward of the court or in foster care
8. Student is an emancipated minor or in a legal guardianship in their state of legal residence
9. On or after July 1, 2008, was a unaccompanied homeless youth or considered an unaccompanied, self-supporting youth at risk of becoming homeless

A dependency status may be appealed to the Financial Aid Office if unusual circumstances exist. Contact the office for appeal guidelines.

## Course Loads

Most undergraduate financial aid programs require at least 12 credits per semester, and graduate programs require at least five credits per semester. Federal Stafford Loan recipients

must carry at least a half-time credit load (6 semester hours for undergraduates per semester and 3 semester hours for graduates per semester). Higher or lower minimums may be required for individual awards (check your award letter for the exact number of credits required).

## **Satisfactory Academic Progress (SAP)**

Students must make satisfactory academic progress as defined by the Financial Aid Office to be eligible for financial aid. For more information, students should review the Financial Aid Academic Standards policy, available on our Web site or in the Financial Aid office.

### **Appeals**

Students may appeal all decisions by contacting the Financial Aid Office in person or by written request. Appeals will be reviewed and considered within three weeks of receipt and a written response will be mailed to the student. The decision of the appeals committee is final.

## **Refunds and Repayments**

If a recipient of federal financial aid withdraws from all classes on or before the 60 percent point of the term, that student may be required to repay a portion of his/her financial aid. The federal government has defined that the recipient has only earned a portion of their financial aid, and the earned aid is directly proportional to the percentage of time the student attended classes up to and including the 60 percent point of the term. The rest of the financial aid is defined as unearned financial aid and must be returned to the federal financial aid programs. Unearned aid includes both the amount allocated to tuition and fees and the amount allocated to the student for other educational expenses. For a complete description of these requirements, request a copy of the financial aid repayment policy from the Financial Aid Office.

## **Reapply Each Year**

Financial aid awards are not automatically renewed each year. Students must reapply and meet priority dates each year. Application materials for the next academic year are available beginning January 1.

## **Awards**

Students are notified in writing of their financial aid eligibility approximately four to six weeks after all application materials have been received in the Financial Aid Office. If awarded, an award notice is e-mailed to the student; it includes the types and amounts of aid awarded and the minimum number of semester hours required each term.

## **Grants, Loans and Work-Study**

The following aid programs are funded by the federal government:

1. *Federal Pell Grant*—Eligibility for the Federal Pell Grant is determined before any other aid is awarded. Awards are defined by a strict need-based formula provided by the federal government, and award amounts vary depending on the amount of financial need and enrollment status. Only undergraduate students seeking a first time bachelors degree are eligible.
2. *ACG and SMART Grants*—Academic Competitiveness Grants (ACG) are awarded to freshman and sophomore Pell Grant recipients who are U.S. citizens and who have graduated from high school programs designated as a rigorous program. National Science and Mathematics Access to Retain Talent Grants (SMART) are awarded to junior and senior Pell Grant recipients who are U.S. citizens and who are majoring in specific areas of physical, life or computer sciences; mathematics, technology, engineering or a critical foreign language.
3. *Federal Teach Grant*—This Teach Grant program is available to students who intend to teach in a public or private service school that serves students from low-income families. Students can be considered for up to \$4000 per academic year, if eligible. More information can be found on the Financial Aid Office Web site.
4. *Federal Direct Stafford Loan (2 types)*—The **subsidized** Federal Direct Stafford Loan program requires that students show financial need in order to qualify. Interest on the subsidized loan is paid for the student by the federal government as long as the student remains enrolled at least half-time and for a six-month grace period after graduation or dropping below half-time enrollment. The **unsubsidized** Federal Direct Stafford Loan program **does not** require the student to document financial need, but a valid FAFSA application is required. Eligibility is calculated as the cost of attendance minus other financial aid awarded. *Interest is not paid by the federal government for the unsubsidized program, and the student may elect to pay the interest now or to allow the interest to be added to the total principal loan amount.*
5. *Federal Direct PLUS Loan*—Graduate students and parents of *dependent students* are eligible to borrow under the Federal Direct PLUS program. The PLUS program is unsubsidized, and interest payments become the responsibility of the borrower at the time of disbursement.
6. *Federal Supplemental Educational Opportunity Grant (SEOG)*—This is a need-based grant program for students who have not yet obtained a bachelor's degree. Students must be eligible for a Federal Pell Grant to be considered for SEOG. This funding is very limited.
7. *Federal Perkins Loan*—This is a need-based loan program, with an fixed interest rate currently at 5 percent. No repayment of interest or principal is due until nine months after the student ceases to be enrolled at least half-time or graduates.
8. *Federal College Work-Study*—Work-study is a need-based program that allows students to work on a part-time basis (on campus, off campus or at nonprofit agencies) to help meet their educational costs.

The state of Colorado funds the following programs:

1. *Colorado Student Grant*—A need-based grant for resident undergraduate students.

2. *Colorado Leveraging Educational Assistance Partnership Grant*—A need-based grant for resident undergraduates who have not yet obtained a bachelor's degree. This grant is funded 50 percent by the federal government and 50 percent by the state of Colorado.
3. *Colorado Graduate Grant*—A need-based grant for resident graduate students.
4. *Colorado Work-Study*—A program similar to the College Work-Study program but limited to resident undergraduate students. Limited amounts of Colorado Work-Study funds are available to students regardless of financial need. In addition, there are some grant programs funded by the institution.
5. *Colorado Teach Grant Program*—This scholarship to students in a approved teacher preparation program who excel in high-need content areas and who demonstrates an interest or commitment to teaching as a career.

## Scholarships

For a complete listing of the many scholarships offered at the Downtown Campus, go to [www.ucdenver.edu/admissions](http://www.ucdenver.edu/admissions). In addition, many Internet search programs are available to help students identify scholarships for which they may be eligible. One of the largest is [www.FastWeb.com](http://www.FastWeb.com).

## Other Sources

There are several other sources of funds for students. Employment opportunities are listed in the Student Employment Office and the Career Center. Graduate students should inquire about additional types of financial aid through their academic departments. American Indian students should request information about Bureau of Indian Affairs and tribal scholarships from their tribe.

## Short-Term Loans

Short-term loans are available to enrolled students to cover unexpected financial needs. Loans are generally limited to \$500 and are due within 30 days. There is a \$10 per loan administrative charge.

## Find it Here

Not sure of the difference between the registrar and the bursar? Here's a quick guide to finding what you need.

### Admissions

CU-Denver Building Annex, 200

303-556-2704

[www.ucdenver.edu/admissions](http://www.ucdenver.edu/admissions)

Application: pick up, drop off, application fee payment, admission status

Residency forms

Information about establishing domicile for tuition classification

General transfer credit information

Information about UC Denver

Scholarship guides  
Talk to an admission counselor

### **Bursar**

North Classroom, 1003  
303-556-2710  
[www.ucdenver.edu/bursar](http://www.ucdenver.edu/bursar)  
Application fees payments by credit card  
College Opportunity Fund (vouchers)  
Departmental deposit transactions  
Payment of tuition and fees  
Refunds  
Student account reconciliation  
Student Service Center—one-stop processing for bursar, financial aid, registration and admission functions  
Third-party billing

### **Financial Aid**

North Classroom, 1030  
303-556-2886  
[www.ucdenver.edu/finaid](http://www.ucdenver.edu/finaid)  
Free Application for Federal Student Aid (FASFA) [www.fafsa.ed.gov](http://www.fafsa.ed.gov)  
Grant, work-study and student loan information  
Short term loans  
University application for financial aid

### **Registrar**

CU-Denver Building Annex, 100  
303-556-2389  
[www.ucdenver.edu/registrar](http://www.ucdenver.edu/registrar)  
Class registration  
Course descriptions  
Diplomas  
Enrollment verification  
Grades and GPA  
Schedule adjustment (drop/add) forms  
Schedule Planner (online course schedule)  
SMART (online registration system)  
Transcripts  
Tuition appeals

### **Student Debt Management**

North Classroom, 1003  
303-556-2937  
[www.ucdenver.edu/admin/studentfinancialservices/debtmanagement](http://www.ucdenver.edu/admin/studentfinancialservices/debtmanagement)  
Past due tuition collection  
Student loan processing

# Office of the Registrar

*UC Denver offers students a completely automated system of planning their schedules (Web Schedule Planner) and registering for classes (SMART), helping you avoid long registration lines and unnecessary visits to campus. As a student, you are responsible for knowing the deadlines, rules, regulations, course loads, prerequisites and policies of the university, as well as those of the college or school in which you are enrolled, all of which is provided within this catalog, as well as online.*

## Office of the Registrar

**Registrar:** Teri Burleson  
**Office:** CU-Denver Building Annex, 100  
**Telephone:** 303-556-2734  
**E-mail:** Teri.Burleson@ucdenver.edu  
**Web site:** [www.ucdenver.edu/Registrar](http://www.ucdenver.edu/Registrar)

## Academic Calendar\*

### Summer 2009

Registration	Begins March 9
May 25	Memorial Day holiday (campus closed, no classes)
May 19–June 5	Maymester
June 8–August 1	Summer
July 3	Independence Day holiday observation (campus closed, no classes)
August 1	End of Term

### Fall 2009

Registration	Begins April 6
August 17	First day of classes

September 7 Labor Day holiday (campus closed, no classes)  
November 23–29 Fall break for students (campus open, no classes)  
November 26 Thanksgiving holiday (campus closed, no classes)  
December 7–12 Finals week  
December 12 Commencement

## **Spring 2010**

Registration Begins November 9  
January 18 Martin Luther King Jr. holiday (campus open, no classes)  
January 19 First day of classes  
March 22–28 Spring break (campus open, no classes)  
May 10–15 Finals week  
May 15 Commencement

## **Maymester - Summer 2010**

Registration Begins March 8  
May 31 Memorial Day holiday (campus closed, no classes)  
May 18–June 4 Maymester  
June 7–July 31 Summer  
July 4 Independence Day holiday (campus closed, no classes)  
July 5 Independence Day holiday Observation (campus closed, no classes)  
July 31 End of Term

\*The university reserves the right to alter the academic calendar at any time. Consult the Web site at [www.ucdenver.edu/registrar](http://www.ucdenver.edu/registrar) for application deadline dates, deadlines for changing programs and registration dates and procedures.

## **Registration**

Students should review the sections of this catalog that describe in detail the academic programs available at UC Denver's Downtown Campus.

New and transfer undeclared undergraduate students, as well as pre-business and pre-engineering students, should contact the Academic Advising Center at 303-352-3520 to arrange for an advising appointment prior to registration. Other freshmen and transfer students should contact their school or college to arrange for an advising appointment prior to registration.

A Web Schedule Planner is made available by the registrar's office every semester prior to registration. Downtown Campus students register for courses via SMART (Student Menu and Access to Records and Transactions). To log on go to [www.ucdenver.edu/registrar](http://www.ucdenver.edu/registrar), then click on Student Web Portals. The registrar's office will send an e-mail message to the student's university-assigned e-mail address, inviting the student to register, including registration information and a registration time assignment. Registration is by time assignment only. Students may register on or after their assigned time.

## **Web Registration and Student Information**

Downtown Campus students can register and obtain information regarding their academic and financial records by accessing a secure site from the SMART link on the registrar's office student Web portal webpage. An assigned student ID and personal identification number (PIN) are required to access the registration or student record options.

Online registration allows the student to check the availability of specific courses prior to their registration time and to search for available courses by department, course level or meeting time. If registration in a course is denied, the Web registration system will specify the reason.

Student information available online currently includes mailing address verification (or change), admission application status, financial aid information, schedule by semester, grades by semester, unofficial transcript, account balance, online payment and degree audit (for some programs). For security reasons, none of the student information screens will display a student's name or student number.

The catalog and Schedule Planner may also be accessed from [www.ucdenver.edu/registrar](http://www.ucdenver.edu/registrar). Additional information regarding programs, faculty, courses and policies are available at the home page: [www.ucdenver.edu](http://www.ucdenver.edu).

## **Definition of Full-Time and Part-Time Status**

Individual students receiving financial aid may be required to complete hours in addition to those listed below. The exact requirements for financial aid will be listed in the student's financial aid award letter.

### **Fall and Spring**

Undergraduates and nondegree graduate students:

Full-time 12 or more semester hours

Part-time 6 or more semester hours

Graduate degree students:

Full-time:

5 or more semester hours

0 semester hours as candidate for degree

1 or more semester hours of thesis (not master's reports or thesis preparation)

Half-time:

3 or more semester hours

## **Summer (8-Week Term)**

Undergraduates and nondegree graduate students:

Full-time 12 or more semester hours

Part-time 6 or more semester hours

Graduate degree students:

Full-time:

3 or more semester hours

0 semester hours as candidate for degree

1 or more semester hours of thesis (not master's reports or thesis preparation)

Half-time:

2 or more semester hours

3 or more semester hours of mixed-level classes

### **Notes**

Enrollment verification including full-time/part-time attendance can be certified beginning the first day of class.

Hours for calculating full-time/part-time attendance do not include interinstitutional hours, nor do they include hours on another CU campus, unless the student is enrolled through concurrent registration.

Students receiving veteran benefits should contact the Veteran Student Services Manager for the definition of full-time status for summer sessions. Contact information: 303-556-2745 or vaoffice@ucdenver.edu.

Individual exceptions to the minimum graduate course-load levels are considered for financial aid purposes by the financial aid committee. Students must file a written appeal with the Office of Financial Aid.

## Add/Drop

Please review the current term's academic calendar for the most recent add/drop deadlines in the Web Schedule Planner or by visiting the registrar's Web site at [www.ucdenver.edu/registrar](http://www.ucdenver.edu/registrar).

## Administrative Drop

An administrative drop is implemented by university officials in the registrar's office or the dean's office. A student may be administratively dropped from one or more classes or withdrawn from all classes for any of the following reasons:

- failure to meet certain preconditions, including but not limited to:
  - class cancellations
  - failure to meet course prerequisites
- whenever the safety of the student, faculty member or other students in a course would be jeopardized
- academic suspension, including but not limited to failure to attain or maintain a required GPA
- disciplinary suspension for having been found to have violated the Student Code of Conduct
- disruptive behavior determined by the chair and/or associate dean to be detrimental to the progress of the course and the education of other students

## Auditing Courses

To qualify as an auditor for fall or spring semester, a student must be 21 years of age or older or approved by the registrar. Auditors may not be registered for any other University of Colorado courses during the time they are auditing and are not eligible to audit courses if they are under suspension from the university or have outstanding financial obligations to the university. The registrar's office does not keep any record of courses audited; therefore, credit for these courses cannot be established. Auditors may attend as many courses as they wish (except those courses with laboratories or where special equipment is used), provided they have received permission from each instructor.

An auditor's card is issued after classes begin. This card should be presented to the instructor. Auditors, whether resident or nonresident, pay 3 semester hours of resident tuition for all audited courses during the fall or spring semester for class instruction and library privileges only. Auditors do not receive student parking privileges and are not eligible for other student services. For more information, contact the bursar's office.

Senior citizens (aged 60 and over) may audit classes at no charge. Contact the Division of Enrollment and Student Affairs at 1250 14th Street, 303-556-8427.

## Candidate for Degree

During the semester in which you take the comprehensive exam, defend your dissertation or thesis or present your final project, you must be registered. If you will NOT be registered for any other courses, you MUST register for CAND 5940, Candidate for Degree. You may only register for this course once.

In order to register for CAND 5940, Candidate for Degree, (you may NOT be registered for any other courses) obtain the call number from your department or program director. Registration for CAND 5940 is available through SMART, and you will be billed at one credit hour of resident tuition plus the SIS fee and the information technology fee. Students registered for CAND 5940 will be considered full-time for financial aid and enrollment verification purposes.

## Course Load/Restrictions

In most cases, students wishing to take more than 18 semester hours (12 in the summer session) must have the overload approved by the dean of their college or school. Consult the individual college or school for specific guidelines as to course-load restrictions.

## Credit by Examination

Degree students may take examinations for credit. To qualify for an examination, the student must be formally working toward a degree at UC Denver, have a GPA of at least 2.0 and be currently registered. Contact the registrar's office for instructions. A nonrefundable fee is charged. Students should contact their degree advising office to determine whether the credit will apply to their degree.

## No Credit

Students may register for a course on a no-credit basis with the consent of their instructor and the dean of their school or college. No grade or credit is awarded. The transcript reflects the name of the course taken and an N/C notation.

## Pass/Fail Procedure

1. Students who wish to register for a course on a pass/fail basis (or to revert from pass/fail to graded status) may do so only during the drop/add period.
2. Up to 16 semester hours of course work may be taken on a pass/fail basis and credited toward the bachelor's degree. *Only 6 hours of course work may be taken pass/fail in any given semester.* (Note: Individual schools and colleges may have additional restrictions as to pass/fail credits. See the accompanying chart for an overview.)
3. Instructors will not be informed of pass/fail registration. All students who register for a pass/fail appear on the regular class roster, and a normal letter grade is assigned by the professor. When grades are received in the registrar's office, those registrations with a pass/fail designation are automatically converted by the grade application system. Grades of D- and above convert to grades of P. Courses taken pass/fail will be included

in hours toward graduation. Pass grades are not included in a student's GPA. An F grade in a course taken pass/fail will be included in the GPA.

4. Pass/fail registration records are maintained by the registrar's office.
5. Exceptions to the pass/fail regulations are permitted for specified courses offered by the School of Education & Human Development, the extended studies programs and study abroad programs.
6. Graduate degree students can exercise the P/F option for undergraduate courses only. **A grade of P will not be acceptable for graduate credit to satisfy any Graduate School requirement.**
7. Students who register for a course on a pass/fail basis may not later (after the drop/add period) decide to receive a letter grade.

*Note:* many other institutions will not accept a P grade for transfer credit.

### **PASS/FAIL OPTION RESTRICTIONS**

Core Curriculum courses used to satisfy Intellectual Competencies cannot be taken on pass/fail basis.

<u>College/School</u>	<u>General</u>	<u>Maximum</u>
Business	Only non-business electives may be taken pass/fail.	Only 6 semester hours may be taken pass/fail.
Engineering and Applied Science	Required courses may not be taken pass/fail. Upper division humanities and social sciences electives are acceptable; otherwise, major department approval is required.	A maximum of 16 semester hours may be taken pass/fail, including courses taken in the honors program.
Liberal Arts and Sciences	College requires a minimum of 30 semester hours of courses with letter grades. Courses used to satisfy major, minor or foreign language cannot be taken on a pass/fail basis.	No more than 6 hours pass/fail any semester. A maximum of 16 semester hours may be taken pass/fail.

### **Module/Intensive Courses**

Courses are also offered in five-week modules, in special weekend courses and in seminars. Students should contact the college/school for information on short-term courses offered each semester.

## Withdrawal from the University

To withdraw from the University of Colorado Denver, students must drop all courses for the semester. Prior to census (see current academic calendar for census date), students must use the Web registration system (SMART) to drop courses. Courses dropped during this period are not recorded on the student's permanent record.

After the census date (see current academic calendar for census date), through the 10th week (fifth week for summer) students must submit a withdrawal form with the approval of the dean and the Office of Financial Aid. Courses dropped during this period will be recorded on the student's permanent record with a grade of W.

Students seeking to withdraw after the 10th week (fifth week for summer) must petition the associate dean of their school or college. A student who stops attending classes without officially withdrawing from the university will receive grades of F for all course work during that term.

Deadlines for dropping module and intensive courses appear in the Web Schedule Planner.

## Other Registrations

### Concurrent Enrollment

Degree-seeking students who wish to attend two University of Colorado campuses concurrently must obtain permission from their school or college on their home campus. A student in a degree program registered on the Downtown Campus may take up to two courses or 6 semester hours (whichever is greater) on another CU campus if:

- the student obtains a concurrent registration form from the office of the academic dean or the registrar's office
- the course is not offered at the Downtown Campus
- the student obtains approval from the academic dean
- there is space available at the other (host) campus
- the student pays tuition at the Downtown Campus (home campus) at Downtown Campus rates
- the home campus school or college arranges for space in the host campus classes
- the concurrent request is processed before the end of the drop/add period on both the host and home campuses

To drop a concurrent course during the *host* campus drop/add period, arrange the drop at the home campus registrar's office. To drop a concurrent course after the end of the host campus drop/add deadline, drop the course at the *host* campus registrar's office.

## Interinstitutional Registration

UC Denver degree students may enroll in courses offered by the Community College of Denver. Students must be enrolled at UC Denver for at least one course during the term to be eligible to

register interinstitutionally. Registration is on a space available basis. Interinstitutional courses are evaluated for transfer credit and are not included in a UC Denver student's GPA.

## Pooled Courses at Metropolitan State College of Denver

Certain courses in the College of Liberal Arts and Sciences have been pooled with similar courses at Metropolitan State College of Denver (MSCD). *Undergraduate* students at UC Denver Downtown Campus may register for any of the pooled courses listed in the UC Denver Web Schedule Planner. Restrictions apply to the pooled courses:

1. UC Denver Downtown Campus graduate students are not eligible to register for MSCD pooled courses.
2. MSCD pooled courses will not be included in the University of Colorado GPA. MSCD courses will appear on the University of Colorado transcript and will count in hours toward graduation. See an academic advisor for approval.
3. MSCD courses cannot be used to meet specific course requirements toward the major without prior written approval of the student's dean.
4. UC Denver Downtown Campus students who wish to take nonpooled MSCD courses must apply directly as a nondegree student to MSCD and pay tuition and fees to MSCD. Nonpooled classes will not appear on the University of Colorado transcript and will not be used in determining course loads for financial aid eligibility. Students may request an MSCD transcript to be sent to the UC Denver Downtown Campus at the end of the term to determine if credit can be transferred.
5. MSCD common pool courses will not satisfy residency requirements at UC Denver Downtown Campus. The last 30 semester hours applied toward the baccalaureate degree must be taken in residence at the Downtown Campus.
6. UC Denver Downtown Campus students taking MSCD common pool courses are subject to the MSCD grading policy and student code of conduct.

## Academic Records

### Student Classification

Students are classified according to the number of semester hours passed:

Freshman	0–29 hours
Sophomore	30–59 hours
Junior	60–89 hours
Senior	90+ hours

All transfer students will be classified on the same basis according to their hours of credit accepted by the University of Colorado.

## Grading System and Policies

The following grading system and policies have been standardized for all academic units of the university. Other academic policies are listed in the University Policies chapter of this catalog.

### Grade Symbols

The instructor is responsible for whatever grade symbol (A, B, C, D, F, I or IP) is to be assigned. Special symbols (NC and W) are indications of registration or grade status and are not assigned by the instructor. Pass/fail designations are not assigned by the instructor but are automatically converted by the grade application system, as explained under “Pass/Fail Procedure.”

Standard Grades	Quality Points
<i>A = superior/excellent</i>	4
<i>A(-) =</i>	3.7
<i>B(+) =</i>	3.3
<i>B = good/better than average</i>	3
<i>B(-) =</i>	2.7
<i>C(+) =</i>	2.3
<i>C = competent/average</i>	2
<i>C(-) =</i>	1.7
<i>D(+)=</i>	1.3
<i>D =</i>	1
<i>D(-) = minimum passing</i>	0.7
<i>F = failing</i>	0

Instructors may, at their discretion, use the PLUS/MINUS system but are not required to do so.

I—incomplete—changed to an F if not completed within one year.

IP—in progress—thesis at the graduate level only.

P/F—pass/fail—P grade is not included in the GPA; the F grade is included; up to 16 hours of pass/fail course work may be credited toward a bachelor’s degree.

H/P/F—honors/pass/fail—intended for honors courses; semester hours count toward the degree but are not included in the GPA.

NC indicates registration on a no-credit basis.

W indicates withdrawal without credit.

## **Explanation of I**

An I is an incomplete grade. Policies with respect to I grades are available in the individual college and school dean's offices.

An I is given only when students, for reasons beyond their control, have been unable to complete course requirements. A substantial amount of work must have been satisfactorily completed before approval for such a grade is given.

The instructor who assigns an I sets the conditions under which the course work can be completed and the time limit for its completion. The student is expected to complete the requirements by the established deadline and not retake the entire course.

It is the instructor's and/or the student's decision whether a course should be retaken. If a course is retaken, it must be completed on the Downtown Campus or in extended studies classes. The student must re-register for the course and pay the appropriate tuition.

The final grade (earned by completing the course requirements or by retaking the course) does not result in deletion of the I from the transcript. A second entry is posted on the transcript to show the final grade for the course.

At the end of one year, I grades for courses that are not completed or repeated are changed to an F.

## **Grade Point Average (GPA)**

GPA is computed by multiplying the credit points per hour (for example, B = 3) by the number of semester hours for each course. Total the hours, total the credit points and divide the total points by the total hours. Grades of P, NC, \*\*\*, W, IP, and I are not included in the GPA. Is that are not completed within one year are calculated as F in the GPA.

If a course is repeated, all grades earned are used in determining the GPA. Grades received at another institution are not included in the University of Colorado GPA.

Undergraduate, graduate and nondegree graduate GPAs are calculated separately. Enrollment in a second undergraduate or graduate program will not generate a second undergraduate or graduate GPA.

Students should refer to their academic dean's office for individual GPA calculations as they relate to academic progress and graduation from their college or school.

## **Good Academic Standing**

Good academic standing requires a minimum GPA that is determined by the student's school or college. Grades earned at another institution are not used in calculating the GPA at the University of Colorado.

Degree students should consult the academic standards section of their school or college for degree program requirements.

Continuation as a nondegree student is contingent upon maintaining an overall GPA of 2.0 upon completion of 12 or more semester hours.

Failure to maintain the required average will result in a nondegree student being suspended. The suspension is for an indefinite period of time and becomes part of the student's permanent record at the university. While under suspension, enrollment at the university is restricted; for more information contact the dean's office of the school /college you are enrolled in.

Nondegree students are not placed on academic probation prior to being suspended.

## **Automated Degree Progress**

A degree progress report is an automated record reflecting a student's academic progress toward completing degree requirements in a declared major. Each degree progress report draws its information from the university's student information system (SIS). Each time a new report is run, the most up-to-date course information and grades are used. A report can be requested by logging on to SMART. Students should contact their schools and colleges for additional information on the availability of a specific degree progress report.

## **Grade Reports**

Grades are normally available within two weeks after the end of the semester through the Web registration system, SMART. Consult the registrar's Web page by going to [www.ucdenver.edu/registrar](http://www.ucdenver.edu/registrar) and going to the Student Web Portals section.

## **Graduation**

### **Undergraduates**

Students should make an appointment with the advising office of their school or college to determine what requirements remain for graduation. Students intending to graduate must complete an intent to graduate application found on the Office of the Registrar's Web page under Degree Planning between the first day of registration for the term and the last day of drop/add (noted on the academic calendar - census). Students will not be officially certified to graduate until a final audit of the student's record has been completed approximately six weeks after the end of the term. After students have been certified to graduate, they must reapply to return to the Downtown Campus.

### **Graduates**

Students on the Downtown Campus must file an application for candidacy with their graduate school office and complete an intent to graduate application found on the Office of the Registrar's Web page under Degree Planning between the first day of registration for the term and the last day of drop/add. Check with your school for more information. Students will not be officially certified to graduate until a final audit of the student's record has been completed,

approximately six weeks after the end of the term. After students have been certified to graduate, they must reapply to return to UC Denver.

## **Commencement**

In early March, informational brochures will be mailed to students eligible to participate in the May spring-semester commencement. In early October, information regarding the December commencement will be mailed to students who graduated in summer term or expect to graduate in fall term. Information will be provided about ordering special display diplomas, fittings for caps and gowns and obtaining diplomas and transcripts with the degree recorded. This information is also available at [www.ucdenver.edu/academics/Pages/Graduation.aspx](http://www.ucdenver.edu/academics/Pages/Graduation.aspx).

## **Class Rank**

Class rank will be calculated by undergraduate degree program within a school or college. It is possible for more than one student to have the same class rank, If more than one student has equivalent class ranking it will be reported as such. The option for a letter indicating the student's class rank will be provided to any graduating undergraduate, but there will be no designation on the University of Colorado transcript for Downtown Campus students receiving bachelor's degrees. There will be one class rank per student per degree. Students can obtain class rank letters through the Web student information system (SMART). Late postings and grade changes after degrees are posted will not recalculate rankings. Rankings will be a snapshot calculation conducted once per term for each graduating undergraduate student after degrees are posted.

## **Official Transcripts**

The official transcript includes the complete undergraduate and graduate academic record of courses taken at all campus locations or divisions of the University of Colorado. It contains the signature of the registrar and the official seal of the university.

Official transcripts are available approximately three weeks after final exams. A transcript on which a degree is to be recorded is available approximately eight weeks after final exams.

On the Downtown Campus, transcripts may be ordered through SMART or requested by fax at 303-556-4829. Transcript request forms are available at [www.ucdenver.edu/registrar](http://www.ucdenver.edu/registrar); click on Forms.

Requests include the following:

- student's full name (include given or other name if applicable)
- student number
- birth date
- the last term and campus the student attended
- whether the current semester grades are to be included when a transcript is ordered near the end of a term
- whether the request should be held until a degree is recorded

- agency, college or individuals to whom transcripts are to be sent (Complete mailing addresses should be included; transcripts sent to students are labeled “issued to student”)
- student’s signature (This is the student’s authorization to release the records)

There is no charge for individual official transcripts (however fees are assessed for rush service). Transcripts are prepared only at the student’s request in writing or through online student PIN authentication. A student with financial obligations to the university that are due and unpaid will not be granted a transcript. Official transcripts require five to seven working days. Rush service is available and fees are assessed based on the service requested.

## **Notification of Rights Under FERPA at University of Colorado Denver**

The Family Educational Rights and Privacy Act (FERPA) affords students certain rights with respect to their educational records:

1. The right to inspect and review the student’s educational records within 45 days of the day that the university receives a request for access. Students should submit to the registrar, dean, head of the academic department or other appropriate official written requests that identify the record(s) they wish to inspect. The university official will make arrangements for access and notify the student of the time and place where the records may be inspected. If the records are not maintained by the university official to whom the request was submitted, that official shall advise the student of the correct official to whom the request should be addressed.
2. The right to request the amendment of the student’s educational records that the student believes are inaccurate or misleading. Students may ask the university to amend a record that they believe is inaccurate or misleading. They should write the university official responsible for the record, clearly identify the part of the record they want changed and specify why it is inaccurate or misleading. If the university decides not to amend the record as requested by the student, the university will notify the student of the decision and advise the student of his or her right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.
3. The right to consent to disclosure of personally identifiable information contained in the student’s educational records, except to the extent that FERPA authorizes disclosure without consent. One exception that permits disclosure without consent is disclosure to school officials with legitimate educational interests. A school official is a person employed by the university in an administrative, supervisory, academic or research or support staff position (including law enforcement unit personnel and health staff); a person or company with whom the university has contracted (such as an attorney, auditor or collection agent); a person serving on the board of trustees; or a student serving on an official committee, such as a disciplinary or grievance committee, or assisting another school official in performing his or her tasks. A school official has a legitimate educational interest if the official needs to review an educational record in

order to fulfill his or her professional responsibility. Upon request, the university discloses educational records without consent to officials of another school in which a student seeks or intends to enroll.

4. The right to file a complaint with the U.S. Department of Education concerning alleged failures by the University of Colorado to comply with the requirements of FERPA.

Family Policy Compliance Office  
U.S. Department of Education  
400 Maryland Avenue, SW  
Washington, DC 20202-4605

The following items are designated “Directory Information” and may be released at the discretion of the University of Colorado Denver unless a student files a request to prevent their disclosure:

- name
- address
- e-mail address
- telephone number
- dates of attendance
- registration status
- class
- major
- awards
- honors
- degrees conferred
- photos
- past and present participation in officially recognized sports and non-curricular activities
- physical factors (height, weight) of athletes

Forms to prevent the disclosure of directory information can be obtained at the Student Service Center in North Classroom, 1003, or via the registrar’s Web site at [www.ucdenver.edu/registrar](http://www.ucdenver.edu/registrar). Questions regarding student rights under FERPA should be directed to the registrar’s office, 303-556-2389.

## Campus Life

*The University of Colorado Denver Downtown Campus is physically located on the 136-acre Auraria Campus, which is shared with two other institutions—Metropolitan State College of Denver and Community College of Denver. Because we share facilities, our students have access to the level of resources found at much larger public universities. Since fall 2006, the university has also been able to offer student housing adjacent to this traditionally commuter campus. Details about the campus and Campus Village are explained in this chapter.*

### Auraria Campus

Since opening in 1976, Auraria has become the largest campus in Colorado, enrolling approximately 43,000 students—20 percent of all the students in public higher education in the state. This is the most efficiently utilized campus in the state. Classrooms on the Auraria Campus are used an average of 50+ hours per week. Classes are held from 7 a.m. to 10 p.m. Monday through Thursday and from 8 a.m. to 6 p.m. on Friday, Saturday and Sunday. Some courses and programs are offered cooperatively by the Auraria educational institutions. Those pertaining to UC Denver students are outlined in this catalog.

The Auraria Campus offers numerous amenities to students, faculty and staff, from the largest bookstore in the Rocky Mountain region to a state-of-the-art fitness facility. Details of these amenities are outlined in this chapter.

In addition to its proximity to the thriving business and industry of downtown Denver, the Auraria Campus has a distinct historic flavor. The Tivoli Student Union is housed in a renovated brewery originally built in the 1860s. Historic Ninth Street Park, St. Cajetan's Church/Performing Arts Center, St. Elizabeth's Church, the Emmanuel-Sherith Chapel/Synagogue/Art Gallery and the Golda Meir Museum are also located on campus.

## **Auraria Higher Education Center**

The Auraria Higher Education Center (AHEC) is the administrative body that coordinates the facilities, services and activities for the three educational institutions on campus. AHEC provides common services for the campus including: classroom scheduling, facilities management and construction, campus police, telecommunications infrastructure, student union, media services, book store, early learning center, parking and transportation, mail services and facilities master planning. Visit their Web site, [www.ahec.edu](http://www.ahec.edu), for additional information.

## **Campus Amenities**

### **Auraria Campus Bookstore**

**Location:** Tivoli Student Union, 900 Auraria Parkway

**Hours:** Mon.–Thurs., 8 a.m.–6 p.m.; Fri. 8 a.m.–5 p.m.; Sat. 10 a.m.–3 p.m.; call during vacation and interim periods

**Telephone:** 303-556-4286

**Web site:** [www.aurariabooks.com](http://www.aurariabooks.com)

The Auraria Campus Bookstore, a department of Student & Auxiliary Services—*your campus store*—is located in the historic Tivoli Student Union. The bookstore provides textbooks for the Auraria schools, plus a complete general book department that is especially strong in technical and reference areas. Best sellers, new releases and gift book selections change frequently and are often accompanied by displays of special value books on many subjects.

Students need to bring course printouts to locate textbooks. Books are located by school; subjects are arranged alphabetically—departmental abbreviations, with course and section numbers—and prices are printed on the shelf tag below. Each title has the designation of

*Required, Preferred, Optional or Available.* You can also buy books online at [www.aurariabooks.com](http://www.aurariabooks.com).

The Auraria Campus Bookstore carries more used textbooks than any other bookstore in Colorado, but shop early as used books are the first to go. A full refund is given for new and used books accompanied by the receipt and returned within the *first two* weeks of class for regular semesters and two days from the first day of class for short terms.

**Please read the refund policy on the back of the receipt.**

When a course ends, the textbook may still have value and may be bought back by the bookstore. The buy-back policy on used texts is to pay half of the new price on books that will be used again next semester on this campus. Other texts are purchased at lower percentages. The Auraria Campus Bookstore's buy-back services are dedicated to its student customers. A validated Auraria student ID is required to complete a buy-back transaction. Books are bought for this campus throughout the semester; however, buyers from national textbook companies are on hand at the end of each semester to purchase used books that may be required at other schools.

**Campus Computers**, 303-556-3726, offers the latest in hardware and software technology. An educational discount is offered to Auraria Campus students; a current, validated Auraria ID must be presented at the time of purchase. A full line of computer reference books and accessories is also available, as well as calculators and other small electronics. Campus Computers' is located on the second floor of the Auraria Campus Bookstore.

A current photo ID is required for purchases paid for by check. The bookstore also accepts MasterCard, VISA, American Express and Discover.

*The Auraria Campus Bookstore is owned by the State of Colorado and supports the Student Bond Fund.*

## **Auraria Early Learning Center (Child Care Center)**

**Location:** West Colfax and Ninth Street Park

**Hours:** Mon.–Fri. 7 a.m.–6 p.m.

**Telephone:** 303-556-3188

**Web site:** [www.tivoli.org/earlylearning](http://www.tivoli.org/earlylearning)

The Auraria Early Learning Center serves the child care needs of Auraria's students, staff and faculty by providing high-quality early childhood education and care programs. The Auraria Early Learning Center is located on the southwest corner of the campus. Its programs are consistently recognized by the educational community for their high-quality early childhood care and education. Developmentally appropriate practices for young children guide the educational programs that are provided. Curriculum planning is flexible and based on children's interests.

Supervising teachers in the Auraria Early Learning Center are all degreed teachers meeting the certification guidelines of the State of Colorado and of the National Academy of Early Childhood programs. Children aged 12 months to 5 years are served at the center. The center also has a fully accredited kindergarten program.

## **Auraria Event Center/Student Recreation Center**

**Location:** 1255 Tenth Street Mall

**Telephone:** 303-352-4371 (fitness center); 303-556-3210 (recreation); 303-556-2755 (events)

**Web site:** [www.mscd.edu/~cra](http://www.mscd.edu/~cra)

The Auraria Campus PE/Event Center is a 2,800-seat facility for team and individual sport activities, academic programs, events and conferences. Funds from student recreation fees support the use by students of the many health and recreation facilities found within the building. Adjacent to the building are softball fields, tennis courts and a track.

## **Auraria Library**

**University Librarian/Director:** Mary Somerville

**Associate University Librarians/Directors:** Meg Brown-Sica, R. Ellen Greenblatt, Cynthia Hashert, Denise Pan

**Office:** 1100 Lawrence Street

**Telephone:** Main Line 303-556-2740

Reference 303-556-2585

**Web site:** <http://library.auraria.edu>

**Associate Professors:** Ellen Greenblatt, MA, University of Denver; Mary M. Somerville, MLS, PhD

**Assistant Professors:** Jeffrey Beall, MLS, University of North Carolina at Chapel Hill; Meg Brown-Sica, MA, University of South Florida; Ignacio Ferrer-Vinent; Nina McHale; Denise Pan, MLS, San Jose State; Karen Sobel, MLS, University of North Carolina

**Senior Instructors:** Orlando Archibeque, MA, University of Denver; Thomas J. Beck, MLS, Emporia State University; Gayle Bradbeer, MLS, Emporia State University; Lorraine Evans, MLS, University of Maryland; Vera Gao, MLS, University of South Carolina; Cynthia Hashert, MLS, North Texas State University; Elaine Jurries, MA, University of Minnesota; Nikki McCaslin, MA, University of Denver; Ellen Metter, MS, Drexel University; Marit S. Taylor, MLS, Vanderbilt University; Linda Tietjen, MA, University of Denver; Louise Treff-Gangler, MA, University of Denver; Diane Turner, MLS, University of Pittsburgh; Judith Valdez, MLS, Emporia State University

**Instructors:** Eric Baker, MLS, Indiana University at Bloomington; Rosemary Evetts, MLS, Indiana University

## **Library Services**

Access to information is essential to academic success. The Auraria Library, located at the center of the campus, provides a wide range of learning resources and services to support academic programs. The library is administered by the University of Colorado Denver.

## **The Collection**

The Auraria Library has a collection of approximately 1 million volumes. In addition to a strong, up-to-date book collection, the library also has more than 3,200 journal and newspaper subscriptions, access to more than 5,000 electronic journals and a film/videotape collection. The library is a selective depository for U.S. Government publications and a depository for Colorado state documents, with a collection of more than 450,000 documents. The Auraria Library's collection is supplemented by providing access to other libraries within the state and nationally through interlibrary loan services.

## Auraria Library Electronic Resources

Auraria Library provides on- and off-campus access to a wide variety of electronic resources available through the library's home page: <http://library.auraria.edu>. Available resources include:

**Skyline:** Auraria Library's online catalog provides access to books, journal holdings, media and government publications owned by the library. Reserve materials for courses are also listed.

**Prospector Global Catalog:** Auraria patrons can expand their searches for materials with Prospector, a catalog of 23 Colorado libraries. Prospector has 20 million holdings including public and academic libraries. You may request items that are checked out or missing from Skyline and if the Prospector item you need is checked out, you may place a hold. Materials are requested online and delivered to the Auraria Library circulation desk within two to four days. Items are checked out for three weeks with one renewal. Try this popular service by clicking on the "Search Prospector" tab in a Skyline catalog search or directly at [prospector.coalliance.org](http://prospector.coalliance.org).

**Article databases:** More than 300 databases provide access to full text articles and journal citations in a variety of fields. Available on-campus to everyone and off-campus to current students, faculty and staff.

**Reference resources:** Dictionaries, encyclopedias, almanacs and numerous other reference resources.

**Web resources:** Internet resources in all fields that have been selected and evaluated by librarians.

**Auraria Library information:** Instruction guides, subject guides, instructions for off-campus access, hours, policies and other library information.

## Circulation Services

Library materials are checked out from the circulation desk with a current Auraria ID or current Colorado picture ID. Undergraduate students may check out books for 28 days and graduate students for 60 days. An Auraria student can check out up to 75 items from the general collection. Items can be renewed three times if not requested by another borrower online using Skyline's View Your Own Record, in person or by phone, 303-556-2639. Other services include patron-placed holds in Skyline for checked-out items and e-mail circulation notices that allow for e-mail renewals.

## Reference/Instruction Services

The Auraria Library reference department strives to provide excellent service in assisting students and faculty with their research needs. The reference desk is staffed during most hours the library is open, and has librarians and staff trained in all subject areas in order to assist students with online and print sources of information. Contact the reference desk at 303-556-2585.

## **Government Publications**

Most United States and Colorado government publications are in a separate location in the library and are available all hours the library is open. Specialized assistance is available during weekday hours and at the reference desk evenings and weekends. Call 303-556-8372 for information and hours.

## **Information Delivery/Interlibrary Loan**

Auraria Library participates in a worldwide electronic borrowing and lending network with other libraries. This service enables all Auraria Campus students, faculty and staff to obtain materials not available at the Auraria Library. Requests from registered users can be initiated electronically through the Auraria Library's Web page using ILLiad. This department also loans material to institutions throughout Colorado and around the world. Access to materials from other Colorado libraries is available via Prospector. Contact the information delivery/interlibrary loan office at 303-556-8198.

## **Library Instruction**

The library is committed to providing information skills through its instruction program. The program is varied, ranging from basic, introductory-level material to advanced research methodology for graduate students. Information on other electronic resources is an important component of the library instruction program. For more information about the library's instructional offerings, contact the library instruction office at 303-556-3683.

## **Reserves/Audio, Video and Media**

The reserves/audio, video and media department is located in the northwest corner of the first floor and provides special short-term circulation of books, pamphlets, articles, videos, CDs and other materials needed for class instruction. The Auraria Library is pleased to offer an electronic reserve option to our faculty. Electronic reserve allows access to digitized reserve materials online 24 hours a day, seven days a week from any computer with an Internet connection. Materials processed through the electronic reserve system are password protected and made available only to students enrolled in the courses. Unlike traditional print reserves, more than one student may access the material at a time. For more information about the reserves/audio, video and media department, see our Web site at <http://library.auraria.edu/aboutus/whoweare/reserves.html> or call 303-352-3847.

The loan periods for reserved items are short, and overdue follow-up is prompt so that the maximum number of students may have access to the materials. These materials include not only titles owned by the library, but personal copies made available by the faculty. Reserve materials may be checked out for two hours, one day or three days, with the exception of media items, which may be checked out for two weeks. The length of the check-out is determined by the professor. Materials will be checked out with either a student ID or valid Colorado picture ID.

## **Archives and Special Collections**

The archives and special collections department of the Auraria Library acts as the archival repository for materials produced by the University of Colorado Denver, Metropolitan State College of Denver, Community College of Denver and the Auraria Higher Education Center. These materials include documents such as college catalogs, student newspapers, budgets and fact books. Manuscript collections at the Auraria Library focus on public policy issues and public affairs. Examples of manuscript holdings include the records from organizations such as the American Civil Liberties Union of Colorado, the National Municipal League and the American Association of University Women of Colorado.

The library's special collections area contains books on many different subjects, including Colorado and Denver history, theses and dissertations from the Downtown Campus, science fiction, rhetoric and juvenile literature. For information and hours, call 303-556-8373.

## **Computer Commons**

The Computer Commons, located in the northeast corner of the Auraria Library, consists of 63 computers that are available only for Auraria Campus students, faculty and staff. Each computer is equipped with Internet access and Microsoft Office applications. Printing is available by using the pay-for-print Go-Print system. The Computer Commons is open whenever the library is open. For more information or to contact the Computer Commons call 303-556-6159.

## **Services for Persons with Disabilities**

The library is committed to making its resources and services available to all students. Library services to assist persons with disabilities include orientation to the physical layout of the library, assistance with the retrieval of materials as well as use of the online public access catalog, periodicals and indexes.

Adaptive computer equipment and software for public access have been installed in the reference area. The Access Center for Adaptive Technology is available for students who have been referred by their school's disability office. For information, contact Greg Sullivan, director, at 303-556-8387 or [sullivag@mscd.edu](mailto:sullivag@mscd.edu).

## **Additional Facilities**

Photocopiers, microform reader/printers, a copy center, pay phones and study rooms are all available at the library. Our homepage has a link to reserving study rooms online.

## **Friends of Auraria Library**

The Friends of Auraria Library is an association formed in 1976 to promote the development of Auraria Library as a center for learning, study and research for the students and faculty of the University of Colorado Denver, Metropolitan State College of Denver and the Community College of Denver. The Friends of Auraria Library's ongoing objectives are:

1. To promote awareness of and good will toward Auraria Library on the campus, in the metropolitan area and in the region; and
2. To increase library resources through contributions, solicitations, grants, bequests and gifts of books and other appropriate materials.

For more information about the Friends of Auraria Library, call 303-556-6381.

## **Auraria Media Center and Classroom Support Services**

**Location:** 1100 Lawrence Street (Auraria Library), 015

**Telephone:** 303-556-2426

**Web site:** <http://mediacenter.ahec.edu>

The Auraria Media Center and Classroom Support Services offers a full range of media services and classroom support:

- distance learning technologies including video conferencing, webinars, audio conferencing, video over IP and ISDN and videotaping of course delivery
- circulation of a wide range of audio, video and data (AVD) presentation equipment for one-time use
- long-term classroom equipment check-out
- production of content on digital tape, DVD, CD and videotape by an award-winning staff using state-of-the-art digital editing, graphics and animation systems
- quantity duplication of DVD, CD, audio and videotape media
- equipment maintenance and repair
- equipment/systems consultation and installation

The Auraria Media Center's 34-channel closed-circuit campus cable system can be used in the classroom to broadcast channels such as CNN, MSNBC, History, Discovery, A&E, PBS, CSPAN, NASA and local television networks. One channel is dedicated to and managed by each institution for distribution of programming of their choice.

Auraria Media Center staff are available to train faculty in the use of equipment in "smart" classrooms on campus and offer consulting services to faculty and other clients in such areas as media design and production, effective use of media types and effective use of distance learning technologies, effective use of those technologies and equipment selection to best meet instructional needs.

Auraria Media Center and Classroom Support Services will handle all of your classroom needs regarding furniture, projector screens, whiteboards, smart classroom equipment and ADA furniture placement.

## Clicks! Copy and Printing Services

**Locations:**

Tivoli Student Union, 211, 303-556-3702

North Classroom, 1811, 303-556-2291

South Classroom, 119A, 303-556-2679

Auraria Library, 303-556-2751

**Hours:** Vary by location

Clicks! is an on-campus copying, printing and graphic design department. Four full-service copy centers around campus provide high-speed copying, color copies, laminating, binding and school supplies. Services vary by location.

## Emmanuel Gallery

**Curator:** Shannon K. Corrigan

**Location:** 1205 Tenth Street Mall

**Hours:** Tues.–Fri. 10 a.m.–6 p.m.; Sat. 11 a.m.–5 p.m.

**Telephone:** 303-556-8337

**Web site:** [www.emmanuelgallery.org](http://www.emmanuelgallery.org)

Emmanuel Gallery is a tri-institutional, nonprofit art facility committed to enhancing the understanding of the visual arts. Through the presentation of high-quality art exhibits, lectures and events our purpose is to encourage critical thinking, creative research and training in gallery practices. Programs at Emmanuel Gallery promote excellence, education and enrichment to the diverse cultural community of the Auraria Campus and the Denver metropolitan area.

## Health Center of Auraria

**Location:** Plaza Building, 150 (lower level)

**Hours:** Vary (see below)

**Telephone:** 303-556-2525

**Web site:** [www.mscd.edu/student/resources/health](http://www.mscd.edu/student/resources/health)

All Downtown Campus students are entitled to medical services at the Health Center at Auraria and student health insurance is NOT required to use this facility. The health center is approved to provide emergency triage care to persons covered by Medicare and/or Medicaid. Other medical conditions will be referred to approved Medicare/Medicaid providers. Physicians, physician assistants, nurse practitioners, radiological technologists and medical assistants staff the facility. Students will be asked to complete a sign-in sheet and show a current semester ID card each time they check in.

Services include:

- treatment of illness and injuries
- lab testing
- medications
- physicals
- annual GYN exams
- sexually transmitted disease information/testing
- birth control information/services
- minor surgery
- cholesterol screening
- immunizations
- HIV testing
- blood pressure checks
- casting
- suturing
- X-ray

All services listed above are low cost. Payment is required at time of service, except for students who participate in the student health insurance program. Classes regarding health-related topics are taught each semester and are offered free to all students.

Scheduled and walk-in appointments are available. Walk-in services begin at 8 a.m., Monday–Friday. Access is on a first-come, first-served basis. Walk-in varies daily, contingent upon when all patient slots have been filled; thus, the daily closure time for walk-in care is variable. Patients are encouraged to check in as early as possible. Brochures with additional information are available at the health center.

## **King Academic and Performing Arts Center**

**Location:** 855 Lawrence Way

**Telephone:** 303-556-2179

**Web site:** [www.ahec.edu/kingcenter](http://www.ahec.edu/kingcenter)

The King Center houses six performing spaces: three permanently assigned production studios, a 197-seat recital hall; 520-seat concert hall; and the 168-297 seat (depending on stage configuration) Eugenia Rawls Courtyard Theatre. There are dressing rooms, green room, recording studio, lighting lab, music electronics lab, classroom space, box office, scene shop, paint shop and costume shop. All spaces are fully equipped with state-of-the-art equipment and a variety of spaces for exhibiting fine art. The entire facility has more than 180,000 square feet dedicated to the education of the student and development of the student who wishes to study performance/arts. The center can support many forms of entertainment, anywhere from legit theatre to large choral ensembles and other forms of performances.

## **Tivoli Student Union**

**Location:** 900 Auraria Parkway (Ninth and Auraria Parkway)

**Telephone:** 303-556-6330

**Web site:** [www.tivoli.org/tivoli/](http://www.tivoli.org/tivoli/)

The Tivoli Student Union, managed by Student and Auxiliary Services, provides a wide variety of services for the Auraria community. The student union houses student government and student life offices, two credit unions and tri-institutional services such as the GLBT student services.

If you want a break or a quiet place to study, the Tivoli Student Union is just the place. With a food court, coffeehouse, deli and convenience store, you'll find a place to suit your appetite, schedule and budget. If you'd rather retreat than eat, you can watch TV in the Roger Braun Student Lounge, play a game of pool at Sigi's Pool Hall and Arcade, meet a study group in the multicultural lounge or study in total silence in the Garage Quiet Study Lounge.

Additional student services at the Tivoli Student Union include the Auraria Campus Bookstore, the Club Hub, Click's Copy Center, event services and the ID program and Commuter Resource Center.

### **Club Hub**

Suite 346, 303-556-8094

This uniquely designed club space on the third floor of the Tivoli features work space for more than 60 clubs, mailboxes for campus clubs, a limited number of lockers, club bulletin boards and a lounge area for group meetings. This office works closely with the Student Advisory Committee to the Auraria Board (SACAB) and the student activities/life offices.

### **Auraria Campus Event Services**

Suite 325, 303-556-2755

Through the event services office, meeting and conference space at the Tivoli Event Center, St. Francis and St. Cajetan's can be reserved for nonacademic purposes, including meetings, weddings and receptions. Conference Services has three caterers to choose from for all off-campus catering needs.

### **ID Program/Commuter and Housing Services**

Suite 269, 303-556-8385

Auraria staff, faculty and students come here to get their ID cards, which are necessary for parking in some campus lots and for checking out library books. Student IDs also serve as an RTD bus pass and light rail with a semester validation sticker. The center provides off-campus housing resources, RTD bus information, campus and Tivoli information, lost and found and a microwave oven.

### **Sigi's Pool Hall and Arcade**

Suite 145, 303-556-3645

Sigi's, named after Tivoli Brewery founder Moritz Sigi, houses 15 video game machines and six billiard tables. Sigi's is open to the entire Auraria Campus population as well as the public. The student-friendly atmosphere encourages community socialization and relaxation.

## Student Housing

**University Policy and Support:** Tivoli Student Union, 260

**Telephone:** 303-556-3682

**E-mail:** [housing@ucdenver.edu](mailto:housing@ucdenver.edu)

**Web site:** [www.ucdenver.edu/life/Pages/Housing.aspx](http://www.ucdenver.edu/life/Pages/Housing.aspx)

**Leasing and Payment Options:** Campus Village Apartments

318 Walnut Street

**Telephone:** 303-573-5272

**E-mail:** [mgrdenver@edrtrust.com](mailto:mgrdenver@edrtrust.com)

**Web site:** [www.campusvillageliving.com](http://www.campusvillageliving.com)

Opened in fall 2006, Campus Village is located directly adjacent to the Auraria Campus, within easy walking distance of campus and the downtown area. Campus Village houses 685 Auraria Campus students in apartment-style accommodations and provides students with programs and resources to help foster their academic and social success. At Campus Village, housing is exclusively for students.

By focusing on the total student experience, life at Campus Village at Auraria reinforces the student's educational goals, as well as UC Denver's commitment to community service and development. Through cultural and development programs coordinated by Campus Village staff, residents can participate in a wide variety of activities, including nutrition and fitness seminars, community outreach programs and classes on career planning, time management, study skills and more.

Starting this fall, all Campus Village housing and dining fees will be billed to your UC Denver student account. If you receive financial aid, your award(s) will be credited directly to your student account. Financial aid awards are used to pay your tuition and fees first; any remaining award(s) are then used to pay your housing charges. You are responsible for any and all charges not covered by financial aid and scholarships.

### Campus Village Frequently Asked Questions

## Amenities

At Campus Village at Auraria, students will find a community to support their academic and personal interests. It's convenient, comfortable and affordable. Features include:

- apartment-style living with kitchenettes or full kitchens for all students
- lease rates that include heating, cooling, electricity, water, cable and high-speed Internet service
- a variety of floor plans (from individual studios to four bedroom apartments) to meet the needs of all students
- individual lease agreements for shared units
- fully furnished apartments
- various affordable meal plans

Diagrams of floor plans, details about meal plans, pricing, applications and exception forms are available on the Web site at [www.ucdenver.edu/life/Pages/Housing.aspx](http://www.ucdenver.edu/life/Pages/Housing.aspx).

## Live-In Requirement for First-Year Students

In an effort to improve the quality of the undergraduate experience, the Downtown Campus has a live-in requirement for first-time freshmen and first-time international students (undergraduate and graduate). For more information regarding this policy and the applicable exemptions, please see the “Exemptions” section below.

Research has shown that living in student housing during the first year has numerous benefits for students both academically and socially. Student-housing participants tend to have:

- higher graduation rates than students who live off campus
- a higher level of satisfaction with their college experience
- a higher level of involvement in clubs and activities on campus
- more frequent interaction with faculty members and peers

First-time freshmen at UC Denver are required to live in the two-bedroom, two-bath units with an efficiency kitchen. These units comprise an entire wing of the project and are designed with the unique needs of first-year students in mind.

- Additional staff—this wing of the complex will have a higher ratio of staff to students to help provide additional support, guidance and resources for first-time students.
- Special programming—many of the programming efforts sponsored by the university will be taking place in this wing of Campus Village. Programs will focus on study skills, navigating the university and community, living with a roommate and a variety of other topics.
- Connections with other first-year students—first-year students share many of the same challenges and anxieties as they begin their college careers. Living in a community of students going through the same types of experiences provides a built-in support network and can lead to lasting friendships.
- First-year students participating in the University Honors and Leadership Program (UHL) or the Denver Bound Program will also have the opportunity to be part a unique living and learning community housed in specific area of the building beginning in fall 2009.

## Exemptions

First-time freshmen students wishing to live with parent(s) or legal guardian(s) or who qualify under at least one of the exemptions listed below must submit the special exemption form to be considered for exception from the live-in policy.

Exemptions to the first-time freshmen live-in requirement will be considered for those who are:

- living at home with parent(s) or legal guardian(s) for the 2009-2010 academic year
- veterans of the armed forces
- married or a parent with dependent(s)

- a part-time undergraduate student enrolled for less than 10 semester hours per semester
- deemed medically excusable by the Office of Student Housing (must be supported in writing by a doctor and with appropriate medical documentation)
- over 21 years of age

Exemptions to this policy will be evaluated and made on a case-by case basis. Exemption forms are available through the Office of Student Housing, Tivoli Student Union, 260, or online at [www.ucdenver.edu/life/Pages/Housing.aspx](http://www.ucdenver.edu/life/Pages/Housing.aspx). For further information, please call the Office of Student Life at 303-556-3682 or via e-mail at [housing@ucdenver.edu](mailto:housing@ucdenver.edu).

## Campus Safety

The University of Colorado Denver places a priority on the safety and security of its faculty, staff, students and visitors. Please visit the University Policies chapter of this catalog for additional information related to campus safety.

## Emergency Notification System

The Emergency Notification System allows students, faculty and staff to register to receive alerts about threats of imminent danger at or near any UC Denver location. This service is used in conjunction with other communication channels including: public address systems, broadcast e-mail and voice-mail messages to campus telephone extensions, electronic signage, a coordinated use of public media outlets and 24-hour recorded emergency and information hotlines (Downtown/Auraria Campus 303-556-2401; Anschutz Medical Campus in Aurora 303-724-4636). Participants can receive various notifications including text messaging, e-mail and phone calls. Visit the UC Denver Web site for details, [www.ucdenver.edu](http://www.ucdenver.edu).

## Auraria Campus Police Department

**Office:** Administration Building, Suite 110

**Telephone:** 303-556-5000 (Police Dispatch)

**Emergency:** 911 from a campus phone or 303-556-5000

**Web site:** [www.ahec.edu/acpd.htm](http://www.ahec.edu/acpd.htm)

On the Downtown Campus, UC Denver works with the Auraria Campus Police Department to ensure campus safety. The Auraria Campus Police Department provides campus services 24 hours a day, seven days a week including:

- security patrols, bicycle patrols and foot patrols
- crime prevention programs
- night escorts to a vehicle
- vehicle unlocks
- informational services

Auraria Police fulfill the campus responsibilities for reporting crime as required by the Clery Act. Clery statistics are available online at [www.ahec.edu/campuspolice/ucd-clery.pdf](http://www.ahec.edu/campuspolice/ucd-clery.pdf).

# **Student Right To Know and Disclosure Information**

## **Crime Statistics**

In compliance with the federal Student Right-to-Know and Campus Security Act, the Auraria Campus publishes crime statistics on campus in the Auraria Campus Clery Report. In an emergency, please contact Auraria Campus Police at 303-556-5000 or dial 911 from a campus phone.

## **Persistence and Completion Data**

Section 103 of Title 1 of Public Law 101-542 as amended by Public Law 102-26 (the Federal "Student Right-to-Know" Act) requires that institutions produce and make available to current and prospective students the completion rate of first-time, full-time, degree-seeking undergraduate students entering the institution. Six years after entering, 36.6 percent of the fall 2002 cohort graduated, another 12.2 percent transferred to other public higher education institutions in Colorado and 12.8 percent were still enrolled at the Downtown Campus for a total six-year combined persistence and completion rate of 61.6 percent.

UC Denver's Downtown Campus' one-year fall-to-fall retention rate is 70.8 percent for the fall 2007 cohort. That is, of the first-time, full-time, degree-seeking undergraduate students who entered the university in fall 2007, 70.8 percent were enrolled at the Downtown Campus in fall 2008.

## **Riot Law (Student Riot Bill)**

Student enrollment-prohibition-public peace and order convictions: 1) No person who is convicted of a riot offense shall be enrolled in a state-supported institution of higher education for a period of twelve months following the date of conviction; 2) a student who is enrolled in a state-supported institution of higher education and who is convicted of a riot offense shall be immediately suspended from the institution upon the institution's notification of such conviction for a period of twelve months following the date of conviction, except that if a student has been suspended prior to the date of conviction by the state-supported institution of higher education for the same riot activity, the twelve month suspension shall run from the start of the suspension imposed by the institution; 3) nothing in this section shall be construed to prohibit a state-supported institution of higher education from implementing its own policies and procedures or disciplinary actions in addition to the suspension under (2) of this section, regarding students involved in riot.

## **Sex Offender Information (Campus Sex Crimes Prevention Act)**

Sex offenders are required to list the locations of all institutions of post-secondary education where he or she volunteers or is enrolled or employed. The Colorado Bureau of Investigation

maintains a database identifying all such persons and makes it available to all law enforcement agencies in which jurisdiction the institution of postsecondary education is located. The campus community can obtain this information by contacting the Auraria Campus Police Department at 303-556-5000.

## **Voter Registration (National Voter Registration Act)**

In compliance with the National Voter Registration Act, the state of Colorado voter registration application form and information is available online at [www.sos.state.co.us/pubs/elections/](http://www.sos.state.co.us/pubs/elections/) or [www.fec.gov/votregis/vr.shtml](http://www.fec.gov/votregis/vr.shtml).

# **Student Services**

## **Academic Success and Advising Center**

**Office:** North Classroom, 2024

**Telephone:** 303-352-3520

**Web site:**

[www.cudenver.edu/Who+Am+I/Current+Students/AcademicSuccessAndAdvisingCenter](http://www.cudenver.edu/Who+Am+I/Current+Students/AcademicSuccessAndAdvisingCenter)

Academic advising is the foundation of a successful college experience and an important component in both choosing a major and career planning. This office serves as the first point of contact and provides academic advising for students who are prebusiness, pre-engineering, nondegree and undecided in the College of Liberal Arts and Sciences and all freshmen and undecided in the College of Arts & Media. In addition, the center provides general information and resource referrals to all students.

New freshmen and transfer students will be assigned an advisor who will meet with them every semester to plan a schedule, discuss academic support services and assist with referrals to other on-campus resources.

**New student orientation** for freshmen/first year students is coordinated through the Academic Success and Advising Center. Fall and spring welcomes for transfer, nondegree and graduate students are also coordinated through the center.

## **American Indian Student Services**

**Office:** North Classroom, 2013

**Telephone:** 303-556-2860

**Web site:**

[www.cudenver.edu/Student+Life/EducationalOpportunitiesPrograms/AmericanIndianStudentServices](http://www.cudenver.edu/Student+Life/EducationalOpportunitiesPrograms/AmericanIndianStudentServices)

The American Indian Student Services program provides access and educational opportunities to American Indian students through specialized recruitment and retention efforts. The program provides academic advising, scholarship information, cultural programs, advocacy, student organization sponsorship and other supportive services tailored to the specific needs of the students. American Indian student services also serves as a resource to the campus, providing current information on issues and concerns of the American Indian community.

## **Asian American Student Services**

**Office:** North Classroom, 2014

**Telephone:** 303-556-2578

**Web site:**

[www.cudenver.edu/Student+Life/EducationalOpportunitiesPrograms/Asian+Amer+Student+Services](http://www.cudenver.edu/Student+Life/EducationalOpportunitiesPrograms/Asian+Amer+Student+Services)

Asian American Student Services provides academic advising, scholarship information, cultural programs, advocacy and student leadership development. Supportive services are tailored to meet the specific needs of students. Asian American student services also serves as a resource to the campus and community, providing current information on issues and concerns of Asian Americans.

## **Black Student Services**

**Office:** North Classroom, 2010

**Telephone:** 303-556-2701

**Web site:** <http://thunder1.cudenver.edu/BSS>

The Black Student Services program provides access, educational opportunities and information to students through specialized recruitment and retention efforts. The program provides academic advising, scholarship information, cultural programs, advocacy, student organization sponsorship and other supportive services tailored to the specific needs of the students. Black student services also serves as a resource to the campus, providing current information on issues and concerns affecting the community.

## **The Career Center**

**Office:** Tivoli Student Union, 259

**Telephone:** 303-556-2250

**Web site:** <http://careers.cudenver.edu>

The Career Center offers a full array of services that prepare students for success. Students are encouraged to participate in career-related programs and services as early as their freshman year to begin planning their careers and gain the skills and experiences they need to be successful upon graduation.

## **Career Planning Services**

The Career Center assists and guides students with understanding and leveraging their skills, personality, values and interests as they choose an academic major and determine a career direction. The center helps students prepare for job search, assists with developing and writing resumes, practice interviews, job search strategies and salary negotiations.

## **Employment Services**

Connect with employers through the Career Center's many employment programs and services including: online job posting, resume referrals, on-campus interviewing, career fairs, employer presentations and networking events.

## **Community Standards and Wellness**

**Location:** Tivoli Student Union, Suite 260

**Telephone:** 303-556-3682

**Web site:** <http://thunder1.cudenver.edu/campussafety/csw.html>

The Office of Student Conduct and Community Standards serves as a resource to the entire university community through its efforts to meet the developmental and educational needs of students related to community expectations, civility and respect for self and others. We function to support community members with conflict management and resolution and by responding to inappropriate and threatening behaviors. We provide student-centered educational services, which promote personal development and individual responsibility. We strive to create a dynamic, open and just environment where civility, cultural competence and learning are expected and celebrated.

Overall Office Goals

- To develop, disseminate, interpret campus policies and procedures related to community standards and expectations
- Protect the rights of students in the administration of the student conduct program
- Respond to student behavioral concerns in a fair, reasonable and efficient manner
- To promote a campus environment that encourages dialogue, mutual respect and cultural sensitivity
- Initiate and encourage educational activities that serve to reduce violation of campus regulations and increase the health and wellness of the campus community
- To foster collaborative partnership that allow for a holistic approach to supporting and developing healthy, engaged and productive students and citizens

## **Disability Resources and Services office**

**Location:** North Classroom, 2514

**Telephone:** 303-556-3450

**TTY:** 303-556-4766

**E-mail:** [DisabilityResources@ucdenver.edu](mailto:DisabilityResources@ucdenver.edu)

The Office of Disability Resources and Services (DRS) is committed to providing equal opportunities and fostering the personal growth and development of students with disabilities. The DRS staff strive to meet the needs of a large and diverse community of students with disabilities. We are available to provide assistance and to arrange for reasonable accommodations that will address specific educational needs.

Accommodations may include but are not limited to the following:

- priority registration for classes
- assistance in identifying volunteer notetakers
- alternative testing (private room, additional time, reader/scribe)
- alternate textbook formats (scanned, enlarged print, Braille)
- interpreter services or captioning services

## **Diversity Educational Enrichment Program**

**Director:** Theresa R. Gutierrez

**Telephone:** 303-556-4721

A center to assist faculty, students and staff with educational resource materials and training concerning diversity and inclusion issues.

## **Gay, Lesbian, Bisexual, Trans (GLBT) Student Services at Auraria**

**Office:** Tivoli Student Union, 213

**Telephone:** 303-556-6333

**E-mail:** [info@glbtss.org](mailto:info@glbtss.org)

**Web site:** [www.glbtss.org](http://www.glbtss.org)

Gay, Lesbian, Bisexual, Trans Student Services is open to all Auraria Campus students as a resource for exploring sexual orientation issues. This program offers a variety of support, education and advocacy services for the entire campus community:

- support for those who may have questions about their own sexual orientation/gender identity or that of a friend or family member
- advocacy for students experiencing discrimination or harassment based on a real or perceived GLBT identity
- speakers for events, workshops and classes on various aspects of sexual orientation/gender identity
- programs and workshops about working with the gay, lesbian, bisexual and trans communities more effectively and combating misinformation, misconceptions and homophobia
- resource library of 500 books and 90 videos (documentary and cinema) available for research and leisure, as well as a multitude of free literature regarding other

organizations and services throughout Denver and Colorado that provide outreach, services and advocacy

- programs such as Gay, Lesbian, Bisexual, Trans Awareness Month and other forums providing information and dialogue about GLBT issues

The GLBT Student Services office is staffed by a director with the support of student employees and volunteers. Input and involvement from the entire campus community are welcome.

## **Global Education, Study Abroad**

**Director:** John Sunnygard

**Telephone:** +1-303-315-2230

Global Education is the university's central office that supports all students seeking to internationalize their education and professional preparation to more effectively serve and compete in a global world. The office helps prepare students, faculty and staff to safely navigate the full range of global academic activities. Global Education has a network of study abroad programs, international internship, volunteer and service learning opportunities in more than 80 countries. Graduate, professional and undergraduate students from both campuses also conduct international research also benefit from Global Education's support services.

Study abroad programs are offered in a variety of terms, costs and disciplines to suit the full spectrum of UC Denver students. Students may choose to immerse themselves in a more traditional academic year or semester program abroad, or participate in shorter, highly-focused travel-study programs over winter break, Maymester or summer. While many students study abroad to learn or perfect language skills, most students participate in English-taught programs in non-English and English-speaking countries. Either UC Denver or transfer credit may be earned on approved programs abroad, giving students the opportunity to fulfill degree requirements while living, learning and growing in another culture.

Considerable effort is made to keep global educational opportunities affordable for all UC Denver students. Additionally, scholarships and financial aid may be available depending upon the program and location. Information and advice on scholarships such as Fulbright, NSEP, Gilman and others is also available. For the most current information on programs, policies and the benefits of global education, please visit the Global Education Web site at <http://studyabroad.ucdenver.edu>.

## **Hispanic Student Services**

**Office:** North Classroom, 2012

**Telephone:** 303-556-2777

The Hispanic Student Services program provides access and educational opportunities to Hispanic students through specialized recruitment and retention efforts. The program provides academic advising, scholarship information, cultural programs, advocacy, student organization sponsorship and other supportive services tailored to the specific needs of the students. Hispanic student services also serves as a resource to the campus, providing current information on issues and concerns of the Hispanic community.

## Information Technology Services

**Office:** Lawrence Street Center, 1350

**Telephone:** 303-724-4357

**Web site:** <http://ucdenver.edu/admin/its/>

Information Technology Services (IT Services) provides central support of the telecommunications, computing and network infrastructure for more than 2,500 computers at the Downtown Campus and 8,000 computers at the Anschutz Medical Campus. IT Services also provides campus computing resources such as computer accounts, e-mail, file storage space, server hosting, Internet, Internet2 and National Lambda Rail. Faculty, staff and students are encouraged to contact the IT Services Help Desk for assistance with their computing needs. Help Desk technicians maintain personal computers and are available to assist with hardware and software planning and installation, acquisitions, Internet connectivity, troubleshooting and general questions.

IT Services also maintains three computing laboratories that provide students with access to Macintosh and Windows-based personal computers and software, as well as access to the campus computing resources.

The goal of IT Services is to assist faculty, staff and students at the Downtown Campus and Anschutz Medical Campus in using computing effectively in their work. For more information, call the IT Services Help Desk at 303-724-HELP.

## International Affairs

**Assistant Vice Chancellor:** Carolyn North

**Courier Address:** International Affairs, 1380 Lawrence Street, 9<sup>th</sup> floor, Denver, CO 80204-2029, USA

**Mailing Address:** International Affairs, Campus Box 185, P.O. Box 173364, Denver, CO 80217-3364, USA

**Telephone:** +1-303-315-2230

**Fax:** +1-303-315-2246

The Office of International Affairs (OIA) serves the university by providing administrative support, expert advice, technical services, educational programs and related services that contribute to the strategic international goals of UC Denver. The Office of International Affairs addresses international policy issues, has oversight of international risk management protocols, serves as a resource for best practices in the internationalization of higher education, maintains central data bases pertaining to international activities of the university, advises on the development of international affiliations and agreements, assists departments/programs and schools/colleges with the development of comprehensive international strategic planning and seeks to promote and support initiatives that advance international research, education and global cooperation. OIA serves as a resource for faculty seeking international research opportunities, provides a comprehensive list of international scholarship/fellowship information and serves as the institutional liaison for the CIES Fulbright Scholars Program. OIA provides visa and orientation services to international students and scholars, provides expertise in the development and maintenance of undergraduate, graduate and professional global education,

assists with brokering and designing bilateral international educational programs and offers comprehensive international recruitment and admissions services.

The four divisions of OIA include International Student and Scholar Services , Global Education, International Colleges and International Student and Scholar Services .

## **Graduate Student and Faculty Fulbright Information**

OIA maintains listings of opportunities and other information on various scholarships and fellowships for study and research abroad, including Fulbright graduate student and faculty visiting lectureships at foreign universities.

## **Community Outreach Services**

During the year, OIA sponsors periodic guest lectures and special seminars focused on topics of current international interest. Many of these activities are open to the public as well as the UC Denver community. OIA is also an active participant in a number of Denver community international programs and events. For more information about these and other programs, contact the OIA office at 303-315-2230.

## **International Colleges**

**Director:** E.J. Yoder

**Telephone:** +1-303-315-2240

The International Colleges Unit in the Office of International Affairs is designed to assist UC Denver schools/colleges, departments and faculty design and implement unique educational partnerships abroad. We have the expertise to assist with both educational and financial modeling, program marketing and in-country support of students and faculty.

### **International College at Beijing**

Currently the International Colleges Unit supports an International College in Beijing, China, in partnership with the College of Liberal Arts and Sciences. This program is maintained by a formal agreement between the University of Colorado Denver and China Agricultural University. The International College at Beijing (ICB) provides a rich, cultural learning experience in an English-speaking environment for Chinese students and UC Denver faculty.

The ICB mission is to educate and empower future leaders of China. This mission is accomplished by promoting knowledge and understanding of human culture and its diversity, teaching essential global work force skills such as English language, critical thinking, communication and decision making and enhancing student's capacity to make informed and responsible choices.

ICB offers a carefully designed program leading to a baccalaureate degree from UC Denver in either economics or communication. The courses cover the same subject matter as the courses taught on the UC Denver Downtown Campus. In addition, ICB students have the option to study

at UC Denver for one to two years. This unique degree program was accredited by the North Central Association (NCA) of the United States in fall 1995.

## **International Student and Scholar Services**

**Director:** Laura Welch

**Telephone:** +1-303-315-2235

Since the first few months in a new country and a new city can be particularly difficult for international students, the Office of International Affairs (OIA) offers a number of special services to ease this transition, such as an orientation program for new international students and answers to visa questions. All international students and scholars meet with an international student advisor (ISA) in OIA upon arrival in Denver to have visas and other paperwork reviewed. OIA provides a friendly place to ask questions and express concerns about many issues, including U.S. social customs, as well as an avenue for communicating with other UC Denver international student clubs and organizing social activities. For more information on immigration matters, advising or services for international students and scholars, visit our Web site at [www.cudenver.edu/international](http://www.cudenver.edu/international) or contact an international student advisor at 303-315-2230.

## **Internships & Experiential Learning**

**Director:** Lissa Gallagher

**Office:** Tivoli Student Union, 260

**Telephone:** 303-556-6656

**Web site:** [www.cudenver.edu/exl](http://www.cudenver.edu/exl)

Live your learning at UC Denver! Students have many opportunities to explore academic fields through direct experience including internships, service in the community, undergraduate research and international experiences. Link your studies to the real world and put your knowledge into practice. You will develop new skills, grow personally and professionally and enrich your academic experience.

## **INTERNSHIPS AND COOPERATIVE EDUCATION**

Hundreds of UC Denver students engage in degree-related work experiences with corporations, government and nonprofit agencies in the Denver-metro area and around the world. Students can earn academic credit, pay or both while gaining relevant experience related to their career interests.

## **SERVICE LEARNING**

Students gain a better understanding of community issues, develop practical skills and make a difference in the world around them when they engage in service activities. From the first-year experience course to senior capstone classes, faculty weave service projects into their courses,

giving students a wider view of the world. Many volunteer opportunities are also available through the center. Students can also earn AmeriCorps education awards for service.

## UNDERGRADUATE RESEARCH

Whether assisting faculty with research or pursuing their own research under faculty supervision, UC Denver students can experience what it means to be involved in the creation of knowledge. Students may apply for research grants through the Undergraduate Research Opportunities Program (UROP) and showcase their research projects at the annual *Research and Creative Activities Symposium*.

## Learning Resource Center

**Office:** North Classroom, 2006 and 2506

**Telephone:** 303-556-2802

The Learning Resource Center is designed to promote student success in the academic setting. Available to undergraduate and graduate students, services include study skills courses, tutoring, study strategies seminars, consulting and a resource library. Supplemental instruction is available for courses in physics, chemistry and biology. ESL (English as a second language) support is available through workshops, conversation and pronunciation groups.

## Ombuds Office

**Office:** CU-Denver Building, 107P

**Telephone:** 303-556-4493

**E-mail:** [Mary.ChavezRudolph@ucdenver.edu](mailto:Mary.ChavezRudolph@ucdenver.edu)

**Web site:** [www.uchsc.edu/ombuds](http://www.uchsc.edu/ombuds)

The Ombuds Office is a designated neutral and independent resource available to all members of the university community to provide informal and confidential assistance in resolving conflicts, complaints and disputes. An ombuds person does not advocate for any party but is an advocate for fair process.

The ombuds person can provide information about policies, procedures, practices or decisions at UC Denver and can assist individuals and groups in resolving their concerns by listening; probing for understanding; and helping to understand options. The ombuds person will make referrals as necessary and can serve as an informal mediator or shuttle diplomat.

The Ombuds Office works toward positive change within the university, serving as a consultant in the preparation and review of policies and procedures and assisting in the solution of problems. While keeping names and cases confidential, the ombuds person reports trends and pervasive problems to the appropriate resolution channels.

The Ombuds Office can also assist with large group issues by providing group facilitation, conflict management training and personality profile assessments. In addition, the office has a lending library comprised of books and videos available for check-out.

Due to its informal, confidential and independent role outside the administrative structure of the university, notice to the ombuds about a problem does not result in the generation of records, nor does it constitute legal notice to the university about the existence of a problem. For those interested in making official complaints to the university about a problem, the Ombuds Office can assist by making appropriate referrals.

## **Center for Pre-Collegiate and Academic Outreach Programs**

**Office:** Administration Building, 360

**Telephone:** 303-556-2322

**E-mail:** [pcdp@ucdenver.edu](mailto:pcdp@ucdenver.edu)

**Web site:** <http://www.cudenver.edu/Admissions/High School Students/Precollegiate/Pages/default.aspx>

The programs offered by the Center for Pre-Collegiate and Academic Outreach Center serve to motivate middle- and high-school students to pursue post-secondary education and provide them the academic skills necessary to be successful in their college endeavors.

### **Pre-Collegiate Development High School Program**

The Pre-Collegiate Development High School Program is a systemwide, institutionally funded academic enhancement program for high school students. The primary focus of the program is to prepare youth (grades 9–12) who are first-generation and from an underrepresented group in higher education to successfully complete high school on a timely basis and possess the necessary skills to successfully enter and graduate from their choice post-secondary institution. During the academic year, students will take part in relevant Saturday Academies in basic study skills, interpersonal skills development and college entrance exam preparation designed to acclimate them to the university and prepare them for college study. In addition, students are provided with either a two-week (sophomores) or five-week (juniors) intense summer academic program. During this experience, students are exposed to various academic courses, which are designed to enhance and augment their college entry requirements (e.g., mathematics, sciences, writing and seminar) once they return to their host high school for either their junior or senior year. For further information you may contact us at 303-556-2322.

### **Pre-Collegiate Middle School Academic Program**

The Pre-Collegiate Middle School Academic Program is an academic enhancement program. The program is designed to adequately prepare potential first-generation college students in grades seven to eight to successfully complete their pre-secondary school career, enroll in a college preparatory high school curriculum and ultimately enroll to their choice college/university with the necessary skills and academic preparation to succeed at and graduate from that institution. The Pre-Collegiate Middle School Academic Program serves as a precursor to the Pre-Collegiate Development High School Program. Students who successfully complete the Pre-Collegiate Middle School Academic Program with a cumulative GPA of 2.75 or better will then be admitted to the Pre-Collegiate Development Program at the end of their 8th grade year.

During the academic year, the students are provided relevant Saturday Academies in areas such as basic study skills, academic skills enhancement, leadership and interpersonal skills development. Parents of the participating students will also be offered relevant workshops during the Saturday Academy sessions, which include effective parenting strategies, as well as strategies on how to prepare financially for their student's college education. Tutoring services will also be provided on an ongoing basis during the academic year at their middle school. The academic year Saturday Academies are designed to augment middle school curriculums (e.g., mathematics, writing, sciences, computer skills, etc.) and enhance parenting skills and strategies designed to more fully support their student. For further information you may contact the program coordinator, Junior Reina, at 303-556-2322.

## **Upward Bound Program Power-Up Project**

The Upward Bound program, a federally funded TRIO program, is an educational pre-collegiate program for selected students from Sheridan and Jefferson High Schools. Upward Bound's mission is to prepare and help motivate students with potential for success in postsecondary education. Participants are selected based on their academic performance, motivation for success, recommendations from teachers and counselors and additional criteria.

Upward Bound aims to provide program participants with the necessary skills needed to successfully graduate from high school and complete a four-year college degree. Students participate in after-school and weekend programs that include supplemental education, academic themed workshops, field trips and college campus tours. Every student also participates in a six-week summer program designed to prepare them for their high school classes and the college application process. Additionally, all students participate in a shadowing program with current college students and working professionals in the Denver metro area. The program is 100 percent funded by the U.S. Department of Education.

## **CU Succeed**

The CU Succeed program enables juniors and seniors to earn fully transferable college credit while still in high school. There are two programs for students to choose from: CU Succeed Gold and CU Succeed Silver.

*CU Succeed Gold:* Courses are taught during regular school periods by specially qualified high school teachers who hold honorarium faculty appointments at UC Denver.

*CU Succeed Silver:* Courses may be taught during school periods and after school hours and are taught by UC Denver full-time or part-time faculty.

Courses taken through the CU Succeed programs are eligible for transfer to University of Colorado campuses, as well as to many other universities and colleges. More information about the CU Succeed programs is available at [www.cudenver.edu/cusucceed/infopage.htm](http://www.cudenver.edu/cusucceed/infopage.htm).

## **Scholars Program**

The Scholars Program is an early college enrollment program for college-bound, high-achieving students who are potential first-generation who are *current graduating high school seniors*. The program allows students to begin their college studies by taking one course on the University of Colorado Denver Downtown Campus during the fall and spring semester of their senior year. The credit earned in the course can be applied toward a bachelor's degree at UC Denver or at another institution.

Prior to and during their fall and spring enrollment, scholars engage in orientation, admissions and financial aid seminars and other workshops, *along with their parents*, designed to acclimate them to the university and prepare them for full-time college study. Assistance with course selection, educational planning and tutoring is provided.

**Who may participate in the program?** Students who are potential first-generation college students, and/or underrepresented in higher education may apply to the program. Applicants must be current juniors who are graduating from their respective high schools at the end of the following spring semester.

## **Applicants must meet the following criteria:**

- A minimum GPA of 3.0 at the time of application
- Completion of at least two years of math (two years of algebra or one year of algebra and one year of geometry) with an average grade of B or better
- Completion of two years of English (one year must be composition) with an average grade of B or better
- A commitment to participate in all of the program's orientations and workshops prior to and during enrollment

NOTE: *Interested students are cautioned that college work requires considerable time and discipline.* Therefore, only students who have completed the majority of their high school requirements, who do not work after school and who are **not** heavily involved in extra-curricular activities are encouraged to apply. Since UC Denver courses are available throughout the day and into the early evening, students will have many options in choosing a course that best fits their schedule.

## **What are the student's responsibilities?**

The UC Denver Scholars Program is committed to providing students with every opportunity to enhance their academic skills and to succeed in the college courses they take at UC Denver. However, students will gain the most benefit from their experience at UC Denver if they commit themselves to the goals of the program and actively participate in its activities. Therefore students will be expected to:

- Commit themselves to actively participating in the program for the semester
- Attend their college class faithfully, completing assignments and participating fully (tutors or teaching assistants will be made available)
- Attend all tutorial sessions as required by instructors and staff

The program involves a serious commitment by students because college is a serious commitment. If a student earns a failing or a low grade in a college class, a prospective college or university may be reluctant to grant admission to that student. Students who are already involved in extra-curricular activities should apply to the program only if they are sure that these activities will not interfere with their full participation in the program.

## How much does the program cost?

UC Denver covers most of the direct educational expenses, which includes tuition and matriculation fees. Students will be responsible for the following:

- Books (ranging from \$50 - \$100)
- A student identification card (\$10), available in the Tivoli Student Union upon acceptance into the program
- Parking (\$3.75 to \$10 per day)

NOTE: Students must arrange their own transportation to and from the Auraria Campus. Those who choose to drive may park in the student lots for an hourly or daily fee.

## How do students apply?

Application to the UC Denver Scholars Program must be made through a high school counselor. Applicants should ensure that their counselor submits the following materials/credentials to the Scholars Program.

- A University of Colorado Denver **nondegree** application form; **Non-USA citizens** must attach photocopy of VISA or permanent resident card
- A *completed* application packet, including student general information form, counselor recommendation form and two teacher recommendation forms
- An unofficial copy of the student's high school transcript

Students should be advised that no application will be considered if it is incomplete.

*Completed applications should be turned in to your high school college counselor.* For additional information contact:

Abenicio D. Rael, Assistant Director  
University of Colorado Denver Scholars Programs  
Campus Box 147  
P.O. Box 173364  
Administration Bldg., Suite #360  
Denver, CO 80217-3364  
303-556-2322  
abenicio.rael@ucdenver.edu

## Student Activities Office

**Office:** Tivoli Student Union, 303

**Telephone:** 303-556-3399

**Web site:** <http://thunder1.cudenver.edu/studentlife/studentactivities2.html>

The Office of Student Activities offers a comprehensive student activities program that helps bring about a positive college experience for each and every student. It is our goal to integrate what students learn from the full range of their experiences and to engage in active learning both inside and outside the classroom. We are committed to bringing you new and exciting activities, events and workshops that actively involve student learning and leadership development. The programs we offer are founded in encouraging students to explore and participate in activities that provide opportunities for self-realization and growth in individual and group settings, where academic learning and student development processes requires all the academy to function together in an integrated manner on behalf of students.

## **Student Advocacy Center**

**Office:** North Classroom, 2012

**Telephone:** 303-556-2546

The Student Advocacy Center provides support services to UC Denver students, particularly during their first year on campus. Services are designed to help students make a smooth transition to life at UC Denver and to succeed in their college studies. Professional staff and student peer advocates provide information about campus resources and assist students with class scheduling, academic policies and procedures, and problem solving. The center also houses an extensive scholarship library.

## **Student and Community Counseling Center**

**Director:** Patricia Larsen

**Office:** North Classroom, 4036

**Hours:** 10 a.m.–8 p.m.

**Telephone:** 303-556-4372

**Web site:** [www.cudenver.edu/resources/counseling+center/default.htm](http://www.cudenver.edu/resources/counseling+center/default.htm)

The Student and Community Counseling Center provides 10 counseling sessions per fiscal year at no charge to students attending the Downtown Campus. We serve individuals, couples, families and groups for mental health concerns including but not limited to:

- stress management
- substance abuse
- relationships
- depression
- anxiety
- crisis intervention
- learning disability/ADHD testing

If appropriate, we refer students to additional on-campus and/or community resources.

Also, by request, staff provide consultation, lectures and workshops to student, faculty and staff groups on mental health topics, diversity, center services and organizational and student development.

## **Student Government Association**

**Office:** Tivoli Student Union, 301

**Telephone:** 303-556-2510

**Web site:** <http://thunder1.cudenver.edu/studgovt/>

The Student Government Association serves as a voice for students. Similar to the structure of the U.S. government, SGA has executive, legislative and judicial branches. Executives are elected each year in the spring. SGA assists students with information concerning student clubs and organizations, campus events, issues concerning student status and other information of general interest to students. SGA also provides students assistance with grievances and the opportunity to become more closely involved with the university community through active participation in student government itself or through service on university, tri-institutional and Auraria committees.

## **Student Health Insurance Office**

**Office:** Tivoli Student Union, 303

**Telephone:** 303-556-3399

**Web site:** <http://thunder1.cudenver.edu/studentlife/healthinsurance.html>

The Student Health Insurance Office strongly encourages all students to have adequate health insurance coverage. This will help assure success in your academic career even in the event of an unexpected medical expense. The plan is designed to coordinate with the Health Center at Auraria to provide quality health care at the lowest possible cost.

## **Student Life**

**Office:** Tivoli Student Union, 303

**Telephone:** 303-556-3399

**Web site:** <http://thunder1.cudenver.edu/studentlife/studentlife2.html>

It is the mission of the Office of Student Life to complement the academic program of studies at UC Denver and enhance the overall educational experience of students through the development of, exposure to, and participation in social, cultural, intellectual, recreational, leadership and governance programs. The Office of Student Life is the advising, coordinating, resource and general information center for student organizations, student government, student programs and the academic honor societies. The office is responsible for the administration of the student fee budget and monitors all student fee expenditures to assure compliance with UC Denver and state of Colorado regulations and procedures. The director of student life represents the assistant vice chancellor for university life on selected UC Denver, tri-institutional

and Auraria committees and maintains effective lines of communication with Metropolitan State College of Denver, Community College of Denver and Auraria Higher Education Center.

## **Student Newspaper: The Advocate**

**Office:** Tivoli Student Union, 345

**Telephone:** 303-556-2535

The purpose of the *The Advocate* is to provide students with information about campus issues and events. The newspaper strives to include good investigative reporting, feature articles and items of general interest to its campus readership. In addition, the newspaper is a tool to encourage and develop writers, journalists, artists and other student members of its general management and production staff.

## **Transfer Initiative, Denver**

**Coordinator:** Angela Marquez

**Office:** 1027 Ninth Street Park

**Telephone:** 303-352-3309

The Denver Transfer Initiative (DTI) is a cooperative project between the Community College of Denver (CCD) and the University of Colorado Denver (UC Denver) aimed at increasing the graduation rate and completion of bachelor's degrees for traditionally underserved populations, specifically first-generation, low-income and Hispanic. The project is designed to provide assistance and support to students throughout their course work and educational careers. Students attend their first two years at Community College of Denver then transfer to UC Denver for their last two years of course work.

DTI students receive continuous assistance in the form of:

- support, guidance and advocacy
- financial aid and scholarship application assistance
- two-year to four-year transfer degree planning
- career assessment, exploration and counseling
- peer mentoring and tutoring services
- connection to campus and community resources
- attendance to informational workshops
- the opportunity to attend student events and multicultural activities

DTI is a Title V grant project funded by the Department of Education's Developing Hispanic-Serving Institutions Program, which helps eligible institutions of higher education enhance and expand their capacity to serve Hispanic and low-income students by providing funds to improve and strengthen the academic quality, institutional stability, management and fiscal capabilities of eligible institutions ([www.ed.gov/programs/idueshsi/index.html](http://www.ed.gov/programs/idueshsi/index.html)).

## **TRIO Programs**

**Office:** North Classroom, 2506  
**Telephone:** 303-556-3420

TRIO programs are federally funded by the Department of Education. The student support services program is designed to provide support and services to first-generation, low-income and disabled students. Academic support, preparation for graduate school, career planning, workshops and cultural events are some of the services offered.

## **Veteran Student Services**

**Office:** CU-Denver Building, 107A/B  
**Mailing address:**  
Campus Box 155  
1250 14th Street, Suite 107A  
P.O. Box 173364  
Denver, CO 80217-3364  
**Telephone:** 303-556-2630, 303-556-2745  
**E-mail:** vaoffice@ucdenver.edu

The University of Colorado Denver Office of Veteran Student Services (OVSS) has been charged with representing veteran and veteran-dependent students on campus and in the Denver metropolitan area. Our mission is to improve and enrich the educational experience of our servicemen, servicewomen and their dependents through advocacy, as well as appropriate and responsive services. Our vision is to provide consolidated and tailored services to our veteran and veteran-dependent students—becoming the regional leader in veteran service organizations.

The Office of Veterans Student Services is the initial contact point for eligible veterans and dependent students wishing to seek a postsecondary education or UC Denver students who wish to utilize Veterans Administration educational benefits. This office assists students with filling out VA paperwork and in solving problems associated with the receipt of VA-related educational benefits. The OVSS maintains proper certification for eligible students to ensure that each student meets Veterans Administration requirements for attendance, course load and content, and other regulations necessary to receive educational benefits payments. In addition, the OVSS provides VA vocational rehabilitation referrals, information on VA tutorial assistance and VA work/study positions for qualified veterans.

## **Writing Center**

**Director:** Justin J. Bain  
**Office:** North Classroom, 4014  
**Telephone:** 303-556-4845  
**Web site:** [www.cudenver.edu/writingcenter](http://www.cudenver.edu/writingcenter)

The UC Denver Writing Center equips our community of writers (students, staff, faculty, alumni) with the necessary skills of composition to expand their academic opportunities and further their careers. We view writing as a process and all texts as works in progress. We build confident

and accomplished writers through the development of strong cognitive and writing abilities. Our mission is to empower writers through collaborative work.

Services include one-on-one and small-group writing consultations in areas such as:

- Generating, organizing and developing ideas
- Establishing effective proofreading skills
- Analysis, synthesis and argument
- Summary, paraphrase and documentation
- Error pattern analysis
- Information literacy and research strategies

Computers are provided for writers' use, and online consultations are available. All consultations are by appointment; to schedule an appointment, please visit our Web site.

## University Policies

*Every organization, large and small, runs more smoothly when policies and procedures are in place. This chapter touches briefly on policies that are most important to students and their academic pursuits. The University of Colorado Denver's Policies and Guidelines Web site, [www.ucdenver.edu/admin/policies/](http://www.ucdenver.edu/admin/policies/), provides a complete list of policies for every facet of the organization, including those from other organizations that affect the Downtown Campus, such as the Laws of the Regents and policies of the Auraria Higher Education Center.*

### Academic Honor Code and Discipline Policies

Policies related to academic credit and grades are explained in the Registration and Records chapter of this catalog.

### Academic Honesty

A university's reputation is built on a standing tradition of excellence and scholastic integrity. As members of the UC Denver academic community, faculty and students accept the responsibility to maintain the highest standards of intellectual honesty and ethical conduct in completing all forms of academic work at the university.

### Forms of Academic Dishonesty

Students are expected to know, understand and comply with the ethical standards of the university. In addition, students have an obligation to inform the appropriate official of any acts of academic dishonesty by other students of the university. Academic dishonesty is defined as a student's use of unauthorized assistance with intent to deceive an instructor or other such person who may be assigned to evaluate the student's work in meeting course and degree requirements. Examples of academic dishonesty include, but are not limited to the following:

#### A. Plagiarism

Plagiarism is the use of another person's distinctive ideas or words without acknowledgment. The incorporation of another person's work into one's own requires appropriate identification and acknowledgment, regardless of the means of appropriation. The following are considered to be forms of plagiarism when the source is not noted:

- word-for-word copying of another person's ideas or words
- the mosaic (the interspersing of one's own words here and there while, in essence, copying another's work)
- the paraphrase (the rewriting of another's work, yet still using their fundamental idea or theory)
- fabrication (inventing or counterfeiting sources)
- submission of another's work as one's own
- neglecting quotation marks on material that is otherwise acknowledged

Acknowledgement is not necessary when the material used is common knowledge.

## **B. Cheating**

Cheating involves the possession, communication or use of information, materials, notes, study aids or other devices not authorized by the instructor in any academic exercise or communication with another person during such an exercise. Examples of cheating are:

- copying from another's paper or receiving unauthorized assistance from another during an academic exercise or in the submission of academic material
- using a calculator when its use has been disallowed
- collaborating with another student or students during an academic exercise without the consent of the instructor

## **C. Fabrication and Falsification**

Fabrication involves inventing or counterfeiting information, i.e., creating results not obtained in a study or laboratory experiment. Falsification, on the other hand, involves the deliberate alteration or changing of results to suit one's needs in an experiment or other academic exercise.

## **D. Multiple Submission**

This is the submission of academic work for which academic credit has already been earned, when such submission is made without instructor authorization.

## **E. Misuse of Academic Materials**

The misuse of academic materials includes but is not limited to the following:

- stealing or destroying library or reference materials or computer programs

- stealing or destroying another student's notes or materials or having such materials in one's possession without the owner's permission
- receiving assistance in locating or using sources of information in an assignment when such assistance has been forbidden by the instructor
- illegitimate possession, disposition or use of examinations or answer keys to examinations
- unauthorized alteration, forgery or falsification of academic records
- unauthorized sale or purchase of examinations, papers or assignments

## **F. Complicity in Academic Dishonesty**

Complicity involves knowingly contributing to another's acts of academic dishonesty.

## **Procedures in Cases of Suspected Academic Dishonesty**

All matters of academic policy, including academic dishonesty, are under the jurisdiction of each of the university's schools and colleges pursuant to Article 4.A.2 and Article 5.E.5 of the Laws of the Regents. Accordingly, each school and college has established procedures for addressing matters of academic dishonesty and for determining the severity and consequences of each infraction. Students should contact their school or college dean's office for procedures specific to their school or college.

## **Code of Student Conduct - Community Standards and Wellness**

**Director:** Larry Loften

**Office:** Tivoli Student Union, 260

**Telephone:** 303-556-3682

### **Preamble**

As members of the University community, students are expected to uphold university standards, which include abiding by state civil and criminal laws and all University policies and standards of conduct. These standards assist in promoting a safe and welcoming community.

The university strives to make the campus community a place of study, work and residence where people are treated, and treat one another, with respect and courtesy. The university views the student conduct process as a learning experience that can result in growth and personal understanding of one's responsibilities and privileges within both the university community and the greater community. All students must follow these standards. Students who violate these standards will be subject to the actions described below. These procedures are designed to provide fairness to all who are involved in the conduct process.

## **Philosophy of Student Conduct**

The Office of Community Standards and Wellness views the conduct process as a learning experience that helps students to understand their responsibility to both themselves and their living and learning community. We strive to learn from one another in an educational environment that holds mutual respect for individuals and community in high regard and self-responsibility for behaviors. Behavior that conflicts with established standards, policies and guidelines may be referred for conduct proceedings.

Every member of the student community must assume responsibility for becoming educated about the various university and housing standards, policies and guidelines. It is against the basic nature of this community for anyone to demean or discriminate against another human being. A caring, educational community does not tolerate physical or psychological threats, harassment, intimidation, or violence directed against a person. Such behavior is subject to the university conduct processes.

## **Diversity**

We are committed to a campus community where diversity is appreciated and valued, and where all individuals are treated fairly and with respect. We encourage curiosity, open communication, continuous learning, and community service as ways to create a socially just environment. We support the right of everyone to respectfully disagree with ideas and philosophies different from their own. However, we do not permit any form of behavior that places anyone in dangerous, discriminatory, or harassing environments. As a community, we expect all to work towards these same goals.

## **Article I – Authority**

Article 7, Part B, of the Laws of the Regents requires each campus to develop a student code of conduct. The Office of Student Life is authorized to establish and administer this policy. Any questions regarding interpretation of this code or any of its provisions should be directed to the Vice Chancellor for Student Affairs or his/her designee for final determination.

1. The Chief Student Conduct Administrator shall determine the composition of University Conduct Review Boards and Appellate Boards and determine which Conduct Review Board, Student Conduct Administrator and Appellate Board shall be authorized to hear each matter.
2. The Chief Student Conduct Administrator shall develop policies for the administration of the student conduct system and procedural rules for the Student Conduct Board Hearings that are not inconsistent with provisions of the Student Code.
3. Decisions made by a Student Conduct Board and/or Student Conduct Administrator shall be final, pending the normal appeal process.

## **Article II – Jurisdiction**

1. The University of Colorado Denver (UC Denver) Student Conduct Code shall apply to conduct that occurs on University premises, University-sponsored programs or activities,

Campus Village Apartments, and to off-campus conduct that adversely affects the University community, poses a threat to safety of persons or property, or damages the institution's reputation or relationship with the greater community. In addition, UC Denver, in collaboration with the Denver and Aurora communities, may respond to student violations of community-based laws and ordinances designed to protect civility and quality of life. The Chief Student Conduct Administrator shall decide whether the Student Conduct Code shall be applied to conduct occurring off campus on a case-by-case basis.

2. Each student shall be responsible for his/her conduct from the time of application for admission through the actual awarding of a degree, even though conduct may occur before classes begin or after classes end, as well as during the academic year and during periods between terms of actual enrollment. The disciplinary process may proceed even if the student withdraws from school while a disciplinary matter is pending.
3. It is the duty of all students who are potential parties or witnesses to an alleged violation of the code to participate conscientiously. Students have a duty to cooperate and discuss the incident with an investigator and conduct officer over the telephone or in person, adhere to stated deadlines, attend scheduled meetings, and participate in all proceedings. Failure to meet these duties may result in a decision being made without the benefit of the student's participation or may result in a student being charged with failing to comply with the direction of a university official. It is the responsibility of a charged student to seek modification to any criminal or civil restraining orders to allow for the completion of any conduct process defined in the Student Conduct Code.
4. Proceedings initiated under this policy are separate from civil or criminal proceedings that may relate to the same incident. Investigations or conduct proceedings by the university are not postponed while criminal or civil proceedings are pending unless otherwise determined by the conduct officer.
5. The unexcused failure of a student to appear and/or respond to the conduct process does not prevent the university from proceeding with the conduct process.

## **Article III – Definitions**

1. Acceptance of Responsibility. The charged student agrees that their behavior constitutes a violation of the code of conduct, as outlined in the conference letter.
2. Aggravating Factor. Any circumstances accompanying the commission of misconduct that add to its seriousness. Examples may include the use of violence or force, violation of a trust or duty, premeditation of an incident, the existence of a previous conduct violation, and elements of hate and bias.
3. Complainant. Any person who submits a charge alleging that a student violated this Student Code.
4. Conduct Process. Any processes outlined in this Student Conduct Code Policies and Procedures.
5. Designation. A student's classification; i.e., graduate, undergraduate, continuing education, degree seeking or non-degree-seeking.

6. Faculty Member. Any person hired by the University to conduct classroom or teaching activities or who is otherwise considered by the University to be a member of its faculty.
7. Member of the University and Campus community. Includes any person who is a student, faculty member, University official or any other person employed by the University. This term also applies to students, faculty members, and University officials of the other institutions on the Auraria Campus, including but not limited to; the Metropolitan State College of Denver (MSCD), the Community College of Denver (CCD), and the Auraria Higher Education Center (AHEC). A person's status in a particular situation shall be determined by the Chief Student Conduct Administrator.
8. Mitigating Factor. Extenuating circumstances that may be taken into account to reduce a sanction. They do not constitute a justification or excuse for the offense in question.
9. Parent. A student's parent or legal guardian.
10. Peace Officer. A person designated by the University of Colorado or the state or federal government with the responsibility of enforcing laws or policies.
11. Policy. The written regulations of the University as found in, but not limited to, the Student Code of Conduct, Resident Handbook, the University web page and computer use policy, and Graduate/Undergraduate Catalogs.
12. Preponderance of Evidence. What happened more likely than not, or "50% plus a feather." This shall be the standard of proof used in all conduct proceedings under this code.
13. Respondent. Any student accused of violating this Student Code.
14. Student. The term student includes all persons taking courses at the university, either full time or part time, pursuing undergraduate, graduate, or professional studies, as well as non-degree students. This also includes individuals admitted, those attending orientation sessions, and those that were enrolled at the date of an alleged incident. Persons who withdraw after allegedly violating the student conduct code are also considered "students." This Student Code applies at all locations of the University, including the Downtown Denver, Anschutz and 9th and Colorado Boulevard campuses.
15. University. The University of Colorado Denver.
16. University Official. A university employee working in the performance of his or her duly authorized duties. University officials may be full or part time, or may be student staff members.
17. University Premises. Includes all land, buildings, facilities, and other property in the possession of or owned, used, or controlled by the University (including adjacent streets and sidewalks and all AHEC facilities
18. Witness. Any individual who may have information relating to a conduct case.
19. Working Day. Monday through Friday, except for official university holidays.

## **Article IV – Rules, Regulations and Statement of Community Expectations**

The conduct listed below is prohibited, as are attempts to commit and aiding, abetting, or inciting others to commit conduct prohibited by this code.

Engaging in retaliatory acts against a person who reports an alleged violation of the code or testifies, assists, or participates in a conduct proceeding or investigation is a violation of this code.

1. Assaulting or physically abusing another person or being involved in brawling.
2. Intimate partner violence. Intimate partner violence is conduct between people who are or were involved in a sexual or romantic relationship when one person in the relationship causes harm or significant alarm or distress to the other person. This includes but is not limited to threats, assault, or other action against the person or their property when used as a method of coercion, control, punishment, intimidation, or revenge.
3. Threatening or endangering the health or safety of a person (one's self or others).
4. Sexual Misconduct: Sexual Misconduct includes Non-consensual sexual intercourse, Non-consensual sexual contact and Sexual exploitation or exposure.
  - Non-consensual sexual intercourse: Non-consensual sexual intercourse is any sexual intercourse (anal, oral or vaginal), including sexual intercourse with an object, however slight, by one person upon another without consent.
  - Non-consensual sexual contact: Non-consensual sexual contact is any sexual touching (including touching with an object) however slight, by one person on another without consent.
  - Sexual exploitation and/or exposure: Sexual Exploitation is when a student takes non-consensual, unjust or abusive sexual advantage of another for his/her own pleasure, advantage or benefit, or to pleasure, benefit or advantage anyone other than the one being exploited. Sexual Exposure occurs when a student engages in lewd exposure of the body done with the intent to arouse or satisfy the sexual desire of any person.
5. Indecently exposing one's body.
6. Stalking. Repeated conduct which reasonably and subjectively causes another person to fear for his/her safety or repeated conduct which causes a person to alter his/her activities in response to the repeated conduct. Such repeated conduct may include but is not limited to any of the following: following or approaching a person or a member of that person's family or household; contacting a person or a member of that person's family or household whether or not conversation ensues; and placing a person or a member of that person's family or household under surveillance.
7. Hazing. Any action or situation that recklessly or intentionally endangers the health, safety, or welfare of an individual for the purpose of initiation, participation, admission into or affiliation with any organization at the university. Hazing includes, but is not limited to, any abuse of a mental or physical nature, forced consumption of any food, liquor, drugs, or substances, or any forced physical activity that could adversely affect the health or safety of an individual. Hazing also includes any activity that would subject the individual to embarrassment or humiliation, the willingness of the participant in such activity notwithstanding. (See Appendix 2)
8. Abusive Conduct. Unwelcome conduct by an individual(s) that is sufficiently severe or pervasive that it alters the conditions of education or employment and creates an environment that a reasonable person would find intimidating, hostile or offensive. The determination of whether an environment is "hostile" must be based on all of the

circumstances. These circumstances could include the frequency of the conduct, its severity, and whether it is threatening or humiliating. Simple teasing, offhand comments and isolated incidents (unless extremely serious) will not amount to abusive conduct.

- This policy should not be construed, and will not be enacted, to deny any student the right of free speech and expression.
9. Violating any federal, state, or local law or university regulation or policy, which includes but is not limited to:
    - Violating the University's Administrative Policy Statement entitled, "Sexual Harassment Policy Campus Appendix." (See [http://ucdhsc.edu/admin/policies/hr/Sexual Harassment Policy Campus Appendix.pdf](http://ucdhsc.edu/admin/policies/hr/Sexual%20Harassment%20Policy%20Campus%20Appendix.pdf) .)
    - Violating the University of Colorado Denver policy entitled, "Non Discrimination Policy." (See <http://www.uchsc.edu/diversity/nondiscrimpolicies.htm> )
    - Violating the University of Colorado Denver policy entitled, "Computing Policy Statement" (See <http://www.cudenver.edu/Resources/ITS/policiesAndProcedures.htm> )
  10. Interfering with, obstructing or disrupting a university activity.
    - University activities include, but are not limited to, all normal university activities, such as teaching, research, recreation, meetings, public events, and disciplinary proceedings.
    - This prohibition includes, but is not limited to, interference, obstruction or disruption of the freedom of expression or movement of students or other members of the university community and their guests.
  11. Interfering with, obstructing or disrupting police or fire responses. This prohibition includes, but is not limited to:
    - Resisting arrest.
    - Failing to abide by the directions of a peace officer.
    - Tampering with, impairing, disabling, or misusing fire protection systems such as smoke detectors, fire extinguishers, sprinklers, or alarms.
    - Failing to evacuate during a fire alarm.
    - Arson/setting fires.
  12. Failing to comply with the direction of university or housing officials who are performing their duties. Students are required to comply with instructions or directions given by university or housing officials, including, but not limited to, an instruction to present identification and an instruction to appear at conduct proceedings or other mandatory meetings.
  13. Failing to abide by or complete a university sanction in a satisfactory manner, including violating the Student Conduct Code while on university probation or suspension in abeyance.
  14. Providing false information to university officials, student conduct administrators, the Conduct Review Board (CRB), or peace officers in performance of their duties or forging, altering, falsifying or misusing documents or records, or knowingly using/possessing forged, altered or false documents or records.

15. Retaliating against or discouraging an individual from participating in a university process, acting to improperly influence a university conduct body, or the unauthorized release of confidential student or university information/records.
  - o Direct contact with an individual or conduct body or contact through a third party may constitute a violation of this provision.
16. Violating any Policy or Procedure listed in the Campus Village Apartments Resident Handbook while in Campus Village. See a complete list of Campus Village Policies and procedures at:  
<http://www.aoinc.com/ros/universal/handbook/index.cfm?fuseaction=section&section=9&page=1>
17. Unauthorized entry into or exit from a university facility or property.
18. Damaging university property or property belonging to another.
19. Engaging in, inciting, or arming someone for a riot or public disturbance.
20. Use of electronic or other devices to make an audio or video record of another person without that person's express consent and/or knowledge when such a recording is likely to cause injury or distress to the individual being recorded.
21. Possessing firearms, explosives, fireworks, incendiary devices, ammunition, or other weapons on campus.
  - o Possession of a harmless instrument designed to look like a firearm, explosive, or dangerous weapon is also prohibited by this policy (including but not limited to BB guns, pellet guns, martial arts equipment, and knives with a blade over 3" in length).
  - o As mandated by Regent's Policy, in the case of a student who is found responsible via the Student Conduct Code process to have intentionally or recklessly used or possessed a weapon in a way that would intimidate, harass, injure, or otherwise interfere with the learning and working environment of the university, the minimum disciplinary sanction shall be expulsion. (See <http://www.cu.edu/regents/Policies/Policy14.html#14-l>)
    - In the case of a harmless instrument as described in section 21a., the minimum sanction shall be expulsion if the student used the item with the intent to cause fear in or assault to another person.
  - o Mere possession of firearms, explosives, fireworks, incendiary devices, ammunition, other weapons, or instruments designed to look like any of the above will result in suspension unless mitigating factors are present.
22. Theft, including but not limited to, possessing property known to be stolen, or taking property of another without consent, even with an intent to return the property.
23. Possessing, using, providing, manufacturing, distributing, or selling drugs or drug paraphernalia in violation of law or university policies.
  - o If the violation occurs in Student Housing, this prohibition includes a student who knew, or reasonably should have known, s/he was in the presence of illegal drugs or drug paraphernalia.
  - o In the case of a student who is found responsible via the student conduct code process to have endangered the health, safety, or welfare of an individual

through the provision of drugs, the minimum disciplinary sanction shall be suspension.

24. Possessing, using, providing, manufacturing, distributing, or selling alcoholic beverages in violation of law or university policies.
  - o If an underage student is in Student Housing, this prohibition includes a student who knew, or reasonably should have known, s/he was in the presence of alcoholic beverages, or possessed, displayed, or was in the presence of alcohol containers. In the case of a student who is found responsible via the student conduct code process to have endangered the health, safety, or welfare of an individual through the provision of alcohol, the minimum disciplinary sanction shall be suspension

## **Article V – Student Conduct Code Procedures – Individual Students**

### **A. Charges**

1. The discipline process can be initiated by police reports, student housing incident reports, or a report from any faculty, administrative staff, student, or other member of the University/Campus community. This process is initiated through the submission of a written account of the incident to the Office of Student Life.
2. Upon the receipt of a written report, the Conduct Officer may determine that there is sufficient reason to charge the student with a violation of the Student Conduct Code and a University disciplinary hearing is warranted. The Conduct Officer may also seek or conduct an additional investigation.
3. In some cases, alternative dispute resolution such as Restorative Justice or mediation may be offered by mutual consent of the parties involved and on a basis acceptable to the Conduct Officer. A written summary of these agreements are provided to all parties. These agreements are binding and once entered are not subject to appeal. Failure to abide by the agreements could result in the situation being returned through the conduct process for possible disciplinary action.

### **B. Hearing Notification**

1. All charges shall be presented to the Respondent in written form via electronic mail to the Respondent's official University email account. This letter of notice will provide the Respondent a copy of the initiating report(s) or information on how to obtain them, and set a time for the hearing. Hearings are scheduled not less than three (3) business days (less than the three day minimum would require mutual agreement between the student and Conduct Officer) nor typically more than fifteen (15) business days after the student has been notified of the charges (maximum time may be extended at the discretion of the Conduct Officer taking into consideration scheduled breaks, etc.).

2. The letter of notice may contain specific requirements or restrictions, pending the resolution of the matter through the hearing process as needed to protect the interests of involved students or the University. These requirements could include but are not limited to, temporary relocation in student housing, restriction from specific campus locations, or orders prohibiting contact with complainants or witnesses. The notice letter will be sent to the student's current address listed on the University data base and to their official University e-mail address. If no local address is listed the letter may be sent to the permanent home address or be served to the student on campus by the campus police or other administrator.

## **C. Options for Resolution of Disciplinary Charges**

After review of the information contained with the letter of notice, the Respondent has the following options:

1. Accept responsibility for the charges: When the Respondent substantially agrees with the contents of the complaint and accepts responsibility for the infraction, the hearing will involve an administrative meeting with the Conduct Officer to determine the appropriate level of discipline and other sanctions or restorative resolution outcomes.
2. Dispute the charges: In the event that the student does not accept responsibility for the charges or substantially disagrees with information contained within the report, a University discipline hearing will be conducted.

The student must notify the Office of Student Life by the date indicated in the letter of notice of his/her intent to accept or dispute the charges. Since cases involving disputed charges may require additional investigation or preparation time, either the student or the Conduct Officer may ask for limited additional time to prepare for the hearing and an appropriate hearing date and time may be re-scheduled typically within one additional week.

## **D. Hearings**

Disciplinary Hearings shall be conducted by University Conduct Officers according to the following guidelines:

1. The Complainant and the Respondent may be accompanied by an advisor or support person they choose, at their own expense. Such advisor may be an attorney. Since the direct interaction with the students involved is essential to the educational relationship with the University, the advisor is limited to counseling the student and may not act as a representative of the student, speak on the student's behalf, or participate directly in any hearing. Advisors may not serve in a dual role as a witness in the hearing. University Conduct Officers may also consult with or choose to have University Counsel, in an advisory capacity, present at a hearing.
2. University disciplinary hearings and administrative meetings are considered private educational interactions between the student(s) and the University. The Complainant, Respondent and their advisors, if any, shall be allowed to attend the entire hearing at

which information is received (excluding deliberations). Admission of any other person to the hearing shall be at the discretion of the Conduct Officer.

3. Pertinent records, exhibits, and written statements, including student impact statements, may be accepted as information for consideration. The Complainant and the Respondent shall be allowed to review and respond to any reports or statements the Hearing Officer will consider as the basis for the charges or determination of evidence related to the hearing.
4. The Complainant and the Respondent will have the opportunity to present his/her own version of the incident or events by personal statements, as well as through written statements and witnesses.
5. If a Respondent, with notice, does not appear for the hearing, a decision may be reached taking into consideration the totality of the information related to the charges available at the time of the hearing.
6. There shall be a single verbatim record, such as a tape recording, made only in hearings in which the charges are disputed. This recording shall be the property of the University. In cases in which the charges are not disputed, the Conduct Officer will provide a brief summary and a listing of sanctions which resulted from the hearing. It is the student's responsibility to notify the Hearing Officer of his/her intent to dispute the charges in advance of the hearing.
7. In disputed cases, the Complainant, the Respondent, and the Conduct Officer may bring witnesses and/or ask for relevant witnesses to be called. The University Conduct Officer will try to arrange upon reasonable request (at least two (2) business days prior to the hearing) witnesses who were identified by or contributed to the report. Witnesses shall be present only during the time they are presenting information in the hearing. Witnesses will provide information to and answer questions directed from the Conduct Officer. Questions may be suggested by the Respondent and/or Complainant to be answered by each other or by witnesses. In order to preserve the educational tone of the hearing and to appropriately manage the proceedings, the Conduct Officer may ask that all questioning be directed through him/her and use discretion related to limiting repetitive information/statements. All procedural questions are subject to the final decision of the Conduct Officer.
8. If information presented in the hearing creates additional need for clarification or investigation, or to accommodate irresolvable scheduling conflicts with key witnesses, the Conduct Officer may reschedule the hearing.
9. If the hearing involves more than one Respondent, the Conduct Officer, in his or her discretion, may permit the hearings concerning each student to be conducted either jointly or separately.
10. The Conduct Officer may accommodate availability and/or remote location of witnesses through conference phone calls or other alternate means. Accommodations may also be made related to concerns for the personal safety, well-being, and/or fears of confrontation of the Complainant, Respondent, and/or other witness during the hearing by providing separate facilities, by using a visual screen, and/or by permitting participation by telephone, videophone, closed circuit television, video conferencing,

videotape, audio tape, written statement, or other means, where and as determined in the sole judgment of the Conduct Officer to be appropriate.

11. Formal rules of process, procedure, or evidence as established and applied in the civil or criminal justice system do not apply to this process.

## **E. Decisions**

1. After the hearing concludes, the Conduct Officer will review all pertinent information and make a determination related to each of the charges specified from the Student Conduct Code. The determination is based on the preponderance of evidence standard - whether it is more likely than not that the Respondent violated the Student Conduct Code.
2. Conduct Officers have the authority to determine the appropriate level of discipline action taking into consideration the severity of the infraction, impact on individuals or the community, and the past record of discipline. In addition to the sanctions listed below, the Conduct Officer may place limits or conditions, require relocation in or removal from student housing, restitution, community service, and/or specify participation in educational programs and interventions including but not limited to those related to alcohol or drug use, ethical decision making, personal counseling, community issues, and restorative justice.
3. Written notice of the Conduct Officer's decision will be sent to the student within ten (10) business days of the hearing. The notification shall consist of the determination of responsibility, level of discipline imposed, and a complete description of any sanctions or requirements. In disputed cases, when the Respondent is found responsible for the charges, the notification will also include a summary of the basis for the determination. A copy of the decision may also be sent to other appropriate University offices.
4. Decision letters that include information identifying persons listed as victims may not be released by the Respondent to unauthorized third parties. Failure to comply with this requirement could result in additional disciplinary charges.

## **F. Sanctions**

The following sanctions may be applied when appropriate to individual students. More than one of the sanctions listed below may be imposed for any single violation. Failure to complete disciplinary sanctions within required deadlines will result in a "hold" on the student's registration status.

1. *No Action*: The Conduct Officer finds that the charges are unsubstantiated or exonerates the student. The decision letter specifies that the charges are cleared and no disciplinary action is taken.
2. *Warning or Written Reprimand*: A student may be given a warning or written reprimand for minor infractions.
3. *General Disciplinary Probation*: Probation is for a designated period of time during which the student is required to show appropriate changes in attitude and behavior. Specific

sanctions or restrictions may be imposed as a part of this sanction but do not result in loss of good standing with the University. A violation of the terms of General Disciplinary Probation, or subsequent misconduct after discipline, is grounds for further disciplinary action, including loss of good standing, suspension, or expulsion.

4. *Disciplinary Probation/Loss of Good Standing:* Probation is for a designated period of time in which appropriate changes in attitude and behavior are expected to occur. Specific sanctions or restrictions may be imposed as a part of this probation. A student on this disciplinary probation is not in good standing with the University. Good standing shall include but not be limited to a requirement for eligibility to represent the University, to serve on a University committee, to participate in intercollegiate or Sports Club athletics, and for recognition by the University including any office held in a student organization. A violation of the terms of disciplinary probation, or subsequent misconduct, is grounds for further disciplinary action, including suspension, or expulsion.
5. *Discretionary/Educational Sanctions:* Educational programs or assignments, Restorative Justice, mediation, community service, individual assessment, counseling, substance abuse education, intervention or treatment, or other related discretionary sanctions may be offered or required.
6. *Restitution:* Compensation for loss, damage, or injury. This may take the form of appropriate service or monetary or material replacement.
7. *Residential Reassignment:* A student may be reassigned to another student housing room when disruption has occurred in the residential community or in order to appropriately separate persons. The student will be responsible for all costs and fees associated with relocation as a result of this sanction.
8. *Residential Expulsion/Eviction:* Permanent separation of the student from student housing as a result of a University discipline hearing. The University expects first-year students to live in student housing and manage their behavior to comply with community standards. If a first year student is expelled from the student housing, the Chief Conduct Officer will determine if the student may be allowed to continue as a student without complying with the University's live-in regulations.
9. *Disciplinary Suspension:* Suspension for a distinct period of time and/or the specification that a student must fulfill certain requirements before re-admission or re-instatement will be considered. While suspended, the student is not entitled to attend classes, use University facilities, participate in University activities, or be employed by the University. Special conditions may be stipulated for reinstatement at the conclusion of the period of suspension.
10. *Deferred Suspension:* A suspension may be deferred under special conditions in which the student participates in a designated program as a condition to remain in school under a strict probationary status.
11. *Disciplinary Expulsion:* Expulsion is permanent removal from the University with no opportunity to return.
12. *Revocation of Admission or Degree:* Admission to or a degree awarded from the University may be revoked for fraud, misrepresentation, or for other serious violations committed by a student prior to matriculation or graduation.

13. *Withholding Degree*: The University may withhold awarding a degree otherwise earned until the completion of the process set forth in this Student Conduct Code, including the completion of sanctions imposed.
14. *Parental Notification*: Parents may be notified of disciplinary decisions when a student under the age of 21 is found responsible for engaging in an infraction(s) involving alcohol, drugs, or the threat or use of violence and the disciplinary decision involves disciplinary probation, suspension, or expulsion and/or student housing relocation or expulsion. Letters are sent to the primary parent address provided to the University.
15. *Interim Suspension*: The Chancellor, Provost and the Associate Vice Chancellor for Student Affairs, and their designee(s) have the authority to suspend summarily, pending final disposition of the case, any student when, in the opinion of these officials, such a suspension is necessary to:
  - a. Maintain order on the campus;
  - b. Preserve the orderly functioning of the university;
  - c. Stop interference in any manner with the public or private rights of others on university premises;
  - d. Stop actions or potential actions that threaten the health or safety of any person;or
  - e. Stop actions or potential actions that destroy or damage property of the university, its students, faculty, staff, or guests.

Interim suspension will also include excluding the student from campus. Interim suspension begins immediately upon notice from the appropriate university official, without a conference with a conduct officer. A conference with a conduct officer is then scheduled as soon as possible (usually within 10 calendar days) to determine how the case will continue and to begin the conduct process. In extreme matters, a summary suspension may be put in place until a student receives a final disposition in a court process after having been charged with a serious crime.

## **G. Appeal of a Disciplinary Decision**

1. A decision reached by a Conduct Officer may be appealed to the University Appellate Board by either the Respondent(s) or Complainant(s). The appellant shall submit a written request for an appeal to the Office of Student Life. The letter requesting an appeal must be very specific and clearly state the reasons for the request. Administrative support for the Appellate Board is provided through the Office of Student Life. The appeal request shall be delivered to that office within seven (7) business days of the date the appellant is notified of the decision rendered by the Hearing Officer. Failure to submit a request for appeal in writing within the specified time will render the decision of the Conduct Officer final and conclusive.

Except as necessary to explain the basis of new information, an appeal shall be limited to a review of the record of the hearing and supporting documents for one or more of the following reasons:

- a. To determine whether the hearing was conducted fairly in light of the charges and information presented, and in conformity with prescribed procedures giving both the Respondent and complaining parties the opportunity to prepare and present relevant

information to be considered in the determination of an appropriate outcome. Minor deviations from designated procedures will not be a basis for sustaining an appeal unless there is an adverse effect on the outcome of the hearing.

- b. To determine whether the decision reached regarding the Respondent was based on substantial information. That is, whether there was information presented in the case that, if believed by the Conduct Officer, was sufficient to establish that a violation of the Student Conduct Code occurred.
- c. To determine whether the sanctions(s) imposed were appropriate for the violation of the Student Conduct Code which the student was found to have committed.
- d. To review the decision, which involves separation of the student from the University, through disciplinary suspension or expulsion.
- e. To consider new information, sufficient to alter the decision or other relevant facts not brought out in the original hearing, because such information and/or facts were not known to the person appealing at the time of the original hearing.
- f. To petition for removal of a disciplinary transcript notation or for eligibility for re-admission to the University following completion of the terms of a disciplinary suspension. Appeals are directed to the panel only in those cases where the University Conduct Officer determines the original terms were not satisfactorily completed.

2. The Chair of the University Appellate Board will review the written request for appeal to determine if the acceptable grounds for the appeal are met. After review of the appellant's request, which may include but is not limited to review of the record and/or meeting with the parties involved and/or the Conduct Officer, the Chair of the Discipline Panel shall take one of the following actions:

- a. Deny the appeal.
- b. Return the case to the Conduct Officer or Chief Conduct Officer for further consideration; while the case is being re-considered, the student must continue to abide by any stated conditions.
- c. Convene an Appeals Committee to review the record of the original case.
- d. Grant a hearing with an Appeals Committee to consider new information.

3. If an appeal is granted, the University Appellate Board will review the record or arrange for a hearing if one is necessary to hear new information. While the decision of the Appeals Committee is pending, the Respondent must comply with all conditions of the decision of the University hearing related to University owned or operated housing, no contact orders, restrictions from particular facilities, interim suspensions, or other conditions deemed necessary for the safety or orderly functioning of the campus as determined by the Chief Conduct Officer. Unless otherwise specified, a student may continue to attend classes while the appeal is pending.

4. When questions of law arise, the Chair may consult with University Legal Counsel.

5. A list of the members of the University Appellate Board will be provided to the Respondent and the Complainant(s). The Conduct Officer or Respondent or Complainant may request, to the Chair, the removal of a member of the panel with cause. The Chair will make the final determination related to removal of members. Members of the panel shall excuse themselves if they have a conflict of interest. The Chair of the University Appellate Board shall either chair the Appeals Committee or select a Chair from among the faculty/staff members of the University

Discipline Panel. The remaining faculty/staff and students shall be selected from the remaining names following a rotation schedule.

6. If a hearing is granted to consider new information, the general process outlined under hearing procedures will be used.
7. The Appeals Committee may make one of the following decisions:
  - a. Reverse the decision: the committee does not agree with the Conduct Officer's evaluation of evidence in support of the charges. In the case of the Respondent, the disciplinary decision would be changed to "No Action". In the case of the Complainant, the case would be referred back to the Conduct Officer or Chief Conduct Officer for appropriate sanctioning.
  - b. Affirm the decision: the committee agrees that the information before the committee supports the decision reached by the Conduct Officer.
  - c. Return the case to the Conduct Officer or Chief Conduct Officer for further consideration: the committee believes that additional considerations should be made which could include increasing or decreasing the penalty or addressing additional issues raised through the appeals process. While the case is being re-considered, the student must continue to abide by any stated conditions.
8. The Appeals Committee will communicate its decision in writing in a timely manner. Except where the matter is returned to the Conduct Officer for further consideration, the matter shall be considered final and binding upon all involved.
9. The University Discipline Panel shall consist of at least 3 members.

## **Article VI – Student Records**

### **A. Student Records**

1. Student disciplinary records will be maintained in keeping with the Federal Family Educational Rights and Privacy Act of 1974 (FERPA) and subsequent amendments and the guidelines for implementation.

The record of disciplinary actions will be kept in the Office of Community Standards and Wellness. Disciplinary records are maintained for a period of five years from the date of the last disciplinary decision if the student is no longer enrolled at the University and then destroyed except in cases of expulsion. Information regarding a student's disciplinary record is available to persons or offices internal to the University who have a "demonstrated educational need to know". Disclosure of disciplinary records to entities outside of the University generally requires a written release from the student.
2. Notations of disciplinary action on the student's transcript will be made only by the Office of Community Standards and Wellness. Disciplinary expulsion will be permanently noted on the academic transcript. Disciplinary suspension is noted on the student record during the period of suspension and/or until the conditions for re-admission have been met. In the case of suspension, when the conditions for re-admission have been met, the student may petition for admissions clearance and/or removal of the notation whether or not the student intends to return to UC Denver. If the petition is denied the student may

appeal the decision to the University Appellate Board in accordance with the established procedure for appeal as set forth in this policy.

## **Article VII – Victims**

### **A. Records**

In situations involving both a Respondent Student(s) (or group or organization) and a student claiming to be the victim of another student's conduct, the records of the process and of the sanctions imposed, if any, shall be considered to be the education records of both parties because the educational career and chances of success in the University of each may be impacted. This provision allows for alleged victims/complainants to participate in the hearing process and be informed of the determination and sanctions imposed, if any. In addition, at the victim's request, be informed (to the extent permitted by law) of the impending return of the respondent student to campus, if the conditions of the suspension were met prior to the victim's departure/graduation from campus.

### **B. Support for Victims:**

1. The University is committed to providing appropriate support and referrals to persons who have been the victims of crimes or violations of the Student Conduct Code. A student who has experienced being the victim of another person's unlawful or prohibited actions may choose to seek personal support, explore options, and report the incident.
2. Strictly confidential services are available through the University Counseling Center, and Student Health Center. Other University agencies may be required by law and University policy to take appropriate action when notified.
3. Victims also have the option to receive assistance from other appropriate University resources. This could include assistance in relocation within or to campus housing if desired; referral for academic support services; notification of appropriate persons/agencies; and at the victim's request, to receive University cooperation in using University procedures to deter harassment or retribution.
4. Students are encouraged to report complaints of:
  - sexual harassment or discrimination to the Office of Equal Opportunity and Diversity
  - crimes to the Auraria Campus Police or Denver Police
  - violations of the University Conduct Code to Housing Staff and/or the Office of Student Life
  - interpersonal and sexual violence to the Office of Student Life and Auraria Campus police
  - violations of their right to free speech in the classroom directly to the faculty member involved or his/her department chair or the Office of Student Life

## **Article VIII: Interpretation and Revision**

Under the authority of the Board of Regents, any question of interpretation or application of the Student Conduct Code shall be referred to the Associate Vice Chancellor for Student Affairs or his or her designee for final determination.

The Student Conduct Code shall be reviewed every five years under the direction of the Chief Conduct Officer, in consultation with Legal Counsel.

## **Use of University/Auraria Property or Facilities**

Nothing in this code of conduct shall be construed to prevent peaceful and orderly assembly for the voicing of concerns or grievances. The university is dedicated to the pursuit of knowledge through a free exchange of ideas, and this shall be a cardinal principle in the determination of whether or not a proposed use of university facilities is appropriate.

The Auraria Higher Education Center has established campus regulations and procedures governing the use of UC Denver/Auraria grounds, buildings and other facilities. Such regulations are designed to prevent interference with university functions and activities. Except where otherwise specifically authorized, or when members of the public are invited, the use of UC Denver/Auraria facilities shall be limited to faculty, staff and students of the UC Denver/Auraria Campus and to organizations having chapters, local groups or other recognized university-connected representation among faculty, staff or students of the three academic institutions on the Auraria Campus.

## **Classroom Conduct**

Students are expected to conduct themselves appropriately in classroom situations. If disruptive behavior occurs in a classroom, an instructor has the authority to ask the disruptive student to leave the classroom. Should such disorderly or disruptive conduct persist, the instructor should report the matter to the Auraria Campus Police Department and/or the appropriate dean's office. The appropriate dean or his/her representative may dismiss a student from a particular class for disruptive behavior, while the Student Discipline Committee may recommend to the Director of Community Standards and Wellness to withdraw, suspend, permanently expel and/or permanently exclude the student from the campus. Appeal questions concerning disruptive behavior should be directed to the academic dean's office when withdrawal from a class is involved and to the Director of Community Standards and Wellness when suspension or expulsion from the university is involved.

## **Tri-Institutional Violations**

Procedures in deciding violations of the code of student conduct involving students from other academic institutions on the Auraria campus have been developed by the Downtown Campus and the institution(s) involved. In such cases, the assistant director of student life should be contacted.

## **Amorous Relationships**

Amorous relationships exist when two individuals mutually and consensually understand a relationship to be romantic and/or sexual in nature. The policy requires only that direct evaluative authority not be exercised in cases where amorous relationships exist or existed within the last seven years between two individuals whether the same or opposite sex.

The policy is intended to establish a reporting structure to protect participants in these relationships from violations of university conflict-of-interest guidelines (when a direct evaluative relationship exists between two employees or between an employee and a student). The relationship must be disclosed to the unit head, department chair, dean or head of the primary unit with all parties present. The person to whom disclosure is made must take action to resolve the conflict and must keep the information confidential. The individual in the evaluative position shall recuse her or himself from all future evaluative actions. The parties may choose to have this disclosure in written form placed in their own personnel files. (This information is removed and destroyed seven years after the time of disclosure if requested and if the relationship has ended.) The responsibility to disclose rests with the person in the evaluative position. A report of the action taken to resolve the conflict must be made to the chancellor or designee who may require other action.

When a relationship exists, either current or within the last seven years, between an individual and an employee who, although not his/her direct supervisor but is in a direct line of report (e.g., dean involved with a faculty member in his/her college or a second or higher level supervisor who is involved with a staff member in the unit), the higher-level employee may not act in an evaluative capacity. When these individuals are parties to a personnel action (appointments/hiring, firing/layoff, promotions/demotions, tenure decisions, salary setting, performance appraisals, grievance and disciplinary procedures), the evaluative authority must recuse himself/herself from participating in the action. The action taken to resolve the conflict must be reported to the chancellor or designee.

## **Antiviolence**

The University of Colorado Denver strives to maintain a campus free of and prohibits violent behavior, including but not limited to verbal and/or physical aggression, attack, threats, harassment, intimidation or other disruptive behavior in any form or by any media, which causes or could cause a reasonable person to fear physical harm by any individual(s) or group(s) against any person(s) and/or property. This policy applies to academic, administrative, research and service departments, programs activities and/or services wherever university business is conducted, including extended studies and international locations.

Employees, students and visitors who engage in prohibited behavior shall be held accountable under university policy, as well as local, state and federal law. Any employee or student who commits or threatens to commit violent behavior shall be subject to disciplinary action, up to and including dismissal or expulsion, as well as arrest and prosecution. Any visitor who commits or threatens to commit violent behavior shall be subject to exclusion from the campus, termination of business relationships and/or arrest and prosecution.

## **Prohibited Behaviors**

Examples of prohibited behaviors may include but are not limited to: (1) disturbing the peace by violent, tumultuous, offensive or obstreperous conduct; (2) engaging in intimidating, threatening or hostile statements or actions; (3) making gestures that convey threats; (4) raising one's voice in anger or using fighting words; (5) uttering ethnic, racial or sexual epithets; (6) using unseemly, profane, offensive or obscene language or making obscene gestures; (7) making bizarre comments about or references to violent events and/or behaviors; (8) waving fists, pushing, stalking, bullying, hazing; (9) engaging in the abusive exercise of legitimate authority; (10) destroying personal property in the workplace; (11) destroying university property; (12) throwing objects at persons or property; (13) physically assaulting or attacking persons or property; (14) engaging in vandalism, arson or sabotage.

## **Weapons**

The possession, display or use of any weapon, including any firearm, or the display or use of any object as a weapon, by any person other than a law enforcement officer in the course of his/her duty, in any location where university business is conducted, is in violation of Regental Policy (14-I) and is strictly prohibited. Possession of a firearm or weapon on University of Colorado Denver-owned property or the Auraria Campus is cause for immediate termination of employees or expulsion of students.

## **Reporting Procedures**

### **Emergency or Life-Threatening Situations**

In the case of an emergency or life-threatening situation, immediately call 911. A call to 911 will go to the appropriate campus, city or county law enforcement agency. A call to 911 from any telephone automatically registers the location of the telephone on which 911 a call was placed, even if no words are spoken.

### **Nonemergency Situations**

In all other situations, notify the Office of Human Resources, 303-315-2700. Before or after normal business hours or if human resources is otherwise unavailable, notify the Anschutz Medical Campus Police at 303-724-4444 or Auraria Campus Police at 303-556-3271.

### **Responsibility to Report**

Anyone witnessing or receiving a report of prohibited behavior, or possession, display or use of any weapon shall immediately notify the appropriate authority as listed above.

### **Emergency Notification System**

The Emergency Notification System allows students, faculty and staff to register to receive alerts about threats of imminent danger at or near any UC Denver location. This service is used in conjunction with other communication channels including: public address systems, broadcast e-mail, voice-mail messages to campus telephone extensions, electronic signage, a coordinated use of public media outlets, and 24-hour recorded emergency and information hotlines (Anschutz Medical Campus in Aurora 303-724-4636; Downtown/Auraria Campus 303-556-2401). Participants choose from various notification options including text messaging, e-mail, phone, instant messaging, pager, fax and BlackBerry devices. Visit the UC Denver Web site for details, [www.ucdenver.edu](http://www.ucdenver.edu).

## Computing

UC Denver's Downtown Campus computing policies and procedures for the following items can be found online by going to [www.ucdenver.edu/admin/policies](http://www.ucdenver.edu/admin/policies) and scrolling down to "Computing."

- antivirus
- computer security and Windows updates
- computing policy
- e-mail
- remote maintenance client software
- Windows domain
- wireless

The IT Services Help Desk provides assistance to students, faculty and staff. Help Desk technicians maintain personal computers and are available to assist with hardware and software planning and installation, acquisitions, Internet connectivity, troubleshooting and general questions. For further information, call the IT Services Help Desk at 303-724-HELP.

## Drugs and Alcohol

The Downtown Campus recognizes the health risks associated with the use of illicit drugs and the abuse of alcohol and is committed to providing a drug-free educational and drug-free workplace that supports the research, teaching and service mission of the university. This Downtown Campus policy statement on drugs and alcohol is designed to address the university's concerns about substance abuse and to ensure that the university community complies with the Federal Drug-Free Workplace Act of 1988 (the "Drug-Free Workplace Act") and the Drug-Free Schools and Communities Act Amendments of 1989 (the "Drug-Free Schools Act"). These acts require the university as a recipient of federal funds to take measures to combat the abuse of drugs and alcohol. The continuation of federal financial support for our students, as well as our academic programs and academic support service programs is based upon compliance with these statutes and their regulations.

The UC Denver policy on drugs and alcohol prohibits the unlawful manufacture, distribution, dispensation, possession or use of any controlled substance (illicit drugs of any kind or amount) and the abuse of alcohol by students and employees on university property or as part of any of its activities. This prohibition covers any individual's actions that are part of any university activities, including those occurring while on university property or in the conduct of university business away from the campus.

It is a violation of university policy for any member of the faculty, staff or student body to jeopardize the operation or interest of the university through the use of alcohol or drugs. Those individuals found to be in violation are engaged in serious misconduct and are subject to legal sanctions under local, state or federal law and are also subject to disciplinary action consistent with the Code of Student Conduct, the Faculty Handbook, applicable rules of the State Personnel System and the university's Officer and Exempt Professionals Handbook. Sanctions that will be imposed by the university for employees who are found to be in violation of this policy may include requiring satisfactory participation in a substance abuse treatment, counseling or education program as a condition of continued employment, suspension or termination of employment and referral for prosecution.

The Web address for the Colorado Department of Human Services' director of licensed treatments programs is [www.cdhs.state.co.us/adad/](http://www.cdhs.state.co.us/adad/).

Health risks associated with the use of illicit drugs and the abuse of alcohol include but are not limited to the following:

- Violence—Fights, vandalism, sexual assaults, homicide and suicide are far more likely to occur when drinking is involved.
- Unprotected Sex—Individuals are less likely to use safer sex practices when drinking, which can result in unplanned pregnancy and infection with a sexually transmitted disease.
- Serious Injury—More than 53 percent of all fatal automobile accidents in the U.S. involve alcohol use.
- Death from overdose.
- Addiction—Although anyone can become addicted, those with a family history of alcohol or other drug addiction are at least four times more likely to develop alcoholism.
- Lowered Resistance to Disease/Illness—Increased risk of ulcers, heart disease and cancers of the liver, mouth, throat and stomach.
- Fetal Alcohol Syndrome/Fetal Alcohol Effects (FAS/FAE)—Women who drink during pregnancy may give birth to infants with physical deformities, brain damage and/or mental retardation. If a woman is pregnant, trying to become pregnant or suspects she is pregnant, she should abstain from alcohol and other drug use.

All university faculty and staff members, as well as any students employed at the university, acknowledge that they will as a condition of their employment abide by the terms of this university policy. In addition, any employee who is convicted of a violation of any criminal drug law occurring in the workplace must report that conviction to his or her immediate supervisor within five days. The Drug-Free Workplace Act makes a strict compliance with this policy statement a condition of employment on all federal grants and contracts. Within 10 days of learning of a drug conviction resulting from workplace activities of any individual engaged in work under grants or contracts funded by a federal agency, the university is required to notify the relevant funding agency that a violation of this policy statement has occurred.

University employees may contact the Office of Human Resources at 303-315-2700 (Lawrence Street Center, 1050) for more information regarding resources, programs and services available. Students may contact the Student and Community Counseling Center at 303-556-4372 (North Classroom, 4036) or the Student Health Center at 303-556-2525 (Plaza Building, 150) for confidential information and/or referrals. Information may also be obtained by calling the

U.S. Department of Health and Human Services national drug and alcohol treatment referral service at 1-800-662-HELP.

This policy statement will be issued each year as part of the university's continuing effort to increase awareness about the dangers of substance abuse. This policy is based on the belief that well-informed members of the university community will choose wellness over illness and effectiveness over impairment. We ask your support in this important campus effort.

## **Inclusiveness and Nondiscrimination**

The University of Colorado Denver is committed to enhancing the inclusiveness of its work force and its student body. Inclusiveness among students, faculty, staff and administrators is essential to educational excellence and to accomplishing UC Denver's urban mission. Inclusiveness among faculty, staff and administrators provides role models and mentors for students, who will become leaders in academe and in the larger society, and ensures that a broad array of experiences and world views informs and shapes teaching, research, service and decision making at UC Denver.

Pursuant to Article 10, Laws of the University of Colorado Board of Regents, the university does not discriminate on the basis of race, color, national origin, sex, age, disability, creed, religion, sexual orientation or veteran status in admission and access to, and treatment and employment in, its educational programs and activities. The university takes action to increase ethnic, cultural and gender diversity, to employ qualified disabled individuals and to provide equal opportunity to all students and employees.

All students shall have the same fundamental rights to equal respect, due process and judgment of them based solely on factors demonstrably related to performance and expectations as students. All students share equally the obligations to perform their duties and exercise judgments of others in accordance with the basic standards of fairness, equity and inquiry that should always guide education.

A statement of Article 10 may be found online at [www.cu.edu/regents/Laws/Article10.html](http://www.cu.edu/regents/Laws/Article10.html). UC Denver procedures for investigating complaints of discrimination may be found online at <http://administration.ucdenver.edu/admin/policies/hr/Nondiscrimination.pdf>.

To report a violation of Article 10 or for additional information, contact the UC Denver Equal Opportunity/Affirmative Action Compliance Officer at 303-315-2700; mailing address: EO/AA Compliance Office, UC Denver, P.O. Box 173364, Campus Box 130, Denver, CO 80217-3364.

## **Disability Accommodation**

The Americans with Disabilities Act (ADA) provides that individuals who are otherwise qualified for jobs or educational programs will not be denied access simply because they have a disability. Its goal is to guarantee that individuals with disabilities are not discriminated against or denied equal access to the same programs, services and facilities available to others. The ADA prohibits employers, including UC Denver, from discriminating against applicants and workers with disabilities in all aspects of employment. The act also prohibits the university from discriminating on the basis of disability in access to its programs and services.

The ADA requires that UC Denver provide reasonable accommodations to qualified individuals with disabilities who are employees or applicants for employment, and for persons who participate in or apply for participation in the university's programs and activities. Exceptions to the obligation for providing accommodation may be made if doing so would cause undue financial or administrative burdens, fundamental alteration to a program or activity, or significant risk to health or safety to self and/or others. Additional information regarding the ADA may be obtained online at [www.usdoj.gov/crt/ada/adahom1.htm](http://www.usdoj.gov/crt/ada/adahom1.htm).

If you are a student at UC Denver and need assistance with access to or participation in the academic curriculum, contact the Office of Disability Resources/Services at: 303-556-3450; TTY 303-556-4766; mailing address P.O. Box 173364, Campus Box 118, Denver, CO 80217-3364.

## Reporting Disability Discrimination

Article 10 of the laws of the University of Colorado Board of Regents prohibits discrimination on the basis of disability (or on the basis of membership in other protected classes) in admission and access to, and treatment and employment in, University of Colorado educational programs and activities. To report discrimination or to obtain additional information, contact the UC Denver ADA coordinator, 303-315-2724; mailing address: P.O. Box 173364, Campus Box 130, Denver, CO 80217-3364. Complaints of discrimination based upon disability will be processed according to the provisions of the UC Denver nondiscrimination procedures, which may be found online at: <http://administration.ucdenver.edu/admin/policies/hr/Nondiscrimination.pdf>.

## Sexual Harassment

The University of Colorado is committed to maintaining a positive learning, working and living environment. In pursuit of these goals, the university will not tolerate acts of sexual harassment or related retaliation against or by any employee or student.

*Sexual harassment:* consists of interaction between individuals of the same or opposite sex that is characterized by unwelcome sexual advances, requests for sexual favors and other verbal or physical conduct of a sexual nature when: (1) submission to such conduct is made either explicitly or implicitly a term or condition of an individual's employment, living conditions and/or educational evaluation; (2) submission to or rejection of such conduct by an individual is used as the basis for tangible employment or educational decisions affecting such individual; or (3) such conduct has the purpose or effect of unreasonably interfering with an individual's work or academic performance or creating an intimidating, hostile or offensive working or educational environment.

*Hostile environment sexual harassment:* (described in subpart (3) above) is unwelcome sexual conduct that is sufficiently severe or pervasive that it alters the conditions of education or employment and creates an environment that a reasonable person would find intimidating, hostile or offensive. The determination of whether an environment is "hostile" must be based on all of the circumstances. These circumstances could include the frequency of the conduct, its severity and whether it is threatening or humiliating.

*Retaliatory acts:* It is a violation of this policy to engage in retaliatory acts against any employee or student who reports an incident of alleged sexual harassment or any employee or student

who testifies, assists or participates in a proceeding, investigation or hearing relating to such allegation of sexual harassment.

The University of Colorado System Administrative Policy Statement (APS) on sexual harassment policy and procedures may be obtained from the UC Denver sexual harassment officer (see "Reporting Sexual Harassment") or found online at:  
[https://www.cusys.edu/policies/policies/HR\\_SexualHarrassment.html](https://www.cusys.edu/policies/policies/HR_SexualHarrassment.html).

## **Reporting Sexual Harassment**

If you need to report sexual harassment or if you have any questions regarding sexual harassment or policy above, please contact the UC Denver sexual harassment officer at 303-315-2724; send correspondence to Human Resources, P.O. Box 173364, Campus Box 130, Denver, CO 80217-3364.

## **Who to Call When You Need Help**

### **ADA Coordinator**

**Contact:** Human Resources  
**Office:** Lawrence Street Center, 1050  
**Telephone:** 303-315-2700

Contact the ADA coordinator to report disability discrimination.

### **Auraria Police Department**

**Office:** 1201 5th Street, 110  
**Telephone:** 303-556-5000  
**Emergency:** 911

Contact the Auraria Police Department to report on-campus criminal conduct, including sexual assault or other serious allegations of sexual harassment in which the complainant believes that his or her safety is threatened. Allegations of serious sexual harassment should be reported to the Auraria Police Department if they occur after hours or on weekends.

### **Disability Resources and Services**

**Director:** Lisa McGill  
**Office:** Arts Building, 177  
**Telephone:** 303-556-3450  
**TTY:** 303-556-4766

The Office of Disability Resources and Services provides equal opportunities and fosters the personal growth and development of students with disabilities. Contact DRS for priority

registration for classes, assistance in identifying volunteer note takers, alternative testing, oral/sign language interpreters, real-time captioning and textbooks in alternative formats.

## **Equal Opportunity/Affirmative Action**

**Contact:** Human Resources

**Office:** Lawrence Street Center, 1050

**Telephone:** 303-315-2700

Contact the compliance officer to report discrimination on the basis of race, color, national origin, sex, age, disability, creed, religion, sexual orientation or veteran status.

## **Human Resources**

**Office:** Lawrence Street Center, 1050

**Telephone:** 303-315-2700

Contact the Office of Human Resources for a referral and to speak to someone immediately about your problem.

## **Ombuds Office**

**Associate Director:** Mary Chavez Rudolph

**Office:** CU-Denver Building, 107P

**Telephone:** 303-556-4493

**E-mail:** mary.chavezrudolph@ucdenver.edu

**Web site:** [www.uchsc.edu/ombuds/](http://www.uchsc.edu/ombuds/)

The Ombuds Office is a confidential and impartial resource for students, faculty and staff. Contact the Ombuds Office: as a first step if you don't know where to turn, as a last resort, or anywhere along the way; when you are confused about university policy or procedure and would like clarification; to explore your options, share your concerns, evaluate your situation, and plan your next step; when you feel as if you have been treated unfairly; and for information and identification of resources to resolve issues.

## **Sexual Harassment**

**Contact:** Human Resources

**Office:** Lawrence Street Center, 1050

**Telephone:** 303-315-2724

Contact the sexual harassment officer with questions about or to report sexual harassment.

## **Student and Community Counseling Center**

**Contact:** Patricia Larsen  
**Office:** North Classroom, 4036  
**Telephone:** 303-556-4372  
**Web site:** [www.cudenver.edu/Resources/Counseling+Center/](http://www.cudenver.edu/Resources/Counseling+Center/)

The Student and Community Counseling Center provides mental health counseling services to the student body as well as the metropolitan community. UC Denver students receive 10 counseling sessions at no cost per fiscal year as part of their student fees.

# College of Architecture and Planning

## Dean

Mark Gelernter

## Associate Deans of Academic Affairs

Denver: Yuk Lee

Boulder: Peter Schneider

## Contact

### Office

UC Denver Building

1250 14th Street, 3rd floor

303-556-3382

Fax: 303-556-3687

<http://ArchitecturePlanning.ucdenver.edu>

### Mailing Address

College of  
Architecture and  
Planning

Campus Box 126

P.O. Box 173364

Denver, CO  
80217-3364

### Advising and Admissions

Undergraduate: 303-492-2804

[Peggy.Gordon@colorado.edu](mailto:Peggy.Gordon@colorado.edu)

Graduate Professional: 303-556-3382

[ANPDeansoffice@storm.cudenver.edu](mailto:ANPDeansoffice@storm.cudenver.edu)

PhD: 303-556-6042

[michael.t.harper@ucdenver.edu](mailto:michael.t.harper@ucdenver.edu)

## Application Deadlines

## **Fall Semester**

*PhD in design and planning*—February 1

*All professional programs*—February 15

## **Spring Semester**

*All programs*—October 1

(In architecture, urban design and landscape architecture, students starting in the spring will only be able to select from a reduced set of courses and will get on track starting the next fall.)

Applications received after these dates will be considered only if space is still available.

*If you're interested in a career in architecture, urban and regional planning, landscape architecture or urban design, you'll want to get acquainted with the College of Architecture and Planning on the Downtown Campus of UC Denver. We offer the only undergraduate and graduate education in these fields in the state of Colorado. Many students intending to enter the design and planning professions complete the college's undergraduate degree as preparation for our graduate-level professional programs. Our graduate programs also are available for those who already hold an undergraduate degree in an unrelated field. Our graduate programs in architecture, landscape architecture, urban and regional planning and urban design, and our graduate certificates in preservation, design build and GIS, are taught on the Downtown Campus, in the heart of a vital downtown. Our undergraduate program is offered in Boulder, an environment ideally suited to the needs of undergraduates (see the University of Colorado at Boulder catalog for details). We offer a multidisciplinary PhD in design and planning based in Denver. With a diverse faculty committed to excellence in teaching, research, scholarship and creative work, the college provides students with a broad range of learning opportunities.*

## **The College's Vision**

To help students prepare for an engaging, productive career in the design and planning professions, the College of Architecture and Planning has developed a bold vision called Integrative Design. This vision directs the college to:

- Engage design and planning challenges that are significant for our society. We are not an ivory tower. Learning experiences address real issues facing designers and planners as they create healthier, more sustainable, more meaningful environments for the 21st century. In recent years, among many other socially important projects, our students have: designed alternatives to suburbia; built award-winning solar-powered homes; written new codes to encourage livelier, safer cities; discovered ecological design principles in Colorado ranches; proposed ways for neighborhoods to recover from natural disasters; and invented new ideas for affordable housing.
- Engage these challenges in partnerships among the disciplines and with our external communities. No one discipline can address these issues alone. Architects, landscape

architects, planners, urban designers and developers must work together to create holistic, healthy, sustainable environments.

In our college, students have opportunities to:

- Participate in multi-disciplinary teams, modeling the practices of today's successful design and planning firms.
- Interact with outstanding practicing designers and planners in the Denver metro area through internships, mentorships, design juries, lectures and student professional organizations.

## Communities of Interest

To implement this vision, the college has organized many of its activities around “communities of interest.” These bring together faculty, students and practitioners across the disciplines who share an interest and expertise in a particular theme, building synergistic relationships as they explore new design and planning ideas.

The college's communities of interest currently include:

- **Emerging Practices in Design**  
Exploring how the digital design revolution and sustainable design practices are reshaping the professions. These include sustainable design and design/build practices as well as digital visualization and building information modeling (BIM) technologies.
- **Sustainable Urbanism**  
Exploring new ideas about creating livable cities in the midst of intense pressures for growth and fragile ecosystems.
- **Healthy Environments**  
Exploring how to build healthier buildings, cities and landscapes.
- **Cultural Heritage**  
Understanding, interpreting and preserving our cultural heritage in design and planning, including historic buildings, landscapes and intellectual and cultural ideas.

## Special Activities and Programs

The college provides a diverse range of opportunities that enrich and enhance the education of its students. Through activities and functions—including a lecture series, a visiting critic series, exhibits, publications and active student organizations—the college encourages contact among students, faculty and members of the design professions. Each summer, the college offers foreign study travel programs, which in recent years have traveled to Prague, Rome, Helsinki, Paris, Beijing and Madrid. In addition, for the past seven summers the college has offered an integrated urban design studio in Turkey. The college makes available a range of scholarships and fellowships, some of which are based on need, others on performance and still others of which are specifically intended to provide enrichment opportunities. The college supports an active and focused internship program for its students, giving them access to elective internship opportunities in the Denver metropolitan area and beyond. Finally, the college encourages

students to take control of their own education and supports, within its ability, any reasonable proposals from students that would enrich their own educational experiences.

## **College Facilities**

The college's administrative headquarters and graduate programs are located at 1250 14th Street in downtown Denver, on the northeastern edge of the Auraria Campus. This favorable location gives easy access both to the extensive campus facilities and to the urban amenities of Denver's lively lower downtown. Most of the major professional design offices in Denver and many planning firms and agencies are within easy reach of the college. These provide many opportunities for contact between students and practitioners. College facilities include studio spaces for students, lecture and seminar rooms, design jury spaces, exhibition spaces and faculty offices. The college also provides a photographic darkroom and studio, a model and furniture-making woodshop, a laser cutter laboratory and an extensive computer laboratory whose focus is computer aided design (CAD), computer 2-D and 3-D imaging and analytic tools for planning. Also located in the college is a geographic information system (GIS) computer laboratory, which is open to all UC Denver students.

## **Scholarships/Financial Aid**

Students in the college have access to a number of scholarships and other financial assistance funds. Some of these funds are provided by the institution itself, while others are provided by external sources like the American Institute of Architects Education Fund, the American Planning Association, the American Society of Landscape Architects and the Rocky Mountain Masonry Institute. For further information on these scholarships and graduate tuition awards, visit the college's Web site here or request a list via e-mail at [patricia.mckissock@ucdenver.edu](mailto:patricia.mckissock@ucdenver.edu). For information on federal and state financial aid, contact the Office of Financial Aid, University of Colorado Denver, Campus Box 125, P.O. Box 173364, Denver, CO 80217-3364, 303-556-2886 or visit the Web site here.

## **Admissions**

### **General Requirements**

Applicants to the College of Architecture and Planning are required to submit the following credentials:

- University of Colorado application for graduate admission form
- Two official transcripts from each institution the applicant has attended. Transcripts must be mailed by the institution directly to the college. A certified literal English translation also must be submitted for documents that are not in English.
- Letters of recommendation: U.S. residents, three letters; international applicants, four letters.
- Statement of purpose: Applicants to all programs must submit a statement summarizing career objectives and reasons for pursuing the intended program of study. Applicants to

the MURP program should indicate their area of concentration. Applicants to the PhD program should discuss the intellectual and policy challenges they hope to address, methodological skills they plan to pursue, and briefly note any tentative dissertation research topics and, if possible, overlap of research interests with program faculty.

- Supporting materials for architecture and landscape architecture: Applicants to the graduate architecture and landscape architecture programs are required to submit a portfolio (6-12 bound pages, 8.5 × 11 inches). Slides are not accepted. A portfolio is an orderly presentation of one's work. This includes examples of creative and analytical work including but not limited to essays, papers, photographs and photographic reproductions of artistic work such as sculptures, drawings, paintings, musical compositions and other fine arts. A stamped, self-addressed envelope must be included for return of the portfolio. Applicants to architecture and landscape architecture are encouraged to submit GRE scores if their GPAs are below 3.0.
- Supporting materials for urban and regional planning: Applicants to the urban and regional planning program should submit, in an 8.5 × 11-inch bound document, their statement of purpose, a resume and a copy of a student or professional paper or project. Applicants to the urban and regional planning program are encouraged to submit GRE (general) scores; those whose undergraduate GPA is below 3.0 are required to submit GRE scores.
- Supporting materials for the PhD: Applicants to the PhD program must submit a sample of written work and any other evidence relevant to admission to the program, in accordance with submission guidelines that can be obtained from the college. Applicants to the PhD program are required to submit GRE scores.
- Application fee. Nonrefundable (\$50, U.S. residents; \$75, international applicants).

## **Confirmation Deposit**

A nonrefundable confirmation deposit of \$200 is required to secure an applicant's place in the architecture, landscape architecture and PhD programs. The deposit is due at the time the applicant accepts the program's offer of admission. The deposit will be applied to the first semester's tuition when the student registers for classes.

## **Computing in the College**

The College of Architecture and Planning requires all incoming graduate students to acquire and use their own computers and software applications in their studies. To assist students with procurement of their personal computers, the IT committee formulated performance-based computing specifications. These are listed online here. Please note that UC Denver neither endorses nor requires students to procure a machine from a particular vendor. While desktop configurations are listed, students are urged to procure laptops mainly for reasons of security and mobility in studios and classrooms. Software application (program) requirements relate to specific course curriculum. In general, students widely use products such as Microsoft Office for word processing, e-mail, presentations and spreadsheet applications. Consult with instructors or refer to course syllabi regarding applications for imaging, CAD, GIS, modeling or rendering before buying them. In addition, not all programs are needed during the first semester; certain

release versions may be preferable over others. The college intends to provide computer IT orientation sessions at the beginning of each semester.

## **Academic Policies**

### **Academic Standing**

Students must maintain a minimum overall GPA of 3.0 in the graduate programs to remain in good standing and to graduate. If a student's GPA falls below a 3.0, then he or she will be placed on academic probation beginning the following semester. If the GPA remains below a 3.0 after the probationary semester, then he or she may be dismissed from the college.

### **Appeals**

Any student may appeal the grade he or she receives in a class within 30 days from the issuance of the grade. The student should first discuss the issue and adjustment sought with the relevant course instructor. If the course instructor does not reply within 30 days, the student submits a written appeal to the department chair. Within 30 days, the department chair shall process the appeal and prepare a written report explaining the reason(s) for the department recommendation. If the grade appeal still remains unresolved at the department level, the student submits a written request to the associate dean of academic affairs, who will direct the Academic Affairs Committee to review the appeal. If the grade appeal remains unresolved at the college level, the student may appeal to the dean.

### **Attendance and Timeliness of Work**

Students are expected to attend all meetings of classes. Excessive unexcused absences may result in a grade reduction at the discretion of the instructor. Absence from a class will be excused for verified medical reasons, religious obligations or for extreme personal emergencies. The student may be required to furnish evidence.

Students' assignments are to be completed in a timely manner. Any assignment turned in late may have its grade reduced by an amount set at the discretion of the instructor. An assignment may be turned in late without penalty for verified medical reasons, religious obligations or for extreme personal emergencies. Students must have their instructor's written permission to turn an assignment in late. Students with excused late work may turn in the assignment by the end of finals week without penalty. Otherwise, the grade "I" will be assigned at the discretion of the faculty.

### **Course Sequencing and Advancement**

Programs in the college are structured so that certain courses must be taken concurrently, others sequentially. Students will not be allowed to enroll in a course if its co-requisites or prerequisites have not been satisfied.

## Originality of Work

Students must submit their own work. Where other sources are used in a student submission, they are to be clearly identified and referenced. The university considers plagiarism and similar acts of falsification to be a serious matter that may result in suspension or expulsion.

Information on codes of conduct and grievance procedures are available from the Office of Enrollment and Engagement on the Downtown Campus.

## Retention of Student Work

The College of Architecture and Planning may, with a student's written permission, retain student work submitted in fulfillment of class requirements for a period of time. This retained work is normally used to provide accrediting agencies with tangible evidence of performance, to serve as additional visual aid material in presentations to other students and to contribute to possible educational exhibits requested by the university community and the general public.

## Departments and Programs

### Certificate

## Design Build Graduate Certificate

**Contact:** Pam Erickson

**Telephone:** 303-556-3387

**E-mail:** pam.erickson@ucdenver.edu

The College of Architecture and Planning offers a graduate certificate in the emerging area of design build as an extension of the MArch program. It requires a total of 15 semester hours, some of which also count toward the MArch program, some of which do not. Course work in this extension emphasizes the designer's point of view.

### Certificate Requirements

Four courses totaling 15 semester hours can be applied to the MArch graduation requirements:

- ARCH 6370 - Introduction To Design Build. **Semester Hours:** 3
- ARCH 6371 - Maintaining Quality and Managing Risks: Design Build. **Semester Hours:** 3
- ARCH 6373 - Construction in Design Build. **Semester Hours:** 3
- ARCH 6170 - Advanced Design Studio. **Semester Hours:** 4
- ARCH 6171 - Advanced Design Seminar. **Semester Hours:** 2

**Total: 15 Hours**

# Geospatial Information Science Graduate Certificate

**Contact:** Brian Muller

**Telephone:** 303-556-5967

**E-mail:** brian.muller@ucdenver.edu

The College of Architecture and Planning offers a certificate in geospatial information science through participating departments. The emphasis of this certificate is on applications of GIS in urban and environmental planning and design fields. The certificate is available to any student earning one of our graduate degrees; to students earning cognate degrees, for example in the School of Public Affairs, College of Engineering and Applied Science or from the Department of Geography; and to nondegree students who have already earned such a degree.

## Certificate Requirements

1. A minimum of 18 semester hours (with at least 12 related planning and design hours to be earned in residence at UC Denver or University of Colorado at Boulder);
2. A minimum B (3.0) average and a minimum grade of B- (2.7) in any course, as outlined in the certificate curriculum:
  - *One required introductory class:* Introduction to GIS (both theory and methods) (3 semester hours)
  - *At least three additional courses in GIS or remote sensing methods* to be approved in advance by the GIS committee (9 semester hours). Such courses may include:
    - Cartography (Boulder and Denver, geography)
    - GIS Analysis (Denver, civil engineering)
    - GIS II (Boulder, geography)
    - Advanced GIS Workshops (Boulder and Denver, multiple departments)
    - GIS Management (Denver, civil engineering)
    - Quantitative Methods in Geography (Boulder, geography)
    - Remote Sensing (Boulder and Denver, multiple departments)
  - *Applications Option 1:* Studio or thesis project involving application of planning and design GIS-based methods to be approved by the faculty GIS committee (6 semester hours)
  - *Applications Option 2:* Internship or other work experience is strongly encouraged for all students and may at the discretion of the committee be substituted for other courses (6 semester hours)

It is not possible or desirable to specify every course that should count toward a certificate. CAP and other participating programs will continue to generate new GIS-related courses as the

curriculum evolves, and CAP delivers much of its instruction through studio courses that vary in content each semester. A certificate program must include an ongoing structure for managing course requirements and determining when individual students have met them.

# Historic Preservation Graduate Certificate

**Contact:** Christopher Koziol

**Telephone:** 303-556-6516

**E-mail:** christopher.koziol@ucdenver.edu

The College of Architecture and Planning together with the Department of History in the College of Liberal Arts and Sciences offers a graduate certificate in historic preservation. The certificate can be earned as part of an MArch, MLA, MURP or an MA in history. It requires a total of 18 semester hours.

## Certificate Requirements

- HIST 5232 - Historic Preservation. **Semester Hours: 3**
- URP 6634 - Preservation Theory and Practice. **Semester Hours: 3**

**Total: 6 Hours**

These are core courses on preservation theory and practice from the architect and planner's perspective of intervening through design and regulation and from the historian's perspective of how the past might guide the future.

A pre-approved thesis or studio (6 semester hours) is required.

Students choose their remaining courses from a selection in the following categories:

- History of architecture, landscape architecture or historic places (3 semester hours)
- Preservation methods (3 semester hours), including preservation technology, documentation of sites and structures, visual research methods and other subjects.

Students are encouraged but not required to take an internship in preservation.

Preservation certificate students work out with their advisor a selection of courses appropriate to their needs and the requirements of their degree program.

## Master of Urban Design

# Urban Design MUD

- ▶ Graduate School Rules apply to this program

**Program Information:** Jeremy Németh

**Telephone:** 303-556-3688

The master of urban design (MUD) is an intensive, one-year, interdisciplinary postprofessional degree program intended for talented persons already holding a professional degree in architecture, landscape architecture or urban and regional planning (e.g. BArch, BLA, MArch, MLA, MURP/MUP or equivalents).

Urban design is an integrative activity focused on creating beautiful, vital, functional, environmentally sustainable and socially just public places. By contextualizing architecture while providing a means of implementation for planners and landscape architects, urban design occupies a realm supportive of these fields while simultaneously generating its own responses to the most pressing urban issues. Although urban designers often intervene on the neighborhood scale, the program fosters mastery of inclusive and participatory community design processes and the attendant means for effectively implementing physical plans at the metropolitan, neighborhood, district, corridor, street and block scale.

The MUD program focuses on creating sustainable urban infrastructure and interprets the city as a set of overlaid and integrated systems. The program views urban designers playing a vital role in the production of the built environment because of their dual responsibility to illustrate preferable design solutions and shape the regulatory patterns governing future development. The inherent interdisciplinarity of this approach brings students into frequent contact with professors, practitioners and experts in urban planning, architecture and landscape architecture, and encourages students to forge their own tailored degree by pursuing an independent study and a variety of electives in the college. Students relate their independent study projects to one of the college's fields of expertise, such as participatory design in distressed communities, postindustrial landscapes, "green streets," vernacular design or historic preservation.

Denver and the American West provide an exciting urban laboratory as we face a number of complex and difficult challenges (e.g. water scarcity, urban sprawl). Students undertake at least one studio in the Denver metropolitan region while remaining cognizant that similar systems and challenges exist in a variety of domestic and international contexts. As a capstone project during their final term, students enroll in an international studio course, preparing for this studio by taking a mandatory seminar in global design history and practice.

The MUD program is informed by innovations in practice. Tested techniques and methods are brought into classroom and studio settings to be evaluated, refined and disseminated in ways that prepare graduates for highly innovative work as critical, reflective urban designers employed in both the public and private sectors. In addition, each spring semester brings a visiting urban design fellow to the college. This practitioner-in-residence is selected from a highly competitive pool of designers from around the world. The selected practitioner teaches an advanced urban design studio and supervises independent study projects.

## **Prerequisites**

Students are required to hold a first professional degree in architecture, landscape architecture or urban and regional planning (e.g. BArch, BLA, MArch, MLA, MURP/MUP or equivalents).

## Program Requirements

The requirements for the postprofessional master of urban design (MUD) degree depend on your current standing and educational background. The basic study plan is a 36-semester-hour plan that includes two elective courses. Students obtaining a first professional degree in University of Colorado Denver College of Architecture and Planning may receive up to 12 semester hours of advanced standing.

## Core Requirements

- U D 6610 - Infrastructure Studio. **Semester Hours: 6**
- U D 6611 - Regulatory Studio. **Semester Hours: 6**
- U D 6612 - Urban Synthesis Studio. **Semester Hours: 6**
- U D 6640 - History of the City. **Semester Hours: 3**
- U D 6641 - Design Process/Practice. **Semester Hours: 3**
- U D 6642 - Design Policy/Regulation. **Semester Hours: 3**
- U D 6840 - Independent Study. **Semester Hours: 1 to 3**  
**or**
- U D 6930 - Urban Design Internship. **Semester Hours: 3**

**Total: 30 hours**

## Course Sequence

### Fall

- U D 6610 - Infrastructure Studio. **Semester Hours: 6**
- U D 6640 - History of the City. **Semester Hours: 3**
- U D 6641 - Design Process/Practice. **Semester Hours: 3**

### Spring

- U D 6611 - Regulatory Studio. **Semester Hours: 6**
- U D 6642 - Design Policy/Regulation. **Semester Hours: 3**
- U D 6840 - Independent Study. **Semester Hours: 1 to 3**  
**or**
- U D 6930 - Urban Design Internship. **Semester Hours: 3**

### Summer

- U D 6612 - Urban Synthesis Studio. **Semester Hours:** 6

## Doctor of Philosophy

# Design and Planning PhD

► Graduate School Rules apply to this program

**Program Director:** Kevin Krizek

**Telephone:** 303-556-3282

The PhD in design and planning from University of Colorado Denver trains scholars for careers in higher education, research and high-level policy positions. It is a research-oriented doctoral degree with a flexible, interdisciplinary focus. Students actively draw from the rich intellectual resources of the University of Colorado campuses in both Denver and Boulder for classes, personalized instruction, teaching opportunities and research appointments. Graduates of the program work in universities, government, nonprofits and the private sector, both in the U.S. and around the world.

Planning and design form a well-established and expanding field of knowledge and practice regarding the relationships of natural, behavioral, technological, political, economic and cultural factors to the organization of physical space, and their combined influence on the quality of life in general. Housed within the college, the departments of architecture, landscape architecture, and planning and design share the idea that the complex problems of the built environment are best addressed through collaboration among the various design and planning disciplines. As a result of this collaboration, the departments jointly offer the advanced research degree, a PhD in design and planning.

## Areas of Specialization

The PhD program serves as the intellectual driver of the College of Architecture and Planning; its mission is to provide a scientific foundation for planning and design. Unique and distinguishing characteristics include the physical environment as the domain of interest, the interdisciplinary and integrative orientation of study and the applied nature of prescriptions. Being broad in its offerings, available study covers issues ranging from highly technical urban modeling to the history of architecture. Students in the program are encouraged to embrace tenets embodied in one of the following areas of specialization. Each broad specialization area is represented by its own core curricula specific to the domains of expertise and faculty interests; in exceptional circumstances, advanced study on a related topic (e.g., historic preservation, green buildings) is available to bridge the two specialty areas.

## Sustainable and Healthy Environments (SHE)

Studies in SHE are concerned with the design making by public agencies to guide the pattern and timing of land development that advance goals of sustainable and healthy environments. Subfields include land use planning, growth management, transportation, urban design, housing and community development, environmental planning and management of urban, rural and natural areas. Primary work in this area focuses on land use controls, design review processes and the development of models and tools to understand and support decision processes and design practices.

## **History of Architecture, Landscape and Urbanism (HALU)**

Studies in HALU include the history and theory of architecture, landscape and urbanism considered within socioeconomic and political contexts, intellectual history and cultural studies, as well as questions concerning the evolution of technology, technique and materiality. Interdisciplinary and cross-cultural collaboration is encouraged. In this manner, the disparate range of ideologies and methodologies within the discipline itself are introduced. It is critical for the contemporary scholar and teacher to be aware of the tradition of strategies and perspectives in order to operate in an intellectually responsible manner in the present. A background in a professional design field is desirable for all applicants.

As part of studies in either specialty area, students work on diverse topics, advancing the intellectual environment of the college by participating in a common colloquia, organizing workshops, presenting at conferences and writing publications.

## **Admission Requirements**

As a candidate for admission to the PhD program, you must meet the requirements of the Office of Vice-Chancellor of Academic and Student Affairs of UC Denver. These include but are not limited to:

- Matters of provisional admission
- Transfer credit restrictions
- Residency requirements
- Eligibility of courses for graduate-level credit
- Foreign language requirements
- Examination schedules

## **Residency**

To be accepted, you will have to meet the academic residency requirement, which requires six semesters of scholarly work beyond the attainment of an acceptable bachelor's degree.

Two semesters of residence credit may be allowed for a master's degree from another institution of approved standing.

At least four semesters of resident credit, two of which must be consecutive in one academic year, must be earned from this university.

# Specific Requirements

The specific admission requirements for the PhD program in design and Pplanning are as follows:

## 1. Degree

Minimally, to be a successful applicant, you must have a bachelor's degree. However, it is strongly advised that students entering the program will have completed both a bachelor's and a master's degree. Field specialization and background are open. However, you will preferably have completed a professional (master's or bachelor's) program in planning or a design-related field, such as:

- Architecture
- Landscape Architecture
- Architectural Engineering
- Urban Design

In combination with a degree in an area, such as:

- Geography
- Urban Economics
- Environmental Law
- Urban Sociology
- Real Estate
- Management Science
- Computer Science
- Public Administration
- Environmental Psychology

## 2. Knowledge from Prior Course Work

The applicability of your prior course work will be decided by the program committee upon review of your transcript and additional materials. If you do not have the requisite educational background, grade point average or GRE scores, you may be admitted on a conditional or provisional basis and additional course work may be required in accordance with Graduate School Rules.

*A. Design and Planning:* You can satisfy this requirement by virtue of having completed either a professional or a pre-professional degree program in these areas.

*B. Undergraduate Work:* You must have completed 12 semester hours of undergraduate work in one of the following areas:

Social and Behavioral Sciences  
Environmental and Natural Sciences

Engineering  
Humanities

*C. Prerequisites:* You must also have completed one of the following prerequisites with a grade of "B-" or above (the choice depends on your area of specialization):

**Statistics.** Including probability theory, parametric and nonparametric methods, and acquaintance with basic multivariate techniques. A minimum of 3 hours.

**Mathematics.** Including differential equations, finite mathematics, algorithms, data structures or other appropriate courses. A minimum of 3.

**Language.** Ability to read at least one foreign language relevant to the area of specialization.

**Computer Applications.** Background in computer aided Design (CAD) or Geographic Information Systems (GIS). A minimum of 3 hours.

### 3. Demonstrated Academic Achievement

Academic achievement as evidenced by an undergraduate grade point average of 3.0 (on a 4.0 scale) or better, and a graduate grade point average of 3.5 or better.

A 575 TOEFL (Test of English as a Foreign Language) score is required if you are a foreign applicant whose native language is not English.

### Curriculum

Degree requirements are set both by the Graduate School at the University of Colorado Denver and the PhD program within the college. Degree requirements are divided into two parts: pre-candidacy and candidacy/dissertation research. The former involves course work, qualifying examinations and a dissertation prospectus. Candidacy is certification that all requirements have been met except the dissertation. The doctor of philosophy (PhD) degree in design and planning is granted upon the successful completion and defense of the dissertation.

Students meet these requirements through course work and exams over a two year period. During this time, a student's cumulative grade point average may not fall below a B without academic discipline or probation.

### Degree Completion

Students in the PhD program in design and planning have up to eight years to complete all requirements for the degree. It is possible to take a leave of absence (referred to as a 'time out,' however, such circumstances should be pursued in tandem with your advisor and/or your committee). A leave of absence form, obtained from PhD program administrative coordinator, must be completed to ensure your place in the program.

### Three Components

The PhD curriculum consists of three components:

- Core curriculum
- Additional course work
- Dissertation

## 1. Core Curriculum (12 semester hours)

Students in the program are encouraged to embrace tenets embodied in one of the following areas of specialization. Each broad specialization area is represented by its own core curriculum that is specific to the domains of expertise and faculty interests. The core curriculum includes 12 semester hours of course work and consists of a series of theory and methods and application courses, which all students must complete during their first two years of residence, plus an additional three hours of programwide colloquia.

### The core curriculum for the specialization in SHE includes:

DSPL 7011 - Research Design: the Logic of Inquiry. **Semester Hours: 3**

DSPL 7013 - Environment and Behavior. **Semester Hours: 3**

DSPL 7012 - Theories of Planning, Government Intervention and Implementation: Means and Ends. **Semester Hours: 3**

### The core curriculum for the specialization in HALU includes:

DSPL 7686 - Special Topics. Historiography: History of the Scholarly Discipline. **Semester Hours: 3**

DSPL 7686 - Special Topics. History of Theory: History of the Ideas Informing Practice. **Semester Hours: 3**

DSPL 7686 - Special Topics. Pro-Seminar: Advanced Seminar on Faculty Research Interests. **Semester Hours: 3**

Advanced study on related topics (e.g., historic preservation, green buildings) is available to bridge the two specialty areas, in which case a core curriculum would consist of one of the above tracks complemented by select offerings from the other track. Such circumstances are addressed in close consultation with your initial advisors and/or your committee.

All students are also required to complete three sessions of the colloquium (DSPL 7014 - Colloquium in Design) during their first two years in the program (1 semester hour, pass/fail credits only). You also have the option of taking more than the three required credits. The colloquium includes presentations by speakers (internal to the program, external to the program/university, students), workshops on research/scholarship skills, and perhaps even more social-type activities.

The year-long colloquium has three primary objectives:

1. It exposes students to various approaches to research related to design and planning.
2. It enables students to formulate and test out researchable topics among faculty and student peers.

3. Finally, it serves as a bridge between the two specializations offered within the program, HALU and SHE.

## 2. Additional Course Work (total 34 semester hours)

In addition to the core curriculum, each student must take at least 12 semester hours of course work in classes broadly conceptualized as “methods” indicative to your field of research. Students must also have 12 semester hours of course work in their minor field of study and will typically take 10 semester hours of support electives. Courses outside the core curriculum may be chosen from outside the college on either the Denver or Boulder campus. Up to 18 semester hours of graduate-level course work can be transferred into the program to qualify for advanced standing.

3. Dissertation (30 semester hours)

It is most important that you continue to work closely with your advisor while you are doing your dissertation research. Meet at least once a month to discuss your progress and be sure to communicate with your other committee members as well. It is a continual process that should be a joint effort to assure that your committee will be well informed and prepared at your defense.

## Required Semester Hours

**The required semester hours are as follows:**

Core Curriculum	12 semester hours
Specialization	12 semester hours
Minor	12 semester hours
Electives	10 semester hours
Dissertation	30 semester hours
Total	76 semester hours

**The average course load is 15 semester hours per academic year, especially for the first two years.**

## Suggested Timing of the Program

(for full-time students without advanced standing):

### Year One

- Develop your degree plan
- Complete any prerequisite courses

- Enroll in 11 semester hours of the required core curriculum and additional courses in your specialty area
- Finish the preliminary examination

## Year Two

- Enroll in one semester of Colloquium
- Continue or begin to take electives in your minor and specialty areas as described in your degree plan
- Begin literature review papers
- Prepare for your comprehensive exam

## Years Three and Beyond

- Complete your literature review papers
- Prepare a dissertation proposal
- Take the comprehensive exam
- Establish your dissertation committee

The remainder of the third and fourth years you will spend researching and writing the dissertation, under the supervision of the dissertation committee.

## Architecture

**Chair:** Hans Morgenthaler, 303-556-4227

**Assistant Chair:** Erik Sommerfeld, 303-556-6160

**Office:** CU-Denver Building, 330

**Telephone:** 303-556-3382

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## Faculty

### Professors:

\*Mark Gelernter, PhD, Bartlett School of Architecture, University of London

\*Julee Herdt, MArch, Southern California Institute of Architecture

\*George Hoover, BArch, Cornell University

\*Joseph Juhasz, PhD, University of California, Berkeley

\*Patricia O'Leary, MArch, Arizona State University

\*Peter Schneider, BArch, University of Cape Town

\*Ping Xu, DDesign, Harvard University

**Associate Professors:**

\*Amir Ameri, PhD, Cornell University

\*Osman Attmann, PhD, Georgia Institute of Technology

\*Robert H. Flanagan, MArch, University of Colorado

\*Michael K. Jenson, PhD, University of Edinburgh

\*Christopher Koziol, PhD, University of Colorado Denver

\*Laurence K. Loftin III, MArch, University of Virginia

\*Taisto H. Mäkelä, PhD, Princeton University

\*Hans R. Morgenthaler, PhD, Stanford University

\*Ekaterini Vlahos, MArch, University of Colorado

**Associate Professor (Clinical Teaching Track):**

\*Barbara Ambach, MArch, Southern California Institute of Architecture

**Assistant Professor:**

Matthew Jelacic, MArch, Harvard University

**Senior Instructors:**

\*Joseph Colistra, MArch, University of Colorado

Allen Harlow, MArch, University of Colorado

\*Charles MacBride, MS, Columbia University

\*Eric Morris, MArch, University of Houston

\*Jason Rebillot, MArch, University of Illinois at Chicago

\*Ranko Ruzic, MArch, University of Colorado

\*Melanie Shellenbarger, MBA, John Carroll University

\*Erik Sommerfeld, MArch, University of Colorado

## **Instructors:**

Kenneth Andrews, MArch, Rice University

Meredith Banasiak, MArch, Arizona State University

Marcel de Lange, MArch, Delft University of Technology

Tamarah Long, MArch, University of Florida

Additional information about faculty in this department is available online [here](#).

\*Also teach graduate courses.

The architecture department's mission is to lead in the discovery, communication and application of knowledge in the discipline of architecture. The department aims to excel in the education of its students, in the research and creative endeavors of its faculty and in service to the community. To respond to this mission, the department has developed a unique intellectual, educational and architectural culture.

- First, the department celebrates its place in a special environment—urbanized Denver with the Front Range and the spectacular natural landscape of the high plains and the Rocky Mountains. The architecture department focuses not only on the design of buildings, but also on the interactions between buildings and their urban and natural settings.
- Second, the department examines the interplay between architectural form and the complex cultural and technological context in which architects operate. As a result of these dominant concerns, the department has created an academic environment that is intellectually stimulating and educationally challenging and that aims to educate students who will become leaders in the discipline and profession of architecture.
- Third, the Department of Architecture follows the College of Architecture and Planning's mission of integrative design. The faculty research, teach and practice ways to design environments that are meaningful and beautiful. We plan, shape and interpret those environments in ways that are collaborative, responsible, sustainable, enabling and integrative. Promoting and acknowledging diversity in subject matter, method and orientation are essential to this integrative approach.

The faculty teach by integrating different design theories and practices into a curriculum that emphasizes their connectedness, crossdisciplinary interdependence, research orientation and real-world relevance. The department collaborates to produce new knowledge while adding to the understanding of the role and identity of design and research in each architectural project. In this collaborative process, each project asks a critical question, then answers it using an appropriate method. These questions stress environmental, economic, social, cultural, aesthetic and ethical concerns. In this knowledge-based matrix, our understanding of how integrative design shapes environments and settings constantly evolves and changes.

## **Degrees**

The College of Architecture and Planning offers a bachelor of environmental design (BEnvd) on the Boulder campus. The Department of Architecture offers a graduate degree on the

Downtown Campus: the master of architecture (MArch). The following statement from the National Architectural Accrediting Board (NAAB), which is responsible for accrediting all architecture programs in the United States, should help a student choose the appropriate degree program:

“In the United States, most state registration boards require a degree from an accredited professional degree program as a prerequisite for licensure. The National Architectural Accrediting Board (NAAB), which is the sole agency authorized to accredit U.S. professional degree programs in architecture, recognizes three types of degrees: the bachelor of architecture, the master of architecture and the doctor of architecture. A program may be granted a 6-year, 3-year or 2-year term of accreditation, depending on the extent of its conformance with established educational standards.

“Master’s degree programs may consist of a preprofessional undergraduate degree and a professional graduate degree that, when earned sequentially, constitute an accredited professional education. However, the preprofessional degree is not, by itself, recognized as an accredited degree.”

- The preprofessional degree offered by the College of Architecture and Planning is the bachelor of environmental design (BEnvd). The professional degree offered by the college is the master of architecture (MArch), which is fully accredited by the NAAB.
- The master of architecture, the college’s accredited professional degree for students intending to seek licensure as architects, is offered to students who have completed the college’s BEnvd or any other preprofessional design degree from any NAAB-accredited institution, as well as to students who have completed an unrelated undergraduate or graduate degree or to students who hold professional architecture degrees from other countries but who seek to obtain an NAAB-accredited architecture degree. Students holding a preprofessional degree from a NAAB-accredited program or professional architecture degree from a foreign institution will be evaluated individually for advanced standing in the MArch program, commensurate with their previous educational experiences.

## **Master of Architecture**

# **Architecture MArch**

The MArch is a three-and one-half-year plan of study on the Downtown Campus that has been fully accredited by the NAAB.

## **Prerequisites**

- Students must complete the prerequisites of college-level trigonometry and physics before enrolling in ARCH 5310, Introduction to Building Technology. Since this class should be taken in the first semester in order to stay on track for graduation, students

are strongly encouraged to complete the trigonometry and physics requirements before beginning the MArch program.

- ARCH 5000, Math and Physics for Architects, is offered in the summer on a pass/fail basis. This class meets the prerequisite requirements. This class does not count toward the number of credits required for the MArch degree.
- A graphics workshop is recommended for students who do not have a background in architectural drawing and model building. This class is offered each year before the beginning of the fall semester.
- Students are also expected to have achieved a basic level of computer literacy and should be familiar with PC or Apple operating systems.

## Program Requirements

Students with a bachelor's or master's degree unrelated to architecture must complete a seven- or eight-semester sequence of course work and accumulate a minimum of 114 semester hours of credit. Students who have completed the college's BEnvd or any other preprofessional architecture degree from any NAAB-accredited institution and students who have completed a non-NAAB-accredited professional architecture degree in another country, and who wish to obtain the NAAB-accredited degree from this college, will be evaluated for advanced standing. These students will work with the associate chair of the department to develop an individualized plan of study commensurate with their previous degrees and experience, and will have to complete at least 60 semester hours of credit in residence within the College of Architecture and Planning.

## Course Sequence

The MArch program is divided into five major components: design studies, 45 semester hours; cultural studies, 12 semester hours; technology studies, 18 semester hours; professional studies, 6 semester hours; and electives, 33 semester hours. A wide array of electives in these areas allows students to tailor their graduate studies to their own interests.

## First Year

### Fall

- ARCH 5110 - Design Studio I. **Semester Hours: 6**
- ARCH 5111 - Introduction to Drawing. **Semester Hours: 3**
- ARCH 5210 - Introduction to Architecture. **Semester Hours: 3**
- ARCH 5310 - Introduction to Building Technology. **Semester Hours: 3**

**Total: 15 Hours**

### Spring

- ARCH 5120 - Design Studio II. **Semester Hours: 4**
- ARCH 5121 - Design Seminar II. **Semester Hours: 2**
- ARCH 5220 - History of Architecture I. **Semester Hours: 3**
- ARCH 5320 - Building Construction and Methods. **Semester Hours: 3**
- L A 6632 - Site Planning. **Semester Hours: 3**  
Elective\* (3 semester hours)

**Total: 18 Hours**

## **Second Year**

### **Fall**

- ARCH 5130 - Design Studio III. **Semester Hours: 4**
- ARCH 5131 - Design Seminar III. **Semester Hours: 2**
- ARCH 5230 - History of Architecture II. **Semester Hours: 3**
- ARCH 5240 - Human Factors in Design. **Semester Hours: 3**
- ARCH 5330 - Environmental Control Systems I. **Semester Hours: 3**  
Elective\* (3 semester hours)

**Total: 18 Hours**

### **Spring**

- ARCH 5140 - Design Studio IV. **Semester Hours: 4**
- ARCH 5141 - Design Seminar IV. **Semester Hours: 2**
- ARCH 5340 - Environmental Control Systems II. **Semester Hours: 3**
- ARCH 5350 - Structures I. **Semester Hours: 3**
- ARCH 5410 - Professional Practice. **Semester Hours: 3**  
Elective\* (3 semester hours)

**Total: 18 Hours**

### **Summer**

- ARCH 6150 - Comprehensive Design Studio. **Semester Hours: 4**
- ARCH 6151 - Comprehensive Design Seminar. **Semester Hours: 2**  
Electives\* (6 semester hours)

**Total: 12 Hours**

## Third Year

### Fall

- ARCH 5360 - Structures II. **Semester Hours: 3**
- ARCH 6170 - Advanced Design Studio. **Semester Hours: 4**
- ARCH 6171 - Advanced Design Seminar. **Semester Hours: 2**  
Electives\* (9 semester hours) or
- ARCH 6950 - Thesis Preparation. **Semester Hours: 6** and  
Electives (3 semester hours)

**Total: 18 Hours**

### Spring

- ARCH 6170 - Advanced Design Studio. **Semester Hours: 4**
- ARCH 6171 - Advanced Design Seminar. **Semester Hours: 2**  
Electives\* (9 semester hours) or
- ARCH 6951 - Architecture Thesis. **Semester Hours: 6**  
Electives\* (9 semester hours)

**Total: 15 Hours**

\* Students must take 9 elective semester hours in cultural studies, 9 elective semester hours in professional studies (3 semester hours of which must emphasize the computer), 6 elective semester hours in technology studies and 9 elective semester hours in any architecturally related electives on campus.

# Architecture II Post-Professional (MArch)

## The Post-Professional Program

The post-professional degree program is a mid-career, post-professional intensive course for those individuals in the design fields who seek to expand their knowledge and to advance their professional careers. In this program, students have the opportunity to study recent developments in their design fields resulting from advances in information technology, new theories and methods and emergent discoveries and associations. The program currently offers the master of architecture II degree program. The program has a research orientation and agenda, and its general intent is to create an educational context within which the fundamental

practices of architecture and urbanism can be examined, advanced and extended. The program has been designed to be both flexible and interdisciplinary so as to provide students with a broad range of options that can accommodate and respond to each student's own interests and study agenda through course work, independent study or optional training.

## Post-Professional Program: The Master of Architecture II

The master of architecture II is an advanced degree program that provides its students with a range of opportunities for exploring and extending their knowledge of the practice of architecture. **Students applying for admission to the program must have been awarded a five-year or six-year first-professional degree in architecture.** They may enter the master of architecture II program in any semester of the academic year.

**NOTE:** The master of architecture II program does not offer an NAAB first-professional degree; it is an advanced studies program for those who already hold this first-professional degree.

Students in the program must complete 30 semester hours of credit in required, recommended and elective course work to qualify for the master of architecture II degree. To be eligible for graduation from the program, students must complete 12 semester hours of advanced design studio (ARCH 6170/6171 or UD 6600/6601) in the degree project sequence and 12 semester hours in required and/or focus-area course work particular to their area of study. The remaining 6 semester hours are elective course work. A typical sequence of course work within a focus area leading to the award of the master of architecture II degree is as follows:

<b>Semester One</b>	<b>Semester Hours</b>
Advanced Design Studio	6
Focus-area required/recommended course work	6
Elective course work	3
<b>Total</b>	<b>15</b>

### **Semester Two**

Advanced Design Studio	6
Focus-area required/recommended course work	6
Elective course work	3
<b>Total</b>	<b>15</b>

## Dual Degree Options

Students may enroll in a dual degree program with landscape architecture (MArch and MLA), with MURP (MArch and MURP), with MUD (MArch and MUD) or with the Business School (MArch and MBA).

## Landscape Architecture

**Chair:** Austin Allen, 303-556-8564

**Associate Chair:** Lori Catalano, 303-352-3613

**Office:** CU-Denver Building 330

**Telephone:** 303-556-3382

**Fax:** 303-556-3687

## Faculty

### Professor:

\*Lois A. Brink, MLA, University of Pennsylvania

### Associate Professors:

\*Austin Allen, PhD, Ohio University

\*Ann Komara, MLA, University of Virginia

### Assistant Professor:

\*Joern Langhorst, Diploma, University of Hannover

### Senior Instructors:

\*Lori Catalano, MLA, University of Pennsylvania

\*Charles Chase, MA, University of Colorado

\*Anthony R. Mazzeo, MLA, University of Pennsylvania

### Instructor:

\*John Lanterman, MLA, University of Colorado

\*Leila Tolderlund, MLA, University of Colorado

Additional information about faculty in this department is available online here.

\*Also teach graduate courses.

The master of landscape architecture (MLA) program examines the symbiotic relationships among the landscape, people and culture. These studies familiarize students with the current practice of landscape architecture, while encouraging them to question, invent, create, test and advance their knowledge of the profession. The goal of this program is superior education, scholarly research and meaningful service in the discipline and practice of landscape architecture.

The program's "laboratories" are the urban, suburban, rural and wilderness landscapes mainly associated with the Mountain, Front Range, High Prairie and Western Slope regions of Colorado. These areas present diverse cultural and environmental situations and opportunities in which to shape regionally responsive landscape design and planning. Imperatives within the public and private realms of these landscapes fuel the academic and research agenda. While representing an accessible spectrum of good and bad examples and situations to study, the knowledge and experiences derived apply globally to multiple scales and cultures.

Within the context of various critical topics, students link theory with practice, history with change and technology with invention. Sample topics include:

- The challenges associated with urban and suburban growth and development
- The planning and design leading to the making of healthy, sustainable cities and regenerative communities
- The role and making of civic infrastructure
- The use and conservation of land and water resources
- The reclamation and preservation of disturbed and historic landscapes
- The recognition and application of natural and urban conditions and values of the region

It is within this context that UC Denver's Department of Landscape Architecture links theory with practice, history with change, technology with invention and designers with their constituents.

## **Program Objectives**

Specific educational objectives of the program are as follows:

- To develop excellence in the design process and the design of the built landscape that leads to a variety of outcomes. Particular emphasis is given to exploring the strategies, methods and skills necessary to study, synthesize, experiment with and evaluate design precedents, as well as design and design processes.

- To learn and develop competence in the core themes of the profession that include landscape architectural theory and precedent, technologies and materials, natural and cultural systems, and communications and research media. Particular emphasis is placed on studying the means to develop ideas, to convey values and to critique work.
- To learn and utilize methods that will enable students to engage in independent research, as well as design investigations based on rigorous, original and creative thinking, the goal of which will lead to the completion of definitive scholarly work and/or enhance the outcome of creative works. Particular emphasis is placed on integrating research assignments within design studios, support classes and thesis options.
- To provide a working knowledge of the institutional framework within which the design process occurs. Particular emphasis is placed on building a strong understanding of professional practice and the skills required therein including management, leadership, marketing, ethical conduct and legal issues.
- To develop skills using methods that apply to and extend course work, research and creative work to real world situations. Particular emphasis is placed on participating in opportunities to implement, enhance, demonstrate, communicate and evaluate ideas and skills, and to provide measurable benefits for all stakeholders.

## **Master of Landscape Architecture**

# **Landscape Architecture MLA**

## **Prerequisites**

Students are expected to have achieved a basic level of computer literacy. A graphics workshop is recommended for students who do not have a background in drawing or computer graphics. The workshop is scheduled each year before the beginning of the fall semester.

## **Program Requirements**

The landscape architecture program offers professional and advanced professional graduate degree curricula leading to the degree master of landscape architecture (MLA).

- The first-professional degree program, requiring a six-semester sequence of course work totaling 90 semester hours, is fully accredited by the Landscape Architecture Accreditation Board (LAAB) and recognized by the Council of Educators in Landscape Architecture (CELA).
- Students completing the college's bachelor of environmental design on the Boulder campus—or completing an undergraduate design degree at another institution—may be given advanced standing in the three-year program. Advanced standing will be based on prior academic accomplishment.

- The advanced professional degree program for qualified students having already earned a first professional degree in landscape architecture or related discipline requires 48 semester hours. Advanced standing will be based on prior academic accomplishment.

## Course Sequence

### **(90-semester-hour MLA for students without a professional degree in landscape architecture or related profession)**

The curriculum consists of core and elective course work. Core courses are grouped into five components:

	<i>Semester hours</i>
Design Studios	36
History and Theory	12
Landscape Architectural Technology	15
Ethics and Practice	3
Media	6
<i>Total core courses</i>	<i>72</i>
Electives	18
<i>Total courses</i>	<i>90</i>

### **Typical 90-semester-hour program of study in required courses for the first professional MLA degree**

## **First Year**

### **Fall**

- L A 5501 - Landscape Architecture Design Studio 1. **Semester Hours: 6**
- L A 5510 - Graphic Media in Landscape Architecture. **Semester Hours: 3**
- L A 5521 - History of Landscape Architecture. **Semester Hours: 3**
- L A 5572 - Landscape Ecology. **Semester Hours: 3**

**Total: 15 Hours**

## Spring

- L A 5502 - Landscape Architecture Design Studio 2. **Semester Hours: 6**
- L A 5532 - Landform Manipulation. **Semester Hours: 3**
- L A 6632 - Site Planning. **Semester Hours: 3**
- L A 6641 - Computer Applications in Landscape Architecture. **Semester Hours: 3**

**Total: 15 Hours**

## Second Year

### Fall

- L A 5503 - Landscape Architecture Design Studio 3. **Semester Hours: 6**
- L A 6631 - Landscape Construction Materials and Methods. **Semester Hours: 3**
- L A 6670 - Plants in Design. **Semester Hours: 3**  
One Elective. **Semester hours: 3**

**Total: 15 Hours**

### Spring

- L A 6604 - Landscape Architecture Design Studio 4. **Semester Hours: 3**
- L A 6605 - Landscape Architecture Design Studio 5. **Semester Hours: 3**
- L A 6620 - Landscape Architecture Theory and Criticism. **Semester Hours: 3**  
Two Electives. **Semester hours: 6**

**Total: 15 Hours**

## Third Year

### Fall

- L A 6606 - Landscape Architecture Design Studio 6. **Semester Hours: 6**  
Three Electives. **Semester hours: 9**

**Total: 15 Hours**

### Spring

- L A 6750 - Professional Practice. **Semester Hours: 3**

- L A 6607 - Landscape Architecture Design Studio 7. **Semester Hours: 3**
- L A 6608 - Landscape Architecture Design Studio 8. **Semester Hours: 3**
- L A 6721 - Regionalism. **Semester Hours: 3**  
One Elective. **Semester hours: 3**

**Total: 15 Hours**

### Course Sequence

## **(48-semester-hour MLA for students with a professional degree in landscape architecture or related disciplines)**

This route requires 48 semester hours and typically two years of full-time study. The core curriculum consists of two groups:

	<i>Semester Hours</i>
Design	24
History and Theory	12
<i>Total core courses</i>	36
Electives	12
<i>Total courses</i>	48

The program director will advise each student engaged in this program of study.

## **Thesis**

The graduate thesis in landscape architecture provides an opportunity for students to conduct independent research and design investigations that demonstrate their capacity for rigorous original thinking. The thesis is not required for graduation and not all students are approved to write a thesis. Choosing to pursue a thesis project constitutes a significant commitment to the endeavor; the topic must be chosen with care and thoughtfully and critically developed. Topics can explore material that has been previously unstudied, reinterpret existing material in a new light, or engage research and design practices in ways that strengthen and define the final project. For all theses, the research and products must meet the highest standards of academic excellence and contribute significantly to the discipline and/or profession.

Pursuing a thesis requires students to enroll in a three-course sequence for a maximum total of

12 semester hours. Students are required to formulate their research proposals two full semesters prior to their enrollment for the 6-semester-hour thesis, typically taken in lieu of the final studio. To proceed through the sequence, students must have completed and passed the research tools and methods class (LA6940) and have secured departmental approval of the thesis proposal. The completion of the thesis is dependent on acceptance of the student's work by the faculty member acting as the thesis chair and by the committee. For work to be accepted it must meet the standards established by the University of Colorado Denver for graduate thesis projects.

## Dual Degree Options

Students may enroll in a dual degree program with architecture (MArch), with urban design (MUD) or with urban and regional planning (MURP).

## Urban and Regional Planning

**Chair:** Thomas A. Clark, 303-566-3296

**Associate Chair:** Pamela Wridt, 303-556-3472

**Office:** CU-Denver Building 330

**Telephone:** 303-556-3382

**Fax:** 303-556-3687

## Faculty

### Professors:

\*Louise Chawla, PhD, City University of New York

\*Thomas A. Clark, PhD, University of Iowa

\*Yuk Lee, PhD, Ohio State University

\*Fahriye Hazer Sancar, PhD, Pennsylvania State University

\*Willem K.T. Van Vliet, PhD, University of Toronto

### Associate Professors:

\*Kevin Krizek, PhD, University of Washington

Raymond McCall Jr., PhD, University of California, Berkeley

\*Peter Park, MUP, University of Wisconsin-Milwaukee

**Assistant Professors:**

\*Brian Muller, MPA, University of Texas

\*Jeremy Németh, PhD, Rutgers University

**Senior Instructor:**

\*Pamela Wridt, PhD, City University of New York

**Instructor:**

John T. Barbour, MURP, University of Colorado

Additional information about faculty in this department is available online here.

\*Also teach graduate courses.

Urban and regional planners in the United States and other countries seek to identify social needs and environmental capacities, anticipate change and its impact on communities, shape the pattern of human settlements, provide essential infrastructure, maintain viable economies and achieve and preserve sustainable communities that are suitably fit to their natural surroundings. Study in planning considers how social needs are legitimated, knowledge about communities and regions is compiled and analyzed, possible courses of action are evaluated, plans are formulated, implementation is transacted through the means of education, investment, negotiation and regulation, and how plans' consequences are tracked over time.

These tasks require a high order of ability: to amass and manipulate information, to represent and model essential phenomena and processes, to simulate futures and to judge outcomes having diverse dimensions and a multitude of consequences across space and amongst stakeholder groups. They also require the ability to portray and communicate key concepts, diagnoses and actions and to harness knowledge about all the key actors on the scene in order to understand their needs, motives and possible responses to the public actions that plans provoke. Underlying these classes of abilities is a base of knowledge that easily overreaches the bounds of any one discipline.

Planners must understand theories regarding urban and regional process, concepts of presentation, communication and negotiation, technologies for the depiction and manipulation of spatial information, means by which to document, judge and forecast change in urban systems, private economic motives and constraints, the behavioral inclinations of all the major classes of players on the urban scene, the mesh of laws that empower planning and govern private action and the broader political economy of regional systems.

Needless to say, the education of planners can only *begin* in the university. It must be a life-long pursuit, and planning programs are becoming increasingly supportive of the continuing

education needs of professionals. It is the intellectual excitement of this ongoing pursuit of knowledge that draws many to the field.

The Department of Planning and Design, along with the college's other departments—architecture and landscape architecture—offers a four-year bachelor of environmental design (BEnvd) degree on the CU-Boulder campus. The Department of Planning and Design offers the master of urban and regional planning (MURP) graduate degree on UC Denver's Downtown Campus. The MURP is fully accredited by the national Planning Accreditation Board and prepares students for professional careers in planning and related fields, and for further study. Though many MURP graduates seek to pursue careers in planning in the local public sector, growing numbers are advancing to important positions at the regional, state and national levels of governance in both the United States and overseas, and also in the for-profit and nonprofit sectors. Our program is one of the nation's very best, attracting very high quality applicants who are, once enrolled, taught by some of the nation's most eminent scholars and talented practitioners.

Realizing that graduate professional students may already have amassed considerable debt and have only limited financial means, we are determined to insure deliberate but rapid progress towards graduation. Residential tuition rates remain competitive and there are numerous options while enrolled to secure paid internships, win competitive tuition assistance grants and some scholarships, assist in funded faculty research, serve as teaching assistants and pursue service engagements that yield tuition aid via the AmeriCorps Program.

For further details on the BEnvd, see the University of Colorado at Boulder catalog. Additional details about the master's program follow. Please also consult the college's Web site for additional information about the college and its several programs.

## **Master of Urban and Regional Planning**

# **Urban and Regional Planning MURP**

### **Prerequisites**

Students are expected to have achieved a basic level of computer literacy prior to enrollment, and should be familiar with PC or Apple operating systems. Acquiring some prior familiarity with digital visualization techniques is recommended for students who do not have a background in graphic communication. A higher level of proficiency is desirable for those seeking to emphasize the design elements of professional practice, most in evidence in our urban place-making concentration. Some assistance in attaining these skills may be provided in advance of the fall semester. Applicants are annually welcomed from virtually every field of prior study.

## Program Requirements

The master of urban and regional planning is the college's accredited degree for students intending to pursue careers in planning and in related fields across a wide spectrum of employment niches both within and outside government.

- With no advanced standing, candidates for the MURP degree must complete a minimum of 51 semester hours of graduate work, including all core courses (27 semester hours), a concentration (15 semester hours minimum) and additional electives (9 semester hours). Concentrations currently include: land use and environmental planning, economic and community development planning and urban placemaking. Students may also devise their own individual concentrations with an advisor's approval.
- Entering students who have engaged in the study or practice of planning elsewhere may petition the faculty prior or during their initial semester to determine whether any credit will be awarded or degree requirements relaxed as a result of these prior activities. A maximum of 9 semester hours of course work can be applied for advanced standing when such work was pursued at other institutions and meets prescribed level, content and quality thresholds. Graduates of the college's own BEnvd program are eligible for up to 15 semester hours of advanced standing.

## New Entrants: Primers, Advising, Transfer Credit and the Plan of Study

The college and each of its departments provides an orientation prior to the start of fall classes. The MURP program will, as it is able, be offering certain noncredit primer courses in advance of each fall semester's onset. These would address such matters as rudimentary design skills, digital visualization and geographic information systems (GIS). Each entering student will be assigned an advisor, identified from the ranks of the regular continuing faculty during the initial days of the fall semester and the initial days of the spring semester for spring entrants. Each student is to meet with his/her assigned advisor in the first two weeks of the semester upon the onset of study. Each is to secure from his/her advisor a plan of study form. The student, with the assistance of the advisor is to begin to pencil in core course selections, indicating in which semesters these would be taken. The student is to retain this form during his/her time of study, augmenting it as the plan of course selections unfolds in ensuing semesters. The faculty advisor is to note on this plan of study all approved waivers, noting whether or not a "waiver" is to be accompanied by the award of transfer credit. A waiver without credit simply releases the student from taking a particular core class, thereby freeing him/her to take other classes in its place. The plan of study, once completed, is to be submitted to the college office for inclusion in the student's official student file after the onset of the last semester of study. This plan will be used by the department chair, along with other information, to certify the student for eventual graduation. Students may opt to switch advisors as their study plans clarify. Some will necessarily wish to switch to a faculty member—often the faculty coordinator for the concentration the student has chosen if it is one of our three official concentrations—who is especially conversant with the student's particular interests.

## Advanced Standing

- Entering students who earned the college's bachelor of environmental design (BEnvd) degree offered on the CU Boulder campus, within five years prior to enrollment, and who have maintained a GPA of at least 3.0, will be admitted to the MURP with advanced standing. Those who graduated still earlier may receive advanced standing at the discretion of the department chair, in consultation with the program faculty.
- These students can earn the MURP degree after completing a minimum of 42 semester hours, which will include the core courses (less any waived due to prior study), an approved concentration and additional electives required to meet the overall credit requirement of 42.
- Students holding the college's BEnvd degree who also have completed, in this study, the undergraduate planning option with a GPA of at least 3.0 (and with a grade of at least 3.0 in ENVD 4320, Planning Studio III) will, in addition, receive a waiver with credit for URP 6630, Planning Studio I. These students will earn the MURP degree upon completion of a minimum of 36 semester hours, including 21 semester hours of core courses and an additional 15 semester hours in an approved concentration.

### Core Courses

- URP 5501 - Planning Issues and Processes. **Semester Hours: 3**
- URP 5510 - Planning Methods I. **Semester Hours: 3**
- URP 5511 - Planning Methods II. **Semester Hours: 3**
- URP 5520 - Urban Spatial Analysis. **Semester Hours: 3**
- URP 5530 - Planning Law. **Semester Hours: 3**
- URP 6630 - Planning Studio I. **Semester Hours: 6**
- URP 6631 - Planning Studio II. **Semester Hours: 6**

### Total: 27 Hours

A thesis option (URP 6950, Thesis Research and Programming, and URP 6951, Thesis) is available primarily for students who are interested in pursuing more advanced academic training in planning or related fields. Thesis work will substitute for Studio II.

## Areas of Concentration

Concentrations—whether official designated or self-devised — enable students to explore in depth an area of special interest. Concentrations are to be composed of 15 semester hours of study. Nine additional semester hours of electives beyond the concentration in the standard 51-semester hour program may be used to deepen study within the concentration or to branch out into other areas of interest. The program supports three official concentrations: (1) land use and environmental planning, (2) urban place making, and (3) economic and community development planning. A set of foundation courses is identified in each concentration, plus additional supporting electives. If the student opts to devise his/her own concentration this must be

pursued under the guidance of a faculty member. Each student so inclined is to prepare a one-page concentration statement that, upon an advisor's approval, is to be retained in the student's official university file.

- **Land Use and Environmental Planning** emphasizes regulation of land uses and land development processes; management of transportation, infrastructure and other major public investments; and management of urban ecology, environmental quality and natural resources on both private and public lands. This concentration prepares students for plan-making and policy administration in urban neighborhoods, cities and counties, regions, open spaces and resource management areas. The curriculum focuses on practices and innovations in land use regulation; analytical methods including transportation modeling, land market evaluation, environmental impact analysis and use of decision support systems; administration of public policies and plans; management of negotiation and collaborative processes among diverse interest groups; and the politics of planning. Graduates take jobs in local, state and federal government, nonprofit organizations, consulting firms and the development industry.
- **Urban Place Making** emphasizes the interrelations between physical design, urban morphology, land-use regulations and other forces such as market trends and regional policies shaping the urban environment and their impacts on quality of life. Curriculum focuses on providing the students with a special kind of expertise that combines design thinking and land-use planning within the dynamic context of city hall politics. The goal is to produce planners, working in the public or the private sector, who can effectively guide the physical form of urban development to serve the needs and desires of an increasingly diverse public while negotiating the realities and constraints of the real estate market and economic development goals of cities and communities. Graduates take jobs in local governments, nonprofit community organizations, consulting firms and the development industry.
- **Economic and Community Development Planning** harnesses both the public and private sectors to fashion local economies able to support the essential needs of resident populations. The field of economic development features efforts to nurture, attract and retain firms that are suited to the fiscal, economic and environmental requirements, capacities and constraints of urban districts (e.g. neighborhoods, downtowns, industrial districts and mixed-use spaces such as TODs and the like), entire municipalities both small and large and multi-local regions. Economic development also concerns the cultivation of both human and social capital as it seeks to encourage an appropriately skilled resident workforce able to find work in both local and regional labor markets.

The field of community development features development from within. It encompasses the many means for engaging local residents and institutions, fostering democratic participation, formulating developmental plans that address residents' most urgent needs and drawing together all parties whose involvement is essential for success. Our program stands apart in its determination to (1) join together these two distinct fields, (2) situate the economy within its essential "built," social and environmental rubrics and (3) encourage a sufficiently broad, hence robust, conceptualization of the economy and its spatial and temporal development. This joint

enterprise travels a continuum from smaller-scale project-based activities through strategic planning at the multi-local regional scale that has utility across the booms and busts of the regional business cycle.

Urban and community economic development specialists find work in localities, sub-state regions and state offices, as well as in quasi-public and private firms and institutions. They work with local residents, neighborhood and community organizations, community development corporations, various other nongovernmental organizations, consulting firms and, of course, in public agencies. For most, although hardly all such graduates, the primary career destination will be the local public sector. Those having this objective in mind should be aware that the bulk of such jobs will marry an appreciation of the rudiments of community economic development to some related physical planning specialty. Others seeking positions explicitly tied to the tasks of economic development are advised to consider opportunities at the municipal, state and federal levels—often set apart from offices devoted primarily to physical planning—with local and regional chambers of commerce, in the private development community and in strategic institutional and corporate planning and development.

## Course Sequence

Applicants may be admitted for both the fall and spring semesters. The schedule below posits a fall onset. If study is commenced in the spring the student may not encounter Planning Methods I until the following fall, so Planning Methods would be deferred to the third semester of study since we now encourage students to take these in the numeric sequence. Planning Issues and Processes is currently offered only in the fall and is the usual “door of entry” to the program. It is possible however that we will move to offer sections of this course during both semesters. Students may take more than 12 semester hours of study and so may progress faster than the template below would indicate. Generally taking more than 15 hours is ill-advised. Under some circumstances—and on a space-available basis—Studio I may be taken during the first semester of study. Both Studio I and II are offered every semester, and additional sections will be added as demand warrants to preserve an acceptable class size. We offer numerous courses beyond the core, and also designate additional options in other departments, elsewhere within our college and across the campus.

### First Year

#### Fall

- URP 5501 - Planning Issues and Processes. **Semester Hours: 3**
- URP 5510 - Planning Methods I. **Semester Hours: 3**
- URP 5530 - Planning Law. **Semester Hours: 3**  
Elective course (3 semester hours)

**Total: 12 Hours**

#### Spring

- URP 5511 - Planning Methods II. **Semester Hours: 3**
- URP 5520 - Urban Spatial Analysis. **Semester Hours: 3**
- URP 6630 - Planning Studio I. **Semester Hours: 6 \***

**Total: 12 Hours**

## **Second Year**

### **Fall**

Concentration Courses (9 semester hours)

Electives (6 semester hours)

**Total: 12 Hours**

### **Spring**

- URP 6631 - Planning Studio II. **Semester Hours: 6 \***  
Concentration Courses (6 semester hours)

**Total: 12 Hours**

\* Both studios are offered in the fall and spring semesters.

## **Dual Degree Options**

Students may enroll in dual degree programs with public administration (MURP+MPA), law (MURP+JD) and business (MURP+MBA). In addition, dual degree options are also available combining the MURP with landscape architecture (MLA) and architecture (MArch). A new dual degree combining planning and public health (MURP+MPH) is under development combining strengths on both the Downtown and Anschutz Medical Campuses of UC Denver. The dual degree with law combines study on UC Denver's Downtown Campus and in the CU Boulder Law School. Interested students should consult the college Web site for additional information regarding these options. Overall, applicants to any dual option must apply to and gain separate admission to each degree program. Once admitted the student can graduate from neither until the work is completed for both degrees. Synergies enable a significant reduction in both the time and credit required to complete these pairings than would be needed if each were separately pursued. If the student should opt to drop either member of the dual set, he/she must then fulfill the stand-alone requirements of the remaining degree.

## **Independent Study and Internships**

MURP students may take up to 6 semester hours of independent study, after first assembling a plan of study with a member of the regular faculty. In addition, up to 3 semester hours of

internship may be applied to the 51-semester-hour program. Independent study entails individual study and research under the personal direction of a regular faculty member. Such study may at times underpin subsequent thesis work, as previously described. It is assigned a letter grade on completion. Internships are a different matter. These entail a “contract” for up to three semester hours of study, that involves a regular faculty member, the student and an area employer. Students contemplating internship work should secure the appropriate “contract” template from the college office, prepare a synopsis of the intended work, secure a faculty mentor, gain his/her approval for the project and then secure the signatures of all three participants, providing a copy of this document to both the mentor and the employer. The employer will subsequently prepare an evaluation of the student’s performance—using the appropriate evaluation form also to be secured from the college office—when the work is completed and submit this to the faculty mentor who will then assess the overall effort, review all “deliverables” on which the student may have worked, and then finally, assign a mark. Internships are grades pass/fail.

## **Certificate Programs**

The college offers official certificate programs in design build, geospatial information science and historic preservation. Consult our Web site for details on each of these. The first is more attuned to the requirements of architectural students, whereas the latter two could suffice—with the approval of the department chair—as a basis for a concentration satisfying the MURP concentration requirement. Some students may wish to augment their 51 semester MURP with additional course work in order to complete any one of these certificate programs.

# **College of Arts & Media**

## **Dean**

David Dynak

## **Associate Dean**

Joann Brennan

Clark Strickland

## **Contact**

### **Advising Office**

Arts Building, 177

### **Mailing Address**

College of Arts & Media

1150 10th Street  
303-556-2279  
Fax: 303-556-2335  
<http://cam.ucdenver.edu>

Campus Box 162  
P.O. Box 173364  
Denver, CO 80217-3364

## Application Deadlines

### MEIS Department:

April 1

### Other Departments:

Priority Deadline

*Fall*—July 22

*Spring*—December 1

*Summer*—May 3

*At the College of Arts & Media we believe that the arts are essential for us to express ourselves, know ourselves and understand the world around us. You'll find a variety of students in our programs. Many are from the Denver area, while others come from around the country and around the world. Some are seeking their first degree, others a career change, many others personal growth and enrichment. Our programs emphasize artistic excellence, whether in visual art or multimedia studies, theatre, film or music. We incorporate real-world knowledge in the classroom and provide that same experience for our students. Convocations with arts professionals, lectures and workshops by visiting artists, internships with start-up entertainment companies and other challenging opportunities let students test the theories while learning about and understanding the dynamics of their chosen profession. We've also established cooperative relationships with civic groups, regional arts agencies, museums, galleries, performance venues, public schools and community colleges, professional societies and the business community.*

## College Goals

1. The College of Arts & Media aims to instill, inspire and model creativity founded upon the accumulated knowledge of human civilization.
2. The college serves as an intersection of art, technology and commerce.
3. The college seeks to develop the artist committed to social responsibility and the citizen who will advocate for the role of the artist in society.
4. The college strives to become a center of cross-cultural exchange and understanding.
5. The college works to enrich the quality of life in the larger community, to foster community partnerships and to encourage mentorship.

6. The college aims to integrate interdisciplinary modes of learning and creating.
7. The college adapts to meet future needs of diverse student constituencies.

## **Programs**

### **Declaring a Major/Minor**

All undergraduate degrees offered through the College of Arts & Media are comprised of 120 semester hours. Students must choose a major. Minors are not required.

Some majors require students to select a degree plan (BA or BFA) and an emphasis (see list of programs in At A Glance: College of Arts & Media (Don't use)). Additional information regarding the differences between a BA and BFA degree are noted here. Information about specific emphases is available on the departmental Web sites (see <http://cam.ucdenver.edu>).

Students may choose to pursue a double degree, double major, double emphasis or minor which may result in the student needing more than 120 semester hours to graduate. Students should consult a CAM advisor for additional information.

### **Minors**

The departments within the college have developed a variety of minors. A minor is not required for graduation. Students interested in completing a minor should contact the individual departments regarding requirements. A minimum of 12 semester hours in residence is required for all minors. Within each departmental section of this chapter, we list the specific requirements for minors.

Students are not required to have a minor to graduate. Students may choose to declare a minor within CAM or through another college/school within the university. Students wishing to declare a minor in CAM should consult with a CAM advisor for details. This may require more than 120 semester hours to complete both a major and minor.

### **Double Emphases**

Students may graduate with more than one emphasis within their degree and major by completing all requirements for each emphasis (e.g., BFA in fine arts with emphases in sculpture and photography). This may require more than 120 semester hours to complete the requirements.

### **Double Majors**

Students may graduate with more than one major within CAM by completing all requirements for each major (e.g., a BA with a major in fine arts, art history emphasis AND a second major in theatre, film and television). This may require more than 120 semester hours to complete the requirements.

## **Double Degrees**

Students may earn two degrees in the College of Arts & Media (e.g., BFA in art and BA in theatre) or from two different schools or colleges within the university (e.g., BS in music and a BS in physics) simultaneously by fulfilling all requirements for both degrees. Students must complete a minimum of 150 semester hours applied toward the two degrees.

## **Second Degrees**

Students who have been awarded a bachelor's degree may be granted a second bachelor's degree provided that (a) all general requirements for that degree have been met; (b) the degree plan for the second bachelor's degree is different from the major for the first; and (c) the college and major department residence requirements are satisfied. A second degree from the college requires a minimum of 30 additional semester hours of credit.

## **Scholarship Opportunities**

Students are encouraged to review scholarship opportunities provided by CAM and the university. Information about specific scholarships and how to apply is available on the CAM Web site (<http://cam.ucdenver.edu/advising>) and through the university's Scholarship Resource Office (303-352-3608; [www.ucdenver.edu/student-services/Pages/Scholarships.aspx](http://www.ucdenver.edu/student-services/Pages/Scholarships.aspx)).

## **Facilities**

### **Music Recording Core (Arts Building Facilities)**

- five recording studios (including one in the King Center able to record from all performance areas) with analog, digital and hybrid technology. Consoles have been used to record the Beatles, U2, AC/DC, Pink Floyd and others.
- Pro Tools in every studio, plus a 22-station computer lab
- three sound reinforcement systems
- mastering studio
- audio forensic station

### **King Academic and Performing Arts Center**

- a 520-seat concert hall large enough to accommodate a full symphony orchestra yet intimate enough for chamber performances
- the 350-seat Courtyard Theatre where seating rotates for three theatre configurations
- a 200-seat recital hall, a classic "shoebox hall" offering a warm, simple music space designed to encourage a direct relationship between performer and audience
- fully accessible, including the catwalks

## Visual Arts (Arts Building)

- photography labs with black-and-white, non-silver, digital imaging and color capabilities
- sculpture lab with wood shop and bronze-casting facilities
- slide library with more than 70,000 slides and a growing digital image bank
- drawing and painting studios with 12-15 easels for small class sizes

## Digital Production Studios (Eighth Floor, CU-Denver Building)

These new computer labs, recording studios and studio spaces provide state-of-the-art equipment and a place where the lines between artistic fields blend into interdisciplinary thought and practice.

- Digital Animation Center computer labs
- digital imaging labs
- large format, color printing
- surround sound and audio sweetening studios

## Requirements for Admission to the College of Arts & Media

A student matriculating in the College of Arts & Media (CAM) must be admitted at three levels: (1) as a student of UC Denver, (2) as a student in CAM and (3) as a student within a CAM major, degree and emphasis. Acceptance to majors, degrees and emphases within the College of Arts & Media is highly selective based upon a variety of factors, which may include:

- careful evaluation of secondary school records, which may include recommendations from guidance counselors, advisors, teachers and others
- scores on standardized tests
- creative review in the form of an audition, portfolio review or other

Formal acceptance into specific degree programs may be contingent on successful academic and creative work, assessed following completion of foundation courses within the major.

## Overview

- Students may enter the college as an undecided arts and media student or may indicate their intended area of study.
- Students may be accepted on a provisional basis for specific programs, with full acceptance pending satisfactory completion of foundation course work and successful review by departmental faculty.
- The application is based on two parts: academic and creative/artistic.
  1. Admissions evaluates the academic component.
  2. In addition, undergraduate programs at CAM may require an incoming artistic/creative assessment such as an audition, portfolio review or an entrance interview.

- Artistic/creative review is conducted by the appropriate department or program (see specific programs for details). Both the academic application and the artistic/creative review are evaluated as a whole to determine admission and must be completed before an admissions decision can be made. Creative material should be mailed directly to the specific department or program. No admissions decision will be made until the candidate's file is complete and the department has forwarded artistic/creative review results to the Office of Admissions.
- Some departments/emphases have sophomore proficiencies prior to students declaring specific emphases. Please read through this chapter of the catalog for additional information.

## **New Freshmen**

New freshmen must meet the university entrance requirements as outlined in the Information for Undergraduate Students chapter of this catalog in addition to appropriate artistic reviews/assessments as outlined in this chapter of the catalog.

## **New Transfers**

New transfers must meet the university entrance requirement as outlined in the Information for Undergraduate Students chapter of this catalog in addition to appropriate artistic and academic reviews/assessments as outlined in this chapter of the catalog.

## **Admission to the MEIS Department**

Acceptance into the UC Denver Department of Music and Entertainment Industry Studies (MEIS) is on a competitive basis with specific entrance evaluation requirements. Admission to the music major is competitive for both freshmen and transfer students. All applicants will be placed in an enrollment pool, and admissions decisions will be based upon several factors which include an indexed composite score of cumulative GPA, Music Aptitude Exam score and an audition (if applicable). Application materials must be received by the deadline—no late applications will be considered.

Prospective students should refer to the MEIS Web site for current requirements, deadlines and procedures: <http://cam.ucdenver.edu/meis>.

### *Notes:*

- Please be aware that neither the university nor CAM returns creative materials and will not assume any liability or responsibility for original materials submitted by an applicant that are lost or damaged while in its possession.
- Candidates are urged to complete and file their applications as soon as possible. Applicants will be notified promptly if additional information is required. No admission decision will be made without complete information.
- Courses reach maximum enrollment quickly; students are encouraged to apply early.

## **Intra-University Transfer**

Students who want to transfer to the College of Arts & Media from another college or school within the university must formally apply to the College of Arts & Media and pass appropriate reviews/assessments as outlined in this section of the catalog. To be considered for admission, students must have a minimum 2.5 cumulative CU GPA.

## **Transfer of Major Within the College of Arts & Media**

Undergraduate students who wish to transfer from one department to another within the college must currently be in good academic standing, pass appropriate reviews/assessments as outlined in this section of the catalog and notify the CAM advising office by submitting a change of major form.

## **Additional Program-Specific Admission Requirements**

### **Music Major Entrance and Sophomore Review Requirements**

All entering freshmen and transfer students applying for admission to the BS in music must submit additional materials. Students wishing to pursue an audition-based emphasis (i.e., performance, music business or recording arts) must successfully complete a music audition at time of application to the university. Students applying for the music industry studies emphasis must complete an audition deferment form, which allows students to postpone their audition until completing foundation course work in performance and musicianship. Audition information and the audition deferment form are available at <http://cam.ucdenver.edu/meis>.

The BS in music with an emphasis in recording arts and MIS-music technology permits provisional program acceptance only, pending completion of sophomore-level review, including foundation course work, entrance examination, formal application and acceptance by departmental faculty. Students will not be allowed to take upper-division audio production courses unless they have been formally accepted into the emphasis/focus. Please visit <http://cam.ucdenver.edu/advising> or contact us at [CAMadvising@ucdenver.edu](mailto:CAMadvising@ucdenver.edu) for additional information.

Students who wish to pursue the BS in music with an emphasis in performance must pass a sophomore proficiency on their primary instrument prior to being able to declare the emphasis and beginning advanced applied music courses.

### **Theatre, Film and Television Major Entrance and Sophomore Review Requirements**

All entering freshmen and transfer students planning to pursue a BA or BFA in theatre, film and television must review the program orientation and submit the last page (available at: <http://cam.ucdenver.edu/tfvp>).

# Academic Advising

## Office of Advising and Student Services

**Location:** Arts Building, 177

**Telephone:** 303-556-2279

**Fax:** 303-556-2335

**E-mail:** CAMadvising@ucdenver.edu

**Web site:** <http://cam.ucdenver.edu/advising>

The college's Office of Advising and Student Services is the main information center for CAM. The role of advisors is to assist students in tracking their academic progress, discuss remaining requirements and course sequencing and offer appropriate referrals to faculty and other university programs (e.g., Career Center). The office also coordinates student notifications (e.g., Dean's List, probation/suspension, scholarship opportunities) and college events (e.g., Open House, commencement, orientation) and maintains advising-related materials. Academic advising is a service provided to students, therefore students are ultimately responsible for their academic progress.

Academic advising may be mandated or suggested prior to registration depending on the student's status. All new freshmen and transfer students are required to meet with an academic advisor prior to registering for their first semester of courses. Continuing students are encouraged to meet with an advisor annually and may be required to meet with an advisor prior to registration. Continuing students who have a registration block placed on their account by the advising office will be notified in advance (via e-mail to the university-issued e-mail address, per university policy). Students can check for registration blocks from their advising office as well as other university offices (e.g., financial aid, bursar, admissions, etc.) by clicking on the "Reg Status" tab on the SMART system. Advising related information can be found at <http://cam.ucdenver.edu/advising>.

## New Freshmen

All new freshmen are required to attend new student orientation where they will:

- take the Accuplacer exam (if required)
- learn about the university
- attend the CAM session about the arts and entertainment industry

Information about new student orientation will be mailed to students and is available at [www.ucdenver.edu/NSO](http://www.ucdenver.edu/NSO) or by calling 303-352-3520. Students are encouraged to register for the earliest orientation they are able to attend.

## Second Semester Freshmen and Undecided Students

Freshmen and undeclared arts and media majors are assigned to the Academic Success and Advising Center. ASAC introduces students to university and college policies and explains core and basic degree requirements. These students are required to meet with an advisor prior to

registering each semester. Students are encouraged to bring a sample schedule to their advising appointment. An online planner is available through the *Web Schedule Planner* ([www.ucdenver.edu/registrar](http://www.ucdenver.edu/registrar)).

### **Academic Success and Advising Center**

**Location:** North Classroom, 1503

**Telephone:** 303-352-3520

**E-mail:** [AAC@ucdenver.edu](mailto:AAC@ucdenver.edu)

**Web site:** [www.cudenver.edu/asac](http://www.cudenver.edu/asac)

## **New Transfers**

Transfer is a two-step process.

1. The Office of Admissions will evaluate the student's transfer transcript(s) and determine an initial set of courses to be transferred. Admissions will mail a copy of this transfer evaluation to the student.
2. CAM advisors and faculty determine how these courses fit into the student's degree plan, course by course. Students should contact a CAM advisor to complete this process by calling 303-556-2279. Students may be referred to the faculty for review of courses within the major.

If certain courses are not initially accepted by the Office of Admissions, the student and advisor can discuss the petition process for accepting these courses. If the student's petition is approved, the advising office will request that the Office of Admissions accept the course(s) in transfer.

## **Continuing Students**

Students with a declared major who have completed at least 30 semester hours are assigned to the college's Office of Advising and Student Services. Please see top of the Academic Advising section for contact information and location.

Students are encouraged to meet with an advisor at least once per year. Students are encouraged to bring a sample schedule to their advising appointment. An online planner is available through the *Web Schedule Planner* ([www.ucdenver.edu/registrar](http://www.ucdenver.edu/registrar)).

Periodically, students may have a block placed on their registration by the Office of Advising and Student Services, which requires students to meet with a CAM advisor prior to registering. The advising office will notify students via e-mail to the university-issued e-mail address, per university policy, if a registration block has been placed by the advising office. As other offices may also place a block on a student's registration, students are encouraged to check their "Reg Status" on the SMART system and resolve any registration blocks through the appropriate office prior to their registration date/time.

Students approaching their junior and senior years are encouraged to meet with a faculty mentor in their area of study to discuss internships, career/employment opportunities, graduate school, professional organizations and other post graduation information. Faculty contact

information is available on the CAM Web site: <http://cam.ucdenver.edu>. Students also may contact the Office of Advising and Student Services for suggested faculty referrals by interest.

## **Academic Policies**

Students are referred to the Registration and Records and the University Policies chapters of this catalog for academic policies that apply to all undergraduate students at the university. The policies that follow apply specifically to the College of Arts & Media.

## **Academic Policies Committee**

The CAM Academic Policies Committee is the appellate committee for all student-related academic petitions, issues and appeals. The committee is responsible for the evaluation and interpretation of the approved academic policies of the college. Questions about interpretation of policies may be directed to the Office of Advising and Student Services. Procedures and petition guidelines are available at <http://cam.ucdenver.edu/advising/forms> or from the Office of Advising and Student Services.

## **Dean's List**

Following each semester, the college honors students who have earned a place on the CAM Dean's List. This honor is transcribed following each semester the student earns placement on the Dean's List.

To earn a place on the list, a student must:

1. Be registered for at least 9 CAM semester hours (for fall and spring semesters; 6 CAM semester hours in summer), not including internship, independent study or extended studies
2. Achieve a 3.75 GPA in all CU hours taken during the semester

## **Graduating with Academic Honors**

A student can be awarded honors based upon cumulative GPA at the time of graduation. To be eligible for honors, a student must have completed a minimum of 45 semester hours at the University of Colorado (on any CU campus). A cumulative CU GPA of 3.65-3.749 will receive *cum laude*, 3.75-3.849 receive *magna cum laude* and 3.85 and above *summa cum laude* honors designations on degrees.

## **Academic Probation and Scholastic Suspension**

Students in the college are expected to maintain appropriate progress in their degree program, as defined by being in "good academic standing." Good academic standing requires minimally a cumulative GPA of 2.0 on all University of Colorado course work. Grades earned in another college or school within the University of Colorado system are used in determining the student's

scholastic standing and progress toward the degree. Grades earned outside the CU system are not used in calculating the GPA at the University of Colorado.

## **Academic Probation**

Academic probation is a warning to students that they are not progressing toward completion of their degree in a satisfactory manner. Students are placed on academic probation when their cumulative CU GPA falls below a 2.0 at the end of any academic term. Students are informed in writing of academic probation. Academic probation requires that the student achieve a minimum 2.25 semester GPA each subsequent term until their cumulative CU GPA is at least a 2.0. Once a student has raised the cumulative CU GPA to at least a 2.0, he or she will be removed from academic probation and be considered in good academic standing. There is no restriction on the length of time students can remain on probation status; however, students must achieve a minimum 2.0 cumulative CU GPA to meet graduation requirements.

## **Academic Suspension**

Students on academic probation who do not meet the 2.25 minimum semester GPA in the subsequent semester(s) will be suspended from the college. Students are informed in writing of academic suspension. Students placed on academic suspension are not allowed to register for courses at the university (see the following paragraphs for details). Should a student be placed on suspension while registered for the next semester, he or she will be dropped from courses by the college. A student's suspension status is permanently indicated on the official University of Colorado transcript.

## **First Suspension**

Students who fail to meet the conditions of academic probation are placed on academic suspension for one calendar year. Students must petition the Academic Policies Committee for readmission and meet and document at least one of the following criteria:

1. Attend another regionally accredited college/university and raise their cumulative GPA (CU GPA + GPA from the other institution) to a minimum of 2.0. Students must reapply to the university and petition the Academic Policies Committee for re-acceptance.
2. After one year, reapply to the university and petition the Academic Policies Committee demonstrating how they will achieve and maintain good academic standing (including a semester GPA of at least 2.25 and a cumulative GPA of at least a 2.0).

Students granted readmission, whose CU GPA is below a 2.0, will be readmitted on probation. These students must meet the condition of academic probation each and every semester until their cumulative CU GPA is at least a 2.0.

## **Second Suspension**

Students who are reaccepted after first suspension and fail to meet the conditions of academic probation for a second time are placed on second suspension for an indefinite period of time.

Students on second suspension may be readmitted to the college only by petition to the CAM Academic Policies Committee. Students will not be considered for readmission unless they have demonstrated significant improvement in academic performance at the college/university level.

## **Independent Study**

The College of Arts & Media has very specific policies concerning eligibility and registration for independent studies. Students should consult the CAM advisor or their faculty advisor for specific eligibility criteria and registration procedures. The amount of credit to be given for an independent study project shall be determined at the time of registration. The college and academic programs have specific policies on the use of independent study credits that may apply to the bachelor's degree. A maximum of 12 semester hours of independent study may apply toward the bachelor's degree and cannot be used to replace a required course. Please see <http://cam.ucdenver.edu/advising/forms> for additional information and appropriate paperwork. Independent study must be added by the add/drop date as noted on the academic calendar.

## **Internships**

As internships are an important educational and professional experience, students are encouraged to explore the possibility of an internship. A maximum of 3 hours of internship credit per semester and 9 hours overall is allowed. Internship credit may not be awarded retroactively nor after the student begins internship hours. Students should consult with an academic advisor as to the placement of internship credit within their degree plan.

The college requires that students have the following to qualify for an internship:

- completed 60 semester hours
- attained junior standing in their program
- have a minimum of a 2.75 cumulative CU GPA

Certain academic programs may have additional eligibility requirements for an internship. Students seeking an internship should consult with their academic advisor, the Experiential Learning Center and their faculty mentor. Additional information is available at <http://cam.ucdenver.edu/advising>. Internships must be added by the add/drop date as noted on the academic calendar. Occasionally opportunities arise mid-semester; students must petition the associate dean for approval to add an internship after the add/drop deadline.

## **Incomplete Grade Policies**

The College of Arts & Media has very strict guidelines on granting incomplete grades. They include but are not limited to the following:

- reason for incomplete must be a verified, compelling and extraordinary circumstance beyond student's control which made completion of the course impossible
- the majority of course requirements (75 percent) must have been completed with a passing grade to be eligible for incomplete (C/2.0 for major/minor courses and select courses in the core; D-/0.7 for most core and general elective courses)

- CAM course completion agreement must be signed by both the instructor and student, with final approval by the associate dean
- all course work must be completed within one calendar year of the original course: NO EXCEPTIONS
- requests for a retroactive change from a letter grade to an incomplete will not be considered

The student is responsible for requesting an incomplete grade and submitting all of the appropriate paperwork and obtaining approvals. Please visit <http://cam.ucdenver.edu/advising> for additional information and appropriate paperwork.

## **Leave of Absence/Returning Students**

Students who have not attended the university for more than one calendar year should refer to the “Readmission Requirements for Former Students” within the Information for Undergraduate Students chapter of this catalog. Due to the dynamic nature of the CAM program, students who have not attended in more than five years must meet all of the above criteria and begin their programs based on the current curriculum. For additional information about your specific situation, please consult a CAM advisor.

## **Curricular Changes and Course Substitutions**

Students are required to complete the core and major requirements as outlined when they declared their degree, major and emphasis and were accepted into the program. If the program revises curriculum, students have the option of remaining with their original program. Occasionally, there are times when courses in the original program may no longer be taught or may not be available for a set duration. In this case, the department will approve course substitutions.

Course substitutions in the major must be approved by the designated faculty member in the specific program area, the department chair and possibly by the associate dean. Course substitutions in the core must be approved by the Academic Policies Committee through the petition process (see <http://cam.ucdenver.edu/advising> for additional information).

Students who switch majors (e.g., BS in music to BA in theatre, film and television) are required to complete the curriculum in place when they declare their new degree or major. Students who switch degrees within the same major (e.g., BFA in fine arts to BA in fine arts) will be required to complete the curriculum that is in place when they declare their new degree. Students who switch emphases within a degree and major may use either the curriculum that was in place when they were accepted into the major or the current requirements.

## **Graduation Applications**

Students expecting to graduate are required to fill out the online intent to graduate form ([www.ucdenver.edu/Registrar](http://www.ucdenver.edu/Registrar)) by the published deadlines. Late applications will not be accepted, and the student will need to apply for the following semester.

Applications will be accepted from the first day of registration for the semester in which the student plans to graduate through the drop/add deadline (census date) of the semester. Applications are due by 5 p.m. on census date of the semester in which the student is applying to graduate as noted in the academic calendar ([www.ucdenver.edu/Registrar](http://www.ucdenver.edu/Registrar)). Students are required to meet with the CAM advisor the semester before they intend to graduate to review graduation procedures and updated degree plan for review by the department and college.

Students who have not attended the university in more than one calendar year must reapply to the university in addition to applying for graduation. Reacceptance to the university must be processed by the application for graduation deadline. It is the student's responsibility to ensure that they reapply with enough time for the application process to be finalized by the aforementioned deadline.

## **Graduation Requirements**

Students must complete all core and major requirements in addition to degree and department requirements. This section lists the general requirements for graduation and the core requirements in addition to information about applying to graduate. Please refer to the specific department and emphasis sections for additional requirements.

- minimum of 120 semester hours passed
- fulfillment of major degree requirements
- fulfillment of both intellectual competencies and knowledge areas in the core (general education)
- for BA and BFA degrees: A minimum of 45 semester hours of upper-division course work (3000/4000 course level)
- a cumulative GPA of 2.0 in all CU course work
- a minimum of C (2.0) in all course work in the major
- a minimum of 30 semester hours of resident credit

## **General Degree Requirements**

### **Office of the Dean**

### **Office of Advising and Student Services**

**Dean:** David Dynak

**Associate Dean:** Joann Brennan

**Office:** Arts Building, Suite 177

**Telephone:** 303-556-2279

**E-mail:** [CAMAdvising@ucdenver.edu](mailto:CAMAdvising@ucdenver.edu)

**Web site:** <http://cam.ucdenver.edu/advising>

**Office Hours:** Monday–Friday, 8 a.m.–5 p.m.

## **General Information**

### **I. Academic Advising:**

- Academic advising is available throughout the year, and students should meet with an advisor at least once a year.
- All new students **MUST** meet with an advisor before registering to review degree requirements and place any transfer credits.
- Freshmen and undeclared students are assigned to the Student Success Center in North Classroom, 1503 (303-352-3520).
- **Transfer students and declared CAM majors with 30+ semester hours are assigned to the CAM Advising Office (see above).**
- Students should try to create a plan before seeing an advisor using the Course Schedule Planner.
- All CAM majors will have an advising STOP placed on their registration periodically throughout their academic career that will be lifted upon meeting with an advisor. Students will be notified, in advance, of the stop via e-mail.

## II. Registration Information:

- The Course Search and Schedule Planner is available online through the Registrar's Web site.
- Students are encouraged to register as soon as possible. Registration date and time, and any registration blocks, can be viewed through the SMART system (under "Reg Status").

## III. Graduation Information:

Students must apply to graduate online by the beginning of their last semester. Deadlines will be published in the academic calendar available online through the Registrar's Web site.

## Degree Requirements

### General Requirements:

- minimum of 120 semester hours passed
- fulfillment of major degree requirements
- fulfillment of all core (general education) with minimum required grade (see list)
- for BA and BFA degrees: a minimum of 45 semester hours of upper-division course work (3000/4000 course level)
- a cumulative GPA of 2.0 in all University of Colorado course work
- a minimum grade of C (2.0) in all course work in the major
- a minimum of 30 semester hours of resident credit

## Departments and Programs

# Theatre, Film and Video Production

**Office:** Administration Building, 210

**Telephone:** 303-352-3883

**Fax:** 303-556-2335

## Faculty

### Professor:

David Dynak

### Associate Professors:

Laura Cuetara

Kent Homchick

Dan Koetting (Chair)

### Assistant Professors:

David Liban

Jose Mercado

Hans Rosenwinkel

Nate Thompson

Craig Volk

### Senior Instructor:

Carol Bloom

### Instructor:

Janetta Turner

## Department Overview

The Department of Theatre, Film and Video Production prepares students for advanced degree programs in graduate schools as well as careers in theatre and/or film, television and video, within the context of a strategically designed liberal arts education. The department offers courses in the disciplines of theatre (THTR) and film/video (FILM) through an innovative curriculum built on a shared foundation of integrative courses, as well as specialized advanced courses.

Students also have the opportunity to work directly with faculty, guest artists and fellow students in the creation of live and recorded performance works through participation in the department's production program of plays, films, television and video projects, and through co-requisite laboratory experiences. Denver-area theatre productions, artist residencies, film screenings, lectures, concerts, exhibits and other cultural resources of the metropolitan area are regularly utilized throughout each student's course of study.

Students wishing to earn degrees in theatre, film and television from the University of Colorado Denver may choose from three four-year program options:

## **BA/BFA Program Options**

A detailed description of the difference between the BA and BFA degree requirements are available in the table: [What's the difference between the BA and BFA degree ?](#)

## **Bachelor of Arts in Theatre, Film and Television**

The BA is designed for students who are interested in multiple aspects of theatre, film and television and for students who are transferring with advanced standing. The BA degree has an integrated sequence of courses in both theatre and film. After completion of the foundation sequence, students choose from either a wide range of electives or a concentration of courses in one area to complete their BA degree.

## **Bachelor of Fine Arts in Theatre, Film and Television with Emphases in:**

**Design**

**Direction and Production Development**

**Performance**

**Writing/Directing\***

*\*This emphasis has a stronger concentration on film and television*

For a limited number of students with exceptional abilities, desire and qualifications, the department offers a rigorous and structured BFA. The BFA program goal is to provide training at a professional skill level while implementing overall departmental goals. This program prepares students to begin their careers with entry-level positions in their areas of study, start their

personal creative work or continue their studies in a graduate program. Majors will take a series of courses in the foundation sequence. Upon successful completion of the foundation courses and the demonstration of competence and potential through the interview/audition process in their desired area of focus, students then specialize with more intensive course work and production activities in the BFA program. This intensive work culminates with a comprehensive review that requires the successful completion of a portfolio and/or thesis project for a degree.

## **Admission Procedures and Incoming Assessment Criteria for BFA**

The first step for students is to apply to the university and be accepted into the BA program as either a theatre or film major. After their third semester and satisfactory completion of foundation sequence courses in theatre, video/television and film, qualified students are able to audition/interview for admittance into the BFA program.

*Assessment for admission to the BFA program includes the following evaluations:*

- *GPA.* As per departmental requirements.
- *Department Interview.* An interview with each student by members of the TFVP faculty is required. This interview is to ascertain that the student's aspirations and expectations are related to those of the programs.
- *Diagnostic Exam and Essay.* Students are required to take an objective exam and write an essay on material covered in the foundation sequence courses.
- *Resume.* (To include theatre/film/video work experience and education to date)
- *Successful completion of first and second year foundation sequences.* Foundation course work is in the following areas: performance techniques (acting, movement, voice), camera work, scriptwriting, production design, management, film and theatre history and aesthetics, directing, producing, technical theatre and film and video production work.
- *Development and successful presentation of a portfolio of the student's work to date.* Upon completion of the foundation sequence, or after transfer, faculty will review each student's classroom, studio, and production work. Faculty will also take into consideration testing and performances and will review resumes and portfolios, conduct year-end interviews and, based upon successful achievement, formally admit qualified students as BFA majors.

## **Transfer Students**

Transfer students are considered on a case by case basis—however, a minimum of at least one semester “residency” in the BA program is required before students can participate in an audition/interview for possible admittance into the BFA program. Admission to the BFA course work is only in the fall semester. (Successfully completing course work and passing the diagnostic exam and essay is required during the “residency” period.)

## **Admission Deferment**

Students admitted to the BFA program may defer their admission for one year, to the fall semester of the academic year following their original admission to the program. Students who wish to defer their admission must contact the TFVP office as well as the Office of Admissions to confirm their deferment. Students must fully reapply to the TFVP department after the permitted deferment period has passed.

## **BFA Curriculum**

Students entering in fall 2008 who desire the BFA program will enter as BA students as per above. The BFA curriculum for the following year is currently under revision. For most current information please check the TFVP Web site or contact the department office at 303-556-6352.

## **Bachelor of Fine Arts in Theatre, Film and Television: 2+2 Program with Emphases in:**

### **Cinematography**

### **Post-Production (Editing and Special Effects)**

### **Production and Writing and Directing (For Film and Television)**

The Colorado Film School is a unique partnership between the University of Colorado Denver and the Community College of Aurora (CCA) that allows students to begin their studies at CCA and then transfer to UC Denver to complete their studies. Students transferring into UC Denver in fall 2008 who desire the BFA program will enter as BA students as per above. If accepted into the BFA program in spring 2009, the curriculum current for 2008 will apply. For most current information please check the TFVP Web site or contact the department office at 303-556-6352.

This program is nicknamed the “2+2” program, as the name denotes the typical number of years students spend at each institution. Students interested in the post-production or cinematography emphases must begin their studies at CCA.

## **Please Note**

All students in the theatre, film and video production program are required to know and abide by the policies and procedures outlined in the TFVP Student Handbook, available online at <http://cam.ucdenver.edu/tfvp>.

## **Bachelor of Arts**

# Theatre, Film and Television BA

CAM Core Requirements

## Degree Requirements

All major courses and other arts courses must be completed with a C (2.0) or better.

## Curriculum for the BA in Theatre, Film and Television

### Required Courses

- FILM 2090 - Production Management Techniques. **Semester Hours: 3**
- FILM 3820 - Production Process. **Semester Hours: 2 \***
- THTR 1100 - Introduction to Theatre, Film and Television. **Semester Hours: 3**
- THTR 1110 - Production Design: Theatre, Film and Video. **Semester Hours: 3**
- THTR 1550 - Scriptwriting I. **Semester Hours: 3** or
- FILM 1550 - Scriptwriting I. **Semester Hours: 3**
- THTR 1611 - Acting Lab I. **Semester Hours: 3** or
- FILM 1611 - Acting Lab I. **Semester Hours: 3**
- THTR 3540 - Directing: Text and Analysis. **Semester Hours: 3**
- THTR 3820 - Production Process. **Semester Hours: 2 \***
- THTR 3910 - BA Junior Project. **Semester Hours: 1** or
- FILM 3910 - BA Junior Project. **Semester Hours: 1**
- THTR 4910 - BA Senior Project. **Semester Hours: 1** or
- FILM 4910 - BA Senior Project. **Semester Hours: 1** (\*class must be taken two times)

### One of the following two are required:

- FILM 1050 - Video Production/Post-Production I. **Semester Hours: 4**
- FILM 1060 - Camera/Multi-Media Production. **Semester Hours: 3**

### Two of the following four are required:

- ENGL 3070 - History of Silent Film. **Semester Hours: 3**
- ENGL 3080 - History of Sound Film. **Semester Hours: 3**
- THTR 3610 - Performance: Theory/History/Criticism I. **Semester Hours: 3**
- THTR 4610 - Performance: Theory/History/Criticism II. **Semester Hours: 3**

**Total: 37-38 Hours**

(\*is taken four times at 2 semester hours each)

## **Electives**

Choose from the following:

- ENGL 3070 - History of Silent Film. **Semester Hours: 3**
- ENGL 3080 - History of Sound Film. **Semester Hours: 3**
- FILM 3111 - Shooting Action and Physical Effects. **Semester Hours: 3**
- FILM 3222 - The Film and Video Business. **Semester Hours: 3**
- FILM 3264 - Advanced Digital Effects. **Semester Hours: 3**
- FILM 3270 - Film/Video Production III. **Semester Hours: 3**
- FILM 3275 - Film and Video Postproduction III. **Semester Hours: 3**
- FILM 3939 - Cooperative Education. **Semester Hours: 1 to 3**
- FILM 4209 - Advanced Production Management. **Semester Hours: 3**
- FILM 4270 - Film and Video Production IV. **Semester Hours: 3**
- FILM 4280 - Film and Video Postproduction IV. **Semester Hours: 3**
- FILM 4840 - Independent Study: Film. **Semester Hours: 1 to 3**
- THTR 2530 - Acting: Character and Staging. **Semester Hours: 3**
- THTR 2560 - Topics in Theatre. **Semester Hours: 1 to 6**
- THTR 2700 - Art for the Theatre. **Semester Hours: 3**
- THTR 2840 - Independent Study. **Semester Hours: 1 to 3**
- THTR 3010 - Stage and Production Management. **Semester Hours: 3**
- THTR 3530 - Acting: Character and Text. **Semester Hours: 3**

**Total: 15 Hours**

**Total for Program: 52-53 Hours**

## **Bachelor of Fine Arts**

# **Theatre, Film and Television 2+2 BFA**

CAM Core Requirements

Cinematography

Post-Production

Writing/Directing

Students first apply to the Community College of Aurora (CCA) and take the film and video technology (FVT) courses as a CCA student. Students then transfer to UC Denver to complete the upper-division FILM courses. Students must apply for transfer admission and meet all transfer requirements. All major courses must be completed with a C (2.0) or better. Students entering UC Denver in fall 2008 who desire the BFA program will enter as a BA student. The

BFA curriculum for the following year is currently under revision. For the most current information please check the TFVP Web site or contact the department office at 303-556-6352.

# Theatre, Film and Television BFA

CAM Core Requirements

## BFA Curriculum

Students entering in fall 2008 who desire the BFA program will enter as BA students. The BFA curriculum for the following year is currently under revision. For most current information please check the TFVP Web site or contact the department office at 303-556-6352.

## Non Degree

# Theatre, Film and Television Minor

CAM Core Requirements

To declare a CAM minor, see the College of Arts & Media's Office of Advising and Student Services in Arts Building, 177. Students may transfer up to 6 semester hours of non-UC Denver courses toward a minor. All other courses must be taken at UC Denver. Students pursuing a BA or BFA in the Department of Theatre, Film and Video Production may not declare a minor in theatre, film and television. Consult a CAM advisor for details. All minor courses must be completed with a C (2.0) or better.

## Program Requirements

- FILM 1050 - Video Production/Post-Production I. **Semester Hours: 4**

### One of the following (in consultation with advisor)

- FILM 2090 - Production Management Techniques. **Semester Hours: 3**
- THTR 1611 - Acting Lab I. **Semester Hours: 3**
- FILM 1611 - Acting Lab I. **Semester Hours: 3**
- THTR 1110 - Production Design: Theatre, Film and Video. **Semester Hours: 3**

### Two of the following (in consultation with advisor)

- ENGL 3070 - History of Silent Film. **Semester Hours: 3**
- ENGL 3080 - History of Sound Film. **Semester Hours: 3**
- THTR 3610 - Performance: Theory/History/Criticism I. **Semester Hours: 3**

- THTR 4610 - Performance: Theory/History/Criticism II. **Semester Hours:** 3

## **Total: 24 Hours**

## **Music and Entertainment Industry Studies**

Undergraduate Program

Graduate Program

**Office:** Arts Building, 288

**Telephone:** 303-556-2279

**Fax:** 303-556-2335

## **Faculty**

### **Professors:**

Zoe Erisman, MFA, University of Hawaii

Richard Sanders, MSEE, University of Colorado

### **Associate Professors:**

William Clark, MM, Northwestern University

Judith Coe, DMA, University of Colorado

Frank J. Jermance, MBA, University of Miami

Stan Soocher, JD, New York Law School

Gregory Walker, DMA, University of Colorado

### **Assistant Professors:**

David Bondelevitch, MFA, USC

Lorne Bregitzer, MS, UC Denver

Leslie Gaston, MS, UC Denver

Storm Gloor, MBA, West Texas A&M University

Sam McGuire, MS, UC Denver

Sean McGowan, DMA, USC

Paul Musso, MM, University of Denver

### **Senior Instructors:**

Peter Ellingson, MM, Arizona State University

Doug Krause, MA, University of Denver

Andrew Morell

**Instructors:**

Erin Hackel, PhD, University of Colorado

Karin Hauger, PhD, Virginia Tech

Shawn McNary, MS, UC Denver

Irina Moreland, DMA, St. Petersburg State Conservatory

Tom Van Schoick, MM, University of Northern Colorado

Pamela Weng, MA, UC Denver

## **Undergraduate Program**

### **Bachelor of Science in Music**

The music program at the University of Colorado Denver Downtown Campus is intended for students seeking preparation for professional careers in music related to commercial performance, recording, music business and the entertainment industries. The four year music program is accredited by the National Association of Schools of Music. There are four emphasis areas available to students: recording arts, music business, performance and music industry studies (MIS).

The specialized curricula offered by the program lead graduates to local, regional and national positions in audio research, record and production companies, arts administration and audio engineering as well as graduate studies at leading universities and conservatories. In addition, many graduates establish careers as owners of booking agencies, publishing companies, management firms and recording studios.

*Please note:* Acceptance into the UC Denver Department of Music and Entertainment Industry Studies (MEIS) is on a competitive basis with specific entrance evaluation requirements. Admission to the music major is competitive for freshmen, transfer students and minors.

All applicants will be placed in an enrollment pool and admission decisions will be based upon several factors, which include an indexed composite score of GPA, Music Aptitude Exam scores and an audition (if applicable). Application materials must be received by the deadline—no late applications will be considered.

Prospective students should refer to the MEIS Web site for current entrance requirements, deadlines and procedures: <http://cam.ucdenver.edu/meis>.

All music applicants, except those entering the music industry studies program, must pass an entrance audition on their primary instrument before being accepted into the College of Arts & Media and the MEIS department. Call 303-556-2279 for information on scheduling an audition.

Students entering the music industry studies program must submit an audition deferment form.

All students in the MEIS department are required to abide by the policies and procedures outlined in the MEIS *Student Handbook*.

The emphases in recording arts, music business and performance are audition-based programs, requiring an entrance audition on a primary instrument. These students will be expected to demonstrate a high level of musicianship as part of their curricular requirements. All three have an identical 51-semester-hour foundation requirement in musicianship and a separate 22-26 semester hour emphasis area.

## **Recording Arts**

This program studies contemporary analog and digital technology as it is used in studio recording, sound reinforcement and electronic music. While mastering the high tech, students also study the artistic applications of technology to recording, reinforcement, composition and performance. Due to the immense popularity of the recording arts program and the limited facility space, the recording arts emphasis is a competitive emphasis. Students will be required to apply to the department (known as “applying to the tech focus”) to be eligible to take the intermediate- and advanced-level recording courses. This application includes completion of a series of music courses, transcript review, exam and cumulative GPA.

## **Music Business**

This program prepares musicians for careers in such fields as artist management, music publishing, concert promotion, record production, venue management, label promotion, distribution, entertainment law and the development of skills relative to the rapidly expanding telecommunications industry.

## **Performance**

Students gain performance skills in classical, jazz, commercial and experimental music styles. The program includes specialized courses in small performance ensembles, applied study, contemporary improv and analysis, and culminates in the presentation of a junior and senior recital. Students will be required to pass a sophomore proficiency around the end of the sophomore year to progress into the advanced performance and musicianship courses.

## **Music Industry Studies (MIS)**

- This nonaudition-based degree requires a placement audition and passing a basic musicianship proficiency.

- This program is designed for students who may or may not be practicing musicians, but who intend to work behind the scenes after graduation, whether on the tech side, the business side or both.
- MIS requires credits in musicianship and performance as part of the curriculum.
- All MIS students, regardless of emphasis or previous musical experience, will be required to complete the musicianship and performance requirements. For students with no musical experience, these requirements will begin at the introductory level.
- For students interested in pursuing MIS/Tech focus, this emphasis is competitive\*, due to the immense popularity of the MIS/Tech program and the limited facility space. Students will be required to apply to the department (known as “applying to the Tech emphasis”) to be eligible to take the intermediate and advanced level recording courses. This application includes completion of a series of music courses, an essay, exam and cumulative GPA.

## **Primary Differences Between Recording Arts/Music Business and MIS/Tech or MIS Business Focus**

### **Recording Arts/Music Business**

- Recording arts and music business are audition-based degrees, meaning they require an entrance audition and a focused level of musicianship and performance as part of the curriculum.
- Recording arts and music business focuses are designed for students who intend to be practicing musicians after graduation, with a very strong knowledge of the tech or business side of the industry.
- Recording arts and music business students are required to complete more musicianship and performance-area credits than MIS/tech or MIS/business students. They will not be required to complete as many tech- or business-based electives as MIS/tech or MIS/business students (but can choose additional tech or business electives).

### **Music Industry Studies/Tech and MIS/Business**

- MIS/tech and MIS/business focuses are nonaudition-based degrees and therefore do not require an entrance audition, but a placement audition will be required.
- MIS/tech and MIS/business focuses are designed for students who may or may not be musicians when they enter, but who don't intend to be practicing musicians after graduation. Rather, they intend to focus solely on the tech or business side. These students are more interested in working behind the scenes.
- MIS/tech and MIS/business students will not be required to complete as many musicianship and performance-area credits as recording arts or music business students. They will be required to complete more tech- or business-based electives than recording arts or music business students.

Students are encouraged to consult a faculty member or CAM advisor to talk about the differences in curriculum to determine which major is best suited to them.

## Competitive Emphasis

Recording arts and/or MIS/tech students entering the College of Arts & Media will be required to complete or be completing the following courses before applying to the tech focus:

- MUS 2470. Music Applications on the Computer
- MUS 2540. Audio Production I
- MUS 2560. Audio Production II
- MUS 2700. Introduction to Music Business
- PMUS 1023. Piano Class (two semesters)  
(Piano placement is available)
- PMUS 1100. Theory I
- PMUS 1110. Ear Training and Sight Singing I
- PMUS 3830/3831. History and Literature of Music I or II

These courses also satisfy the requirements for the music industry studies minor. Students who have completed the above named courses, but who are denied acceptance to the recording arts or MIS/tech emphasis, will automatically be eligible for the MIS minor if they choose to pursue a major outside of the MEIS department.

**\*Please note that satisfactory completion of the above named courses will not automatically guarantee a student's acceptance into the recording arts or MIS/tech focus.**

Students interested in the tech focus will need to submit an application form, and this application will include the above named courses, unofficial transcripts from all previous institutions attended. Students must also take an exam covering material in audio production—test dates are announced at the beginning of the spring semester. Further, the student's cumulative GPA from all institutions will be part of the evaluation criteria. Complete information on applying to the tech focus is available online: <http://cam.ucdenver.edu/meis>.

## Graduate Program

### Master of Science in Recording Arts (MSRA)

#### Program Overview

Recording arts is a field that deals with all aspects of recorded music and sound including mixing, mastering, sequencing, calibration and reinforcement. Our program refines students' skills in sound recording, aesthetics, multitrack recording, digital signal processing, automated mixing, synchronization, stereo imaging and monitoring.

In addition, our program recognizes and includes:

**Study in the rapidly growing field of audio forensics**, which is audio for the legal field. The program includes study in tape authentication, audio enhancement, voice prints, analysis and witness testimony.

**The need for pedagogy degrees.** Pedagogy is synonymous with teaching, and this program includes a survey of available resources for audio education. We offer an interdisciplinary approach by including physics, acoustics, engineering, music, broadcast, medicine, psychology, multimedia, theatre and film/video. The program emphasizes design and development of new methods and materials.

UC Denver's master of science in recording arts (MSRA) has the only pedagogy track in the nation, as well as the only college-level course in audio forensics. This graduate degree is designed to:

- prepare students for careers in audio application for the fields of mass communications, education, arts and the entertainment industries
- help professionals advance their careers
- help prepare the music educators of the future

Students may choose between a thesis (research) or nonthesis (portfolio) option.

Graduate courses constituting the core of this study will advance the artistic, pedagogical, technical and problem-solving abilities of the enrolled students. Elective courses will allow each student to develop an additional skills and knowledge in related areas including film, broadcasting, education, music business and the performing arts.

We encourage students from allied disciplines (music, physics, engineering, etc.) to apply. Students are not required to have their bachelor's in recording arts—the student's bachelor's degree can be from any discipline. They can qualify for the MSRA by having the equivalent level preparation (e.g., work experience). Candidates without sufficient experience/training in recording arts may be required to take preparatory courses at the undergraduate level.

### **1. Graduate Admissions Application—Parts I and II**

Students may request an application packet by calling 303-556-2279. Please be sure to provide your mailing address.

Students are required to complete the application for graduate admissions form.

Program of study—on the application, the code for all master of science in recording arts candidates is GR-RAMS. The degree is MS.

International students must complete additional paperwork in addition to the components below. International student applications must be received six months prior to the term for which the student is applying. Contact the Office of International Affairs for specific application forms, [www.internationaladmissions.cudenver.edu](http://www.internationaladmissions.cudenver.edu).

### **2. In-State Tuition Classification Application**

Students who feel they may qualify for Colorado in-state tuition (i.e., residency) should fill out the in-state tuition form. *The Office of Admissions will make the determination of residency.* For information on residency criteria contact the Office of Admissions, 303-556-2704 or [admissions@ucdenver.edu](mailto:admissions@ucdenver.edu).

### 3. Entrance Examinations(s)

Official GRE scores ([www.gre.com](http://www.gre.com))—All applicants to the MSRA degree program must submit scores from the GRE. The “General Test” offered by Educational Testing Service will assist in evaluating applicants to the degree program. It evaluates verbal, quantitative and analytical writing skills for the candidates. This examination is offered internationally by Educational Testing Service on a continuous schedule. The minimum required score for entrance in the program is the 50th percentile, although each student’s score will be evaluated as part of complete application process. This examination is not intended to exclude any applicant from the degree program, but rather to assist in academic advising.

Scores must be received by the application deadline; therefore, students should plan accordingly when scheduling their testing dates. Late GRE scores are not accepted, and these applications will not be reviewed.

**Test of English as a Foreign Language (TOEFL)** ([www.ets.org/toefl](http://www.ets.org/toefl))—This examination is required for international students for whom English is not their primary language. These students are required to have a minimum TOEFL score of 500 (173 electronic).

### 4. Transcripts

The most recent *official* academic transcripts must be sent from the registrar of all previous institutions. Official transcripts should be mailed to:

MSRA Graduate Admissions Committee  
Campus Box 162, P.O. Box 173364  
Denver, CO 80217-3364

### 5. Letters of Recommendation

Three (3) letters of recommendation are required from responsible persons who can attest to your academic and professional accomplishment. The names those who are providing your letters of recommended should be included in your Part II of the application.

Letters of recommendation must be accompanied by the letter of recommendation form, available on the MSRA Web site (<http://thunder1.cudenver.edu/musictech/masterdegree/>).

Incomplete letters of recommendation will not be considered, and the application will not be reviewed.

### 6. Application Essay

This essay should summarize the educational and professional history of the applicant relative to a career in the audio/music industry, and should include:

- complete name and contact information
- educational background
- career objective
- anticipated dates of attendance

The essay must be typed, double-spaced and in English; the preferred length is three to five pages.

### 7. Resume

Students are required to submit a one- to two-page typed resume, including educational background, work experience and relevant skills. Students are welcome to include any

published works, exhibitions, performances, awards or other relevant achievements. The resume should be chronological, beginning with your educational background and progressing to your employment history. Please refrain from functional resumes or those that simply summarize qualities or competencies. This professional vita complements the essay you will author by providing a chronology of all your educational and work experiences and of scholarly/creative work.

### **8. Portfolio**

All applicants will submit a portfolio of recordings that represent their best accomplishments in audio production. Presentation, breadth of experience, technical and artistic quality will be evaluated.

The required submission format is Compact Disc (CD) or Digital Video Disc (DVD), with an annotated discography (index) to the portfolio material and a clear and accurate labeling of all material. Discography *must* include the applicant's function on each track (e.g. artist/performer, engineer, producer, arranger, etc.).

A DVD portfolio may be submitted if the student's primary experience is in visual media (film, TV, etc.). DVD portfolios must also contain an annotated discography.

Helpful tips for a good portfolio are available on the MSRA Web site. Portfolio submissions that do not follow these guidelines will not be evaluated, and the application will not be processed.

### **9. Application Fee**

\$50 nonrefundable for domestic (within the USA) applicants

\$75 nonrefundable for international applicants

The application fee must be paid with a check, money order or by credit card. Cash will not be accepted. The fee must be paid in U.S. dollars.

**Applications that do not include all of the requirements listed above or that include partial components are considered incomplete and will not be reviewed.**

## **Bachelor of Science in Music**

# **Music BS**

CAM Core Requirements

## **Undergraduate Degree Requirements**

Please refer to the MEIS *Student Handbook* at <http://cam.ucdenver.edu/meis> for additional guidelines and information.

Students complete the 54 semester hours of music foundation and then select one of the emphasis areas. Students must pass a musical audition as part of application process and pass varying levels of performance proficiency. All courses within the major must be completed with a C (2.0) or better.

## Music Foundation Courses

- MUS 2470 - Music Applications on the Computer. **Semester Hours: 3**
- MUS 2540 - Audio Production I. **Semester Hours: 3**
- MUS 2700 - Introduction to Music Business. **Semester Hours: 3**
- MUS 4720 - Music Management. **Semester Hours: 3** or
- MUS 4750 - Music and Entertainment Marketing. **Semester Hours: 3**
- PMUS 1023 - Piano Class. **Semester Hours: 1** Level I  
PMUS 1023 - Piano Class. Level II  
PMUS 1023 - Piano Class. Level III  
PMUS 1023 - Piano Class. Level IV
- PMUS 1100 - Music Theory I. **Semester Hours: 3**
- PMUS 1110 - Ear Training and Sight Singing I. **Semester Hours: 1**
- PMUS 1200 - Music Theory II. **Semester Hours: 3**
- PMUS 1210 - Ear Training and Sight Singing II. **Semester Hours: 1**
- PMUS 1500 - General Recital. **Semester Hours: 0**  
PMUS 1500 - General Recital.  
PMUS 1500 - General Recital.  
PMUS 1500 - General Recital.
- PMUS 1 \_\_\_\_ - Applied Music (2 semester hours)  
PMUS 1 \_\_\_\_ - Applied Music (2 semester hours)  
PMUS 1 \_\_\_\_ - Applied Music (2 semester hours)  
PMUS 1 \_\_\_\_ - Applied Music (2 semester hours)
- PMUS 2000 - Music Ensembles. **Semester Hours: 1**  
PMUS 2000 - Music Ensembles.  
PMUS 2000 - Music Ensembles.  
PMUS 2000 - Music Ensembles.  
PMUS 2000 - Music Ensembles. or
- PMUS 4000 - Music Ensembles. **Semester Hours: 1**  
PMUS 2000 - Music Ensembles. or  
PMUS 4000 - Music Ensembles.
- PMUS 2100 - Music Theory III. **Semester Hours: 3**
- PMUS 2110 - Ear Training and Sight Singing III. **Semester Hours: 1**
- PMUS 2200 - Contemporary Styles. **Semester Hours: 3**
- PMUS 3830 - History and Literature of Music I. **Semester Hours: 3**
- PMUS 3831 - History and Literature of Music II. **Semester Hours: 3**  
PMUS \_\_\_\_ - UD Music History Elective\* (3 semester hours)

**Total: 54 Hours**

\* UD = upper division (3000- or 4000- level course)

## Performance Emphasis Courses

- PMUS 1500 - General Recital. **Semester Hours: 0**  
PMUS 1500 - General Recital.  
PMUS 1500 - General Recital.  
PMUS 1500 - General Recital.
- PMUS 3300 - Advanced Sight Reading and Improvisation. **Semester Hours: 2**  
PMUS 3 \_\_\_\_ - Applied Music (3 semester hours)  
PMUS 3 \_\_\_\_ - Applied Music (3 semester hours)  
PMUS 3 \_\_\_\_ - Applied Music (3 semester hours)  
PMUS 3 \_\_\_\_ - Applied Music (3 semester hours)
- PMUS 4000 - Music Ensembles. **Semester Hours: 1**  
PMUS 4000 - Music Ensembles.
- PMUS 4200 - Senior Recital. **Semester Hours: 2**

**Total: 22 Hours**

## **Music Business Emphasis Courses**

- MUS 2560 - Audio Production II. **Semester Hours: 4**
- MUS 3720 - Law and the Music Industry. **Semester Hours: 3**
- MUS 4501 - Music Business Senior Seminar. **Semester Hours: 3**
- MUS 4720 - Music Management. **Semester Hours: 3 or**
- MUS 4750 - Music and Entertainment Marketing. **Semester Hours: 3**
- MUS 4740 - Music Business Analysis. **Semester Hours: 3**
- MUS 4770 - Concert Promotion, Tour and Venue Management. **Semester Hours: 3**  
MUS \_\_\_\_ - UD Music Business Elective (6 semester hours)

**Total: 25 Hours**

## **Recording Emphasis Courses**

Students must be accepted into the recording arts emphasis before being able to take any of the upper-division courses in this area. Please consult a CAM advisor for details.

- MUS 2560 - Audio Production II. **Semester Hours: 4**
- MUS 3540 - Recording Studio Maintenance and Calibration. **Semester Hours: 3**
- MUS 3550 - Critical Listening for Recording Arts. **Semester Hours: 3**
- MUS 4505 - Audio Sweetening. **Semester Hours: 4 or**
- MUS 4575 - Surround Sound. **Semester Hours: 4**
- MUS 4550 - Audio Production III. **Semester Hours: 4**
- MUS 4580 - Audio Production Seminar. **Semester Hours: 3** (Junior Project)  
MUS 4580 - Audio Production Seminar. (Senior Project)  
MUS \_\_\_\_ - Recording Arts Elective (1 semester hours)
- PHYS 3620 - Sound and Music. **Semester Hours: 3**

Total: 28 Hours

# Music Industry Studies Emphasis—BS in Music

CAM Core Requirements

## Undergraduate Degree Requirements

Please refer to the MEIS Student Handbook at <http://cam.ucdenver.edu/meis> for additional guidelines and information.

Students complete the 14 semester hours of music performance courses, 20 semester hours of musicianship courses, 13 semester hours of MIS core courses and 26 semester hours of their music business or music technology courses. While no audition is required as part of the application process, students are required to complete the performance and musicianship courses. All major courses must be passed with a C (2.0) or better.

## Music Performance, Musicianship and MIS Core Courses

- MUS 2300 - Introduction to Songwriting. **Semester Hours: 3**
- MUS 2470 - Music Applications on the Computer. **Semester Hours: 3**
- MUS 2540 - Audio Production I. **Semester Hours: 3**
- MUS 2560 - Audio Production II. **Semester Hours: 4**
- MUS 2700 - Introduction to Music Business. **Semester Hours: 3**
- MUS 4720 - Music Management. **Semester Hours: 3**
- or
- MUS 4750 - Music and Entertainment Marketing. **Semester Hours: 3**
- PMUS 1023 - Piano Class. **Semester Hours: 1** Level I  
PMUS 1023 - Piano Class. Level II  
PMUS \_\_\_\_ - Piano III or Guitar I or Voice I (1 semester hour)  
PMUS \_\_\_\_ - Piano III or Guitar I or Voice II (1 semester hour)
- PMUS 1100 - Music Theory I. **Semester Hours: 3**
- PMUS 1110 - Ear Training and Sight Singing I. **Semester Hours: 1**
- PMUS 1200 - Music Theory II. **Semester Hours: 3**
- PMUS 1210 - Ear Training and Sight Singing II. **Semester Hours: 1**
- PMUS 1310 - Beginning Sight Reading and Improvisation. **Semester Hours: 2**
- PMUS 1400 - Group Applied Lessons. **Semester Hours: 2**
- PMUS 1500 - General Recital. **Semester Hours: 0**  
PMUS 1500 - General Recital.
- PMUS 1800 - Applied Music: Music Industry Studies. **Semester Hours: 2**
- PMUS 2000 - Music Ensembles. **Semester Hours: 1**

- PMUS 2000 - Music Ensembles.
- PMUS 2200 - Contemporary Styles. **Semester Hours: 3**  
or
- MUS 2220 - Commercial Electronic Music Composition. **Semester Hours: 3**  
or
- MUS 3310 - Songwriting II. **Semester Hours: 3**
- PMUS 3830 - History and Literature of Music I. **Semester Hours: 3**
- PMUS 3831 - History and Literature of Music II. **Semester Hours: 3**
- \_\_\_\_ - Electives in Performance (2 semester hours)

**Total: 50 Hours**

Students select either music business or music technology and complete all listed courses and elective credits.

## Music Business Focus Courses

- MUS 3720 - Law and the Music Industry. **Semester Hours: 3**
- MUS 4501 - Music Business Senior Seminar. **Semester Hours: 3**
- MUS 4720 - Music Management. **Semester Hours: 3**  
or
- MUS 4750 - Music and Entertainment Marketing. **Semester Hours: 3**
- MUS 4740 - Music Business Analysis. **Semester Hours: 3**
- MUS 4770 - Concert Promotion, Tour and Venue Management. **Semester Hours: 3**
- \_\_\_\_ - Music Business Electives (11 semester hours)

**Total: 26 Hours**

## Music Technology Focus Courses

Students must be accepted into the MIS/tech focus before being able to take any of the upper-division courses in this area. Please consult CAM advisor for more details.

- MUS 3540 - Recording Studio Maintenance and Calibration. **Semester Hours: 3**
- MUS 3550 - Critical Listening for Recording Arts. **Semester Hours: 3**
- MUS 4505 - Audio Sweetening. **Semester Hours: 4**  
or
- MUS 4575 - Surround Sound. **Semester Hours: 4**
- MUS 4550 - Audio Production III. **Semester Hours: 4**
- MUS 4580 - Audio Production Seminar. **Semester Hours: 3** (Junior Project)
- MUS 4580 - Audio Production Seminar. (Senior Project)
- PHYS 3620 - Sound and Music. **Semester Hours: 3**

\_\_\_\_ - Music Technology Electives (3 semester hours)

**Total: 26 Hours**

## **Non Degree**

# **General Musicianship Minor**

### **CAM Core Requirements**

See the beginning of the Music and Entertainment Industry Studies section in this catalog for specific admission information to the UC Denver Department of Music and Entertainment Industry (MEIS). This competitive process is also for students interested in either music minor.

To declare a CAM minor, please see the College of Arts & Media's Office of Advising and Student Services in Arts Building, 177. All courses must be taken at UC Denver unless approved by an MEIS faculty member. All other courses must be taken at UC Denver. Students pursuing a BS in music may not declare a minor in music. Consult a CAM advisor for details. All minor courses must be passed with a C (2.0) or better.

Students must successfully audition before declaring a general musicianship minor.

## **Program Requirements**

- PMUS 1100 - Music Theory I. **Semester Hours: 3**
- PMUS 1110 - Ear Training and Sight Singing I. **Semester Hours: 1**
- PMUS 1200 - Music Theory II. **Semester Hours: 3**
- PMUS 1210 - Ear Training and Sight Singing II. **Semester Hours: 1**
- PMUS 3830 - History and Literature of Music I. **Semester Hours: 3**
- PMUS 3831 - History and Literature of Music II. **Semester Hours: 3**
- PMUS \_\_\_\_ - Applied Music (2 semester hours)
- PMUS \_\_\_\_ - Applied Music (2 semester hours)
- PMUS 1500 - General Recital. **Semester Hours: 0**  
PMUS 1500 - General Recital.
- PMUS 2000 - Music Ensembles. **Semester Hours: 1**  
PMUS 2000 - Music Ensembles.
- PMUS 1023 - Piano Class. **Semester Hours: 1**  
PMUS 1023 - Piano Class.
- P/MUS \_\_\_\_ - Music Elective (1 semester hour)

**Total: 23 Hours**

# Music Industry Studies Minor

## CAM Core Requirements

See the beginning of the Music and Entertainment Industry Studies section in this catalog for specific admission information to the UC Denver Department of Music and Entertainment Industry (MEIS). This competitive process is also for students interested in either music minor.

To declare a CAM minor, please see the College of Arts & Media's Office of Advising and Student Services in Arts Building, 177. All courses must be taken at UC Denver unless approved by an MEIS faculty member. All other courses must be taken at UC Denver. Students pursuing a BS in music may not declare a minor in music. Consult a CAM advisor for details. All minor courses must be passed with a C (2.0) or better.

## Program Requirements

- MUS 2450 - Introduction to Performing Arts and Events Management. **Semester Hours:** 3
- MUS 2470 - Music Applications on the Computer. **Semester Hours:** 3
- MUS 2700 - Introduction to Music Business. **Semester Hours:** 3  
MUS \_\_\_\_ - Music Business or Tech Elective (3-4\* semester hours)
- PMUS 1023 - Piano Class. **Semester Hours:** 1 Level I or III  
PMUS 1023 - Piano Class. Level II or IV
- PMUS 1100 - Music Theory I. **Semester Hours:** 3
- PMUS 1110 - Ear Training and Sight Singing I. **Semester Hours:** 1
- PMUS 3830 - History and Literature of Music I. **Semester Hours:** 3 or
- PMUS 3831 - History and Literature of Music II. **Semester Hours:** 3

**Total: 21-22 Hours**

\* Must be MUS 2560, Audio Production II (4 semester hours), if student plans to apply for the MIS/tech or recording arts emphasis as a music major.

## Master of Science

# Recording Arts MS

► Graduate School Rules apply to this program

## CAM Core Requirements

## Intellectual Competencies

Must earn grade of C- (1.7) or higher in each section

## English Writing/Speech

- ENGL 1020 - Core Composition I: CO1. **Semester Hours: 3**
- ENGL 2030 - Core Composition II: CO2. **Semester Hours: 3**

**Total: 6 Hours**

## Mathematics

Select one course from the following list:

- MATH 1010 - Mathematics for the Liberal Arts: MA1. **Semester Hours: 3 \***
- MATH 1070 - Algebra for Social Sciences and Business: MA1. **Semester Hours: 3**
- MATH 1080 - Polynomial Calculus: MA1. **Semester Hours: 3**
- MATH 1110 - College Algebra: MA1. **Semester Hours: 3**
- MATH 1120 - College Trigonometry: MA1. **Semester Hours: 3**
- MATH 1130 - Precalculus Mathematics: MA1. **Semester Hours: 4**
- MATH 1401 - Calculus I: MA1. **Semester Hours: 4**
- MATH 2411 - Calculus II: MA1. **Semester Hours: 4**
- MATH 2421 - Calculus III: MA1. **Semester Hours: 4**
- MATH 2830 - Introductory Statistics: MA1. **Semester Hours: 3**
- \*Math placement not required; recommended for CAM majors

**Total: 3 Hours**

## Knowledge Areas

Must earn a passing grade of D- (.7) or higher in each section.

## Natural and Physical Sciences

Select two courses from the list below. One course must have a laboratory (4 semester hours). The non-laboratory, 3-semester-hour course can be selected from list below or the MATH list above.

- ANTH 1303 - Introduction to Biological Anthropology: SC1. **Semester Hours: 4**
- BIOL 1550 - Basic Biology: Ecology and the Diversity of Life: SC1. **Semester Hours: 4**
- BIOL 1560 - Basic Biology: From Cells to Organisms: SC1. **Semester Hours: 4**
- BIOL 2051 - General Biology I: SC1. **Semester Hours: 3**
- BIOL 2071 - General Biology Laboratory I: SC1. **Semester Hours: 1**

- BIOL 2061 - General Biology II: SC1. **Semester Hours: 3**
- BIOL 2081 - General Biology Laboratory II: SC1. **Semester Hours: 1**
- CHEM 1474 - Core Chemistry: Chemistry For the Consumer: SC1. **Semester Hours: 4**
- ENVS 1042 - Introduction to Environmental Sciences: SC1. **Semester Hours: 4**
- GEOG 1202 - Introduction to Physical Geography: SC2. **Semester Hours: 3** (Non-laboratory)
- GEOL 1072 - Physical Geology: Surface Processes: SC1. **Semester Hours: 4**
- GEOL 1082 - Physical Geology: Internal Processes: SC1. **Semester Hours: 4**
- PHYS 1000 - Introduction to Physics. **Semester Hours: 4**
- PHYS 1052 - General Astronomy I: SC1. **Semester Hours: 4**
- PHYS 1100 - Foundations of Physics: SC2. **Semester Hours: 4**
- PHYS 2010 - College Physics I. **Semester Hours: 4**
- PHYS 2030 - College Physics Lab I: SC1. **Semester Hours: 1**
- PHYS 2020 - College Physics II: SC1. **Semester Hours: 4**
- PHYS 2040 - College Physics Lab II: SC1. **Semester Hours: 1**
- PSY 2220 - Biological Basis of Behavior: SC2. **Semester Hours: 3** (Non-laboratory)

**Total: 7 Hours**

## **Behavioral Sciences**

Select one course from the following list:

- ANTH 1302 - Introduction to Archaeology: SS3. **Semester Hours: 4**
- ANTH 2102 - Culture and the Human Experience: SS3. **Semester Hours: 3**
- CMMU 1011 - Fundamentals of Communication: SS3. **Semester Hours: 3**
- CMMU 1021 - Fundamentals of Mass Communication: SS3. **Semester Hours: 3**
- PSY 1000 - Introduction to Psychology I: SS3. **Semester Hours: 3**
- PSY 1005 - Introduction to Psychology II: SS3. **Semester Hours: 3**

**Total: 3 Hours**

## **Social Sciences**

Select one course from the following list:

- ECON 2012 - Principles of Economics: Macroeconomics: SS1. **Semester Hours: 3**
- ECON 2022 - Principles of Economics: Microeconomics: SS1. **Semester Hours: 3**
- ENVS 1342 - Introduction to Environment and Society: SS2. **Semester Hours: 3**
- ETST 2000 - Introduction to Ethnic Studies: SS3. **Semester Hours: 3**
- GEOG 1102 - World Regional Geography: SS2. **Semester Hours: 3**
- GEOG 1602 - Introduction to Urban Studies: SS2. **Semester Hours: 3**
- GEOG 2202 - Natural Hazards: SS2. **Semester Hours: 3**

- HBSC 2001 - Introduction to Community and Population Health Science: SS3. **Semester Hours: 3**
- P SC 1001 - Introduction to Political Science: The Quest for Freedom and Justice: SS1. **Semester Hours: 3**
- P SC 1101 - American Political System: SS1. **Semester Hours: 3**
- SOC 1001 - Introduction to Sociology: SS3. **Semester Hours: 3**
- SOC 2462 - Introduction to Social Psychology: SS3. **Semester Hours: 3**

**Total: 3 Hours**

## Humanities

Select two courses from the following list:

- ENGL 1601 - Telling Tales: Narrative Art in Literature and Film: AH2. **Semester Hours: 3**
- ENGL 2600 - Great Works in British and American Literature: AH2. **Semester Hours: 3**
- ETST 2155 - African American History: HI1. **Semester Hours: 3**
- FR 1000 - Introduction to Cultures of the French- Speaking World: AH1. **Semester Hours: 3**
- GER 1000 - Germany and the Germans: AH1. **Semester Hours: 3**
- HIST 1361 - U.S. History to 1876: HI1. **Semester Hours: 3**
- HIST 1362 - U.S. History Since 1876: HI1. **Semester Hours: 3**
- HIST 1381 - Paths to the Present I: HI1. **Semester Hours: 3**
- HIST 1382 - Getting Here: Paths to the Present II: HI1. **Semester Hours: 3**
- PHIL 1012 - Introduction to Philosophy: Relationship of the Individual to the World: AH3. **Semester Hours: 3**
- PHIL 1020 - Introduction to Ethics and Society: The Person and the Community: AH3. **Semester Hours: 3**
- PHIL 2441 - Logic and Language: AH3. **Semester Hours: 3**
- RLST 1610 - Introduction to Religious Studies: AH3. **Semester Hours: 3**
- RLST 2660 - World Religions: AH3. **Semester Hours: 3**

**Total: 6 Hours**

## Arts

Select an art course not in your major. Must earn a passing grade of *D-* (.7) or higher.

Students may mix and match disciplines to reach 3 semester hours, if desired, or take a 3-semester-hour course from one discipline. For example:

**Music majors:** must take 3 semester hours in theatre, film and/or visual arts

**Visual arts majors:** must take 3 semester hours in music and/or theatre, film

**Theatre/film majors:** must take 3 semester hours in visual arts and/or music

## **Total: 3 Hours**

## **Cultural Diversity**

Must earn a passing grade of *D-* (.7) or higher.

Select one course from the following list:

- ANTH 3142 - Cultural Diversity in the Modern World. **Semester Hours: 3**
- CMMU 3271 - Communication and Diversity. **Semester Hours: 3**
- ECON 3100 - Economics of Race and Gender. **Semester Hours: 3**
- ENGR 3400 - Technology and Culture. **Semester Hours: 3**
- ETST 3704 - Culture, Racism and Alienation. **Semester Hours: 3**
- ETST 3794 - Ethnic Diversity in American Literature. **Semester Hours: 3**
- HIST 3345 - Immigration and Ethnicity in American History. **Semester Hours: 3**
- MGMT 4100 - Managing Cultural Diversity. **Semester Hours: 3**
- PHIL 3500 - Ideology and Culture: Racism and Sexism. **Semester Hours: 3**
- P SC 3034 - Race, Gender, Law and Public Policy. **Semester Hours: 3**
- P SC 3035 - Political Movements: Race and Gender. **Semester Hours: 3**
- PSY 4485 - Psychology of Cultural Diversity. **Semester Hours: 3**
- RLST 4000 - Religion and Cultural Diversity. **Semester Hours: 3**
- SOC 3020 - Race and Ethnicity in the U.S.. **Semester Hours: 3**
- THTR 3611 - Drama of Diversity. **Semester Hours: 3**

## **Total: 3 Hours**

## **International Perspectives**

Must earn a passing grade of *D-* (.7) or higher.

Select one course from the following list:

- ENGR 3600 - International Dimensions of Technology and Culture. **Semester Hours: 3**
- P SC 3022 - Introduction to Comparative Politics. **Semester Hours: 3**
- P SC 3042 - Introduction to International Relations. **Semester Hours: 3**
- HIST 3121 - The World at War, 1914-1945. **Semester Hours: 3**

## **Total: 3 Hours**

A semester abroad in a country where the language is not the student's native language may fulfill this requirement. Preapproval is required!

## Foreign Language

Second-semester proficiency, 0-10 semester hours

Second-semester proficiency demonstrated by one of the following:

- Second-semester, college-level courses with minimum grade of C- (1.7)
- Satisfactory proficiency test
- Completion of a second year (level II) high school course with a minimum grade of C- (1.7)

BS students in music are exempt from this requirement.

The master of science in recording arts (MS) comprises 34 semester hours of credit: 14 hours are required courses, 15 hours are electives and 4 hours are thesis/portfolio. Courses must be completed with a *B* (3.0) or higher to count toward degree progress.

## Required Courses

- MSRA 5000 - Introduction to Graduate Studies. **Semester Hours:** 3
- MSRA 5580 - Graduate Audio Seminar. **Semester Hours:** 3
- MSRA 5590 - Graduate Audio Production. **Semester Hours:** 4
- MSRA 6510 - Graduate Audio Studies Pedagogy. **Semester Hours:** 4
- MSRA 6950 - Thesis in Professional Audio. **Semester Hours:** 4
- MSRA 6951 - Professional Audio Portfolio Thesis. **Semester Hours:** 4

**Total: 18 Hours**

## Electives

Students may take courses not listed here, per approval of the faculty or academic advisor.

- MSRA 5500 - Topics in Professional Audio. **Semester Hours:** 1 to 4 (fall and spring)
- MSRA 5505 - Graduate Audio Sweetening. **Semester Hours:** 4 (fall and spring)
- MSRA 5575 - Graduate Surround Sound. **Semester Hours:** 4 (fall and spring)
- MSRA 6530 - Graduate Audio Forensics. **Semester Hours:** 4 (spring only)  
or other courses as approved by MSRA advisor or program director.

**Total: 34 Hours**

Students may take courses not listed here, per approval of the faculty or academic advisor. Below is the suggested semester-by-semester sequencing of courses and semester hours.

## Fall

- MSRA 5000 - Introduction to Graduate Studies. **Semester Hours: 3**
- MSRA 5590 - Graduate Audio Production. **Semester Hours: 4**  
Topics course (1 semester hour)  
Two MSRA electives (8 semester hours)

**Total: 16 Hours**

## Spring

- MSRA 5580 - Graduate Audio Seminar. **Semester Hours: 3**
- MSRA 6510 - Graduate Audio Studies Pedagogy. **Semester Hours: 4**  
MSRA elective (4 semester hours)  
Topics courses (3 semester hours)

**Total: 14 Hours**

## Summer

- MSRA 6950 - Thesis in Professional Audio. **Semester Hours: 4** or
- MSRA 6951 - Professional Audio Portfolio Thesis. **Semester Hours: 4**

**Total: 4 Hours**

## Program Total: 34 Hours

*The above progression is merely suggested and shows the quickest possible schedule for graduation (three semesters). Students may elect to enroll for less than the suggested semester hour total, and/or enroll in additional semesters as needed. Students can apply for graduation in any semester (fall, spring or summer) provided they have completed the required course work. All course work must be completed with a satisfactory grade of "B" (3.0) or higher. Students should not register for thesis/portfolio, unless approved by the faculty advisor.*

*Please refer to the master of science in recording arts Web site for additional information:  
<http://thunder1.cudenver.edu/musictech/masterdegree>.*

## Visual Arts

**Chair:** Joann Brennan  
**Office:** CU-Denver Building, 815  
**Telephone:** 303-556-2279

## **Faculty**

### **Associate Professors:**

Joann Brennan, MFA, Massachusetts College of Art

Quintin Gonzalez, MFA, Yale University

### **Assistant Professors:**

Mary Connelley, MFA, Indiana University

Brian DeLevie, MFA, University of Houston

Melissa Furness, MFA, University of Iowa

Carol Golemboski, MFA, Virginia Commonwealth University

Rian Kerrane, MFA, University of New Orleans

Bryan Leister, MFA, George Mason University

Jeffrey Schrader, PhD, New York University, MA, Oberlin College

### **Senior Instructors:**

Michael Bronman, MA, UC Denver

Vivian George, MFA, Yale University

## **Department Overview**

The Department of Visual Arts offers professional instruction in six interrelated areas of study: art history, digital design, drawing, painting, photography, sculpture, transmedia and 3-D graphics and animation. The department provides an educational environment where artists and art historians of promise and motivation can explore the horizons of their own talents in the midst of intense critical dialogue and rigorous art-making practice. The primary educational experience for the student is centered on the knowledge and skills gained from exciting courses offered by the various areas of the visual arts department, as well as the rich academic offerings throughout the university. Every student is challenged to infuse their scholarly and creative practice with innovative technology, contemporary theory and professionalism. The visual arts faculty and programs are designed not only to refine but to cultivate the mind. Education in the visual arts encompasses a comprehensive knowledge of and direct experience with the various

media of digital design, drawing, painting, photography and sculpture. Supporting this enterprise is the development of an understanding of art theory, a knowledge of the methods and materials of art making and examination of the diverse approach to examining the art object in history. Central to the practice of art history are critical writing and analysis. Graduating seniors receiving the BFA degree are required to participate in the BFA thesis exhibition during their last semester of study. These exhibitions are scheduled in the fall and spring terms only.

## Bachelor of Arts

# Fine Arts BA — Art History

All students pursuing a BA in fine arts with an emphasis in art history must complete the 12 semester hours of visual arts foundation courses, the 18 semester hours of required art history emphasis courses and 15 semester hours of art history topic courses (one course from each of the five lists).

## General Requirements

- All major courses within the major must be completed with a C (2.0) or better.
- All upper-division F A courses must be taken at UC Denver unless approved by faculty.
- 27 semester hours of all F A credits (at any level) must be taken at UC Denver.
- 18 semester hours of total F A courses must be upper division.

## Visual Arts Foundation Courses

- F A 1100 - Drawing I. **Semester Hours: 3**
- F A 1150 - Introduction to Photography. **Semester Hours: 3**
- F A 1400 - Two Dimensional Design. **Semester Hours: 3**
- F A 1810 - Digital Animation Foundations: Producing Animation. **Semester Hours: 3** ---  
or---
- F A 2155 - Introduction to Digital Photography. **Semester Hours: 3** ---or---
- F A 2405 - Introduction to Digital Design. **Semester Hours: 3**

**Total: 12 Hours**

## Art History Required Emphasis Courses

- F A 2600 - History of Art I (survey). **Semester Hours: 3**
- F A 2610 - History of Art II (survey). **Semester Hours: 3**
- F A 3600 - Art History Survey III: Non-Western Art. **Semester Hours: 3**
- F A 4790 - Methods in Art History. **Semester Hours: 3**
- F A 4951 - Bachelor of Art Thesis. **Semester Hours: 3**

Nonwestern Cultural Experience (select one of the six options listed below)

**Total: 18 Hours**

1. Study abroad course that focuses on the art history or the language of host culture (consult art history faculty).
2. Any upper-division art history course in African, Latin American, Asian or African-American art. This cannot be used to fulfill any other degree requirement.
3. Third-semester study of a foreign language (consult the Department of Modern Languages if placement is needed).
4. FA 3939, Internship. Project must focus on cultures outside of mainstream United States, e.g., Native American, Latin American, women studies, gay/lesbian studies, etc. Consult art history faculty.
5. FA 4840, Independent Study. Project/research must focus on cultures outside of mainstream United States, e.g., Native American, Latin American, women studies, gay/lesbian studies, etc. Consult art history faculty.
6. Cultural course: CNST 1000, China and the Chinese; FR 1000, Introduction: Cultures: French Speaking World; GER 1000, Germany and the Germans; or RUSS 1000, Russia and Russians: Life, Culture, Arts.

## **Upper-Division Art History Electives**

Students must complete five upper-division (3000/4000 level) art history courses. (See <http://cam.ucdenver.edu/advising/forms> for a complete list.)

**Total: 15 Hours**

## **Bachelor of Arts in Fine Arts**

# **Fine Arts BA — Drawing, Painting, Photography, Sculpture**

All students pursuing a BA in studio fine arts must complete the 27 semester hours of visual arts foundation courses and then select an emphasis area, consisting of 21 semester hours. Students interested in pursuing a double emphasis (e.g., emphasis in drawing and painting) are encouraged to consult a CAM advisor to discuss required courses.

## **General Requirements**

- All major courses within the major must be completed with a C (2.0) or better.

- All upper-division F A courses must be taken at UC Denver unless approved by faculty.
- 27 semester hours of all F A credits (at any level) must be taken at UC Denver.
- 18 semester hours of total F A courses must be upper division.

## Required Visual Arts Foundation and Required Courses

To be completed by all BA-seeking students:

- F A 1015 - Interdisciplinary Foundations. **Semester Hours: 3**
- F A 1100 - Drawing I. **Semester Hours: 3**
- F A 1400 - Two Dimensional Design. **Semester Hours: 3**
- F A 1500 - Three-Dimensional Design. **Semester Hours: 3**
- F A 2015 - Intermedia Foundations. **Semester Hours: 3**
- F A 2600 - History of Art I (survey). **Semester Hours: 3**
- F A 2610 - History of Art II (survey). **Semester Hours: 3**
- F A 4990 - Contemporary Art - 1945 To the Present. **Semester Hours: 3**
- F A 4800 - Senior Art Seminar. **Semester Hours: 3**

**Total: 27 Hours**

## Drawing Emphasis Courses

- F A 2000 - Life Drawing. **Semester Hours: 3**
- F A 3000 - Intermediate Drawing. **Semester Hours: 3**
- F A 3310 - Drawing and the Printed Image. **Semester Hours: 3**
- or
- F A 4020 - Anatomy for the Artist. **Semester Hours: 3**
- F A 4000 - Advanced Drawing I. **Semester Hours: 3**
- F A \_\_\_\_ - UD Art History Elective (3 semester hours)
- F A \_\_\_\_ - Fine Art Elective (6 semester hours)

**Total: 21 Hours**

## Painting Emphasis Courses

- F A 2200 - Painting I. **Semester Hours: 3**
- F A 2210 - Painting II: Figure. **Semester Hours: 3**
- F A 3200 - Intermediate Painting I. **Semester Hours: 3**
- F A 3210 - Intermediate Painting II. **Semester Hours: 3**
- F A 4200 - Advanced Painting I. **Semester Hours: 3**
- F A \_\_\_\_ - UD Art History Elective (3 semester hours)
- F A \_\_\_\_ - Fine Art Elective (3 semester hours)

**Total: 21 Hours**

## **Photography Emphasis Courses**

- F A 1150 - Introduction to Photography. **Semester Hours: 3**
- F A 2155 - Introduction to Digital Photography. **Semester Hours: 3**
- F A 3155 - Digital Book Making/Narrative Strategies. **Semester Hours: 3**
- F A 3160 - Color and Studio Lighting Dynamics. **Semester Hours: 3**
- F A 3165 - Concepts and Processes in Photography. **Semester Hours: 3**
- F A 3170 - Photography: Constructing the Fine Print. **Semester Hours: 3**
- F A 3630 - History of Photography. **Semester Hours: 3**

**Total: 21 Hours**

## **Sculpture Emphasis Courses**

- F A 2500 - Bronze Casting and Metal Sculpture. **Semester Hours: 3**
- F A 3500 - Modeling and Casting the Figure. **Semester Hours: 3**
- F A 3510 - Installation Art. **Semester Hours: 3**
- F A 4500 - Kinetic Sculpture. **Semester Hours: 3**
- F A \_\_\_\_ - Fine Art Elective (6 semester hours)

**Total: 18 Hours**

# **Fine Arts BFA — Drawing, 3-D Graphics and Animation, Digital Design, Painting, Photography, Sculpture**

All students pursuing a BFA in fine arts must complete the 34 semester hours of visual arts foundation courses and then select an emphasis area, consisting of 39 semester hours. Students interested in pursuing a double emphasis (e.g., emphasis in drawing and painting) are encouraged to consult a CAM advisor to discuss required courses.

## **General Requirements**

- All major courses within the major must be completed with a C (2.0) or better.
- All upper-division F A courses must be taken at UC Denver unless approved by faculty.
- 27 semester hours of all F A credits (at any level) must be taken at UC Denver.
- 25 semester hours of total F A courses must be upper division.

## Required Visual Arts Courses

To be completed by all BFA-seeking students:

- F A 1015 - Interdisciplinary Foundations. **Semester Hours: 3**
- F A 1100 - Drawing I. **Semester Hours: 3**
- F A 1400 - Two Dimensional Design. **Semester Hours: 3**
- F A 1500 - Three-Dimensional Design. **Semester Hours: 3**
- F A 2015 - Intermedia Foundations. **Semester Hours: 3**
- F A 2600 - History of Art I (survey). **Semester Hours: 3**
- F A 2610 - History of Art II (survey). **Semester Hours: 3**
- F A 3600 - Art History Survey III: Non-Western Art. **Semester Hours: 3**
- F A 4990 - Contemporary Art - 1945 To the Present. **Semester Hours: 3**
- F A 4950 - BFA Thesis. **Semester Hours: 1** (pass/fail)

**Total: 28 Hours**

\* may include studio, lecture, internship or art history

## 3-D Graphics/Animation Emphasis

Entrance into the 3-D program is by portfolio review and entrance interview only. This review process happens during the spring semester of the student's freshman year. As a result, all visual arts majors may take F A 1810 and F A 1820. These two courses will be offered at the standard tuition rates.

Students who wish to enroll in F A 2810 or above must pass the portfolio review and be accepted into the 3-D animation program. Please note that F A 2810 through F A 4820 are offered through Extended Studies and have a higher tuition rate. For the 2008-2009 academic year, this rate is anticipated at \$4,050 per course. Please see [www.cu3d.org](http://www.cu3d.org) for information, or contact the program director, Howard Cook, at [howard.cook@ucdenver.edu](mailto:howard.cook@ucdenver.edu).

- F A 1810 - Digital Animation Foundations: Producing Animation. **Semester Hours: 3**
- F A 1820 - Digital Animation Foundations: Introduction to Digital 3D. **Semester Hours: 3**

For registration and tuition information, please consult [www.cu3d.org](http://www.cu3d.org).

- F A 2810 - Digital Animation Techniques: Surface Modeling. **Semester Hours: 3**
- F A 2820 - Digital Animation Techniques: Surface Properties. **Semester Hours: 3**
- F A 2830 - Digital Animation Techniques: Lighting. **Semester Hours: 3**
- F A 3810 - Digital Animation Studio: Set/Environment Production. **Semester Hours: 3**
- F A 3820 - Digital Animation Techniques: Rigging and Animation. **Semester Hours: 3**
- F A 3830 - Digital Animation Technique: Character Animation. **Semester Hours: 3**
- F A 3845 - Digital Animation Discovery and Preproduction Seminar. **Semester Hours: 3**
- F A 4810 - Digital Animation Studio: Animation Production I. **Semester Hours: 3**

- F A 4820 - Digital Animation Studio: Animation Production II. **Semester Hours: 3**

**The following courses are required for 3-D animation majors, but are offered at the standard tuition rates:**

- ENGL 2250 - Introduction to Film. **Semester Hours: 3**
- F A 4632 - Media History and Aesthetics. **Semester Hours: 3**
- F A 4950 - BFA Thesis. **Semester Hours: 1**
- F A Electives (9 semester hours)

**Total: 55 Hours**

## **Drawing Emphasis Courses**

- F A 2000 - Life Drawing. **Semester Hours: 3**
- F A 2020 - Drawing II: Spatial Thinking and Visualization. **Semester Hours: 3**
- F A 3000 - Intermediate Drawing. **Semester Hours: 3**
- F A 3310 - Drawing and the Printed Image. **Semester Hours: 3**
- F A 3230 - Abstract Drawing. **Semester Hours: 3**
- F A 4000 - Advanced Drawing I. **Semester Hours: 3**
- F A 4020 - Anatomy for the Artist. **Semester Hours: 3**
- F A 4100 - Painting and Drawing Theory. **Semester Hours: 3**
- F A 4800 - Senior Art Seminar. **Semester Hours: 3**
- Studio Art Electives (9 semester hours)
- F A Electives (6 semester hours)
- Upper-Division Art History Elective (3 semester hours)

**Total: 54 Hours**

## **Digital Design Emphasis Courses**

- F A 2405 - Introduction to Digital Design. **Semester Hours: 3**
- F A 2415 - Typography Studio. **Semester Hours: 3**
- F A 3414 - Motion Design I. **Semester Hours: 3**
- F A 3424 - Interactive Media. **Semester Hours: 3**
- F A 3428 - Design Studio II. **Semester Hours: 3**
- F A 3434 - 3D Motion Design. **Semester Hours: 3**
- F A 3444 - Interactive Media II. **Semester Hours: 3**
- F A 3454 - Motion Design II. **Semester Hours: 3**
- F A 4400 - Design Studio III. **Semester Hours: 3**
- F A 4480 - The Practice of Design. **Semester Hours: 3**
- F A 4495 - Design Studio IV. **Semester Hours: 3**

- F A 4632 - Media History and Aesthetics. **Semester Hours: 3**  
F A/Studio Art Electives\* (15 semester hours)

**Total: 54 Hours**

\* consult advisor

## Painting Emphasis Courses

- F A 2000 - Life Drawing. **Semester Hours: 3**
  - F A 2200 - Painting I. **Semester Hours: 3**
  - F A 2210 - Painting II: Figure. **Semester Hours: 3**
  - F A 3200 - Intermediate Painting I. **Semester Hours: 3**
  - F A 3210 - Intermediate Painting II. **Semester Hours: 3**
  - F A 3230 - Abstract Drawing. **Semester Hours: 3**
  - F A 3300 - Painting and the Printed Image. **Semester Hours: 3**
  - F A 4100 - Painting and Drawing Theory. **Semester Hours: 3**
  - F A 4200 - Advanced Painting I. **Semester Hours: 3**
  - F A 4210 - Advanced Painting II. **Semester Hours: 3**
  - F A 4800 - Senior Art Seminar. **Semester Hours: 3**
- Upper-Division Art History Elective (3 semester hours)  
Studio Electives (9 semester hours)  
F A Electives (6 semester hours)

**Total: 54 Hours**

## Photography Emphasis Courses

Students must complete the first seven courses listed in the “Required Visual Arts” section and F A 1150 and F A 2155 before going onto the UD Photo courses. F A 3155-3170 may be completed in any order after having completed F A 2155 and must be completed prior to beginning the advanced photography sequence (F A 4195 and F A 4196). See additional prerequisites for F A 3165.

- F A 1150 - Introduction to Photography. **Semester Hours: 3**
- F A 2155 - Introduction to Digital Photography. **Semester Hours: 3**
- F A 3155 - Digital Book Making/Narrative Strategies. **Semester Hours: 3**
- F A 3160 - Color and Studio Lighting Dynamics. **Semester Hours: 3**
- F A 3165 - Concepts and Processes in Photography. **Semester Hours: 3**
- F A 3170 - Photography: Constructing the Fine Print. **Semester Hours: 3**  
*Note: must be completed before F A 3165*
- F A 4195 - Advanced Photography I/Creating a Personal Vision. **Semester Hours: 3**

- F A 4196 - Advanced Photography II. **Semester Hours: 3**
- F A 3630 - History of Photography. **Semester Hours: 3**
- F A \_\_\_\_ - Studio Art Elective (12 semester hours)

**Total: 39 Hours**

## **Sculpture Emphasis Courses**

- F A 2500 - Bronze Casting and Metal Sculpture. **Semester Hours: 3**
  - F A 2510 - Wood and Metal Sculpture. **Semester Hours: 3**
  - F A 3500 - Modeling and Casting the Figure. **Semester Hours: 3**
  - F A 3505 - Sculpture Topics. **Semester Hours: 3**
  - F A 3510 - Installation Art. **Semester Hours: 3**
  - F A 3515 - Public Art. **Semester Hours: 3**
  - F A 3525 - Environmental Sculpture. **Semester Hours: 3**
  - F A 3530 - Iron Casting. **Semester Hours: 3**
  - F A 4500 - Kinetic Sculpture. **Semester Hours: 3**
  - F A 4505 - Performance Art. **Semester Hours: 3**
  - F A 4510 - Advanced Sculpture. **Semester Hours: 3**
  - F A 4800 - Senior Art Seminar. **Semester Hours: 3**
- UD Art History Elective (3 semester hours)  
 Studio Art Electives (9 semester hours)  
 F A Electives (6 semester hours)

**Total: 54 Hours**

## **Transmedia Emphasis Courses**

- F A 2405 - Introduction to Digital Design. **Semester Hours: 3**
- F A 2510 - Wood and Metal Sculpture. **Semester Hours: 3**
- F A 3414 - Motion Design I. **Semester Hours: 3**
- F A 3424 - Interactive Media. **Semester Hours: 3**
- F A 3434 - 3D Motion Design. **Semester Hours: 3**
- F A 3438 - Text, Image and Electronic Art. **Semester Hours: 3**
- F A 3441 - Narrative and Experience. **Semester Hours: 3**
- F A 3505 - Sculpture Topics. **Semester Hours: 3**
- F A 3510 - Installation Art. **Semester Hours: 3**
- F A 3520 - Sculpture: Contemporary Artists and Concepts. **Semester Hours: 3**
- F A 4434 - Virtual Landscapes. **Semester Hours: 3**
- F A 4500 - Kinetic Sculpture. **Semester Hours: 3**
- F A 4510 - Advanced Sculpture. **Semester Hours: 3**

- F A 4632 - Media History and Aesthetics. **Semester Hours: 3**  
Studio Art Electives (12 semester hours)

**Total: 54 Hours**

## Non Degree

# Art History Minor

### CAM Core Requirements

To declare a CAM minor, please see the College of Arts & Media's Office of Advising and Student Services in Arts Building, 177.

Student may transfer up to 6 semester hours of non-UC Denver courses toward a minor. All other courses must be taken at UC Denver. Students pursuing a BA or BFA in fine arts may use up to 6 semester hours to fulfill major and minor requirements; the remaining semester hours must be taken in addition to the major requirements. Consult a CAM advisor for details.

## Program Requirements

- F A 2600 - History of Art I (survey). **Semester Hours: 3**
- F A 2610 - History of Art II (survey). **Semester Hours: 3**  
F A \_\_\_\_ - Studio Art Elective (3 semester hours)  
F A \_\_\_\_ - UD Art History Elective (9 semester hours)

**Total: 18 Hours**

# Digital Design Minor

### CAM Core Requirements

To declare a CAM minor, please see the College of Arts & Media's Office of Advising and Student Services in Arts Building, 177.

Student may transfer up to 6 semester hours of non-UC Denver courses toward a minor. All other courses must be taken at UC Denver. Students pursuing a BA or BFA in fine arts may use up to 6 semester hours to fulfill major and minor requirements; the remaining semester hours must be taken in addition to the major requirements. Consult a CAM advisor for details.

## Program Requirements

- F A 2405 - Introduction to Digital Design. **Semester Hours: 3**
- F A 3424 - Interactive Media. **Semester Hours: 3**
- F A 4632 - Media History and Aesthetics. **Semester Hours: 3**  
Digital Design Electives (9 semester hours)

**Total: 21 Hours**

## Sculpture Minor

CAM Core Requirements

To declare a CAM minor, please see the College of Arts & Media's Office of Advising and Student Services in Arts Building, 177.

Student may transfer up to 6 semester hours of non-UC Denver courses toward a minor. All other courses must be taken at UC Denver. Students pursuing a BA or BFA in fine arts may use up to 6 semester hours to fulfill major and minor requirements; the remaining semester hours must be taken in addition to the major requirements. Consult a CAM advisor for details.

### Program Requirements

- F A 1500 - Three-Dimensional Design. **Semester Hours: 3**
- F A 2500 - Bronze Casting and Metal Sculpture. **Semester Hours: 3**
- F A 2510 - Wood and Metal Sculpture. **Semester Hours: 3**  
Art History Elective (3 semester hours)

**Select three courses from the following list:**

- F A 3500 - Modeling and Casting the Figure. **Semester Hours: 3**
- F A 3510 - Installation Art. **Semester Hours: 3**
- F A 4500 - Kinetic Sculpture. **Semester Hours: 3**
- F A 4510 - Advanced Sculpture. **Semester Hours: 3**

**Total: 21 Hours**

## Studio Art Minor

CAM Core Requirements

To declare a CAM minor, please see the College of Arts & Media's Office of Advising and Student Services in Arts Building, 177.

Student may transfer up to 6 semester hours of non-UC Denver courses toward a minor. All other courses must be taken at UC Denver. Students pursuing a BA or BFA in fine arts may use up to 6 semester hours to fulfill major and minor requirements; the remaining semester hours must be taken in addition to the major requirements. Consult a CAM advisor for details.

## Program Requirements

Select two courses from following:

- F A 1100 - Drawing I. **Semester Hours: 3**
- F A 1400 - Two Dimensional Design. **Semester Hours: 3**
- F A 1500 - Three-Dimensional Design. **Semester Hours: 3**
- F A \_\_\_\_ - Studio Art Electives (6 semester hours)
- F A \_\_\_\_ - UD Studio Art Elective (3 semester hours)
- F A \_\_\_\_ - Art History Elective (3 semester hours)

**Total: 18 Hours**

## Studio Photography Minor

CAM Core Requirements

To declare a CAM minor, please see the College of Arts & Media's Office of Advising and Student Services in Arts Building, 177.

Student may transfer up to 6 semester hours of non-UC Denver courses toward a minor. All other courses must be taken at UC Denver. Students pursuing a BA or BFA in fine arts may use up to 6 semester hours to fulfill major and minor requirements; the remaining semester hours must be taken in addition to the major requirements. Consult a CAM advisor for details.

## Program Requirements

- F A 1150 - Introduction to Photography. **Semester Hours: 3**
- F A 2155 - Introduction to Digital Photography. **Semester Hours: 3**
- F A 3630 - History of Photography. **Semester Hours: 3**

**F A photo electives from the following: (9 semester hours)**

- F A 3155 - Digital Book Making/Narrative Strategies. **Semester Hours: 3**
- F A 3170 - Photography: Constructing the Fine Print. **Semester Hours: 3**
- F A 3160 - Color and Studio Lighting Dynamics. **Semester Hours: 3**
- F A 3165 - Concepts and Processes in Photography. **Semester Hours: 3**
- F A 3175 - Photography: Creative Commercial Applications. **Semester Hours: 3**

**Total: 18 Hours**

# Business School

**Dean:** Sueann Ambron

**Associate Dean of Faculty:** Clifford E. Young

**Associate Dean of Operations:** Jean-Claude Bosch

**Associate Dean for Academic Programs and Students:** Bruce R. Neumann

## Contacts

<b>Dean's Office</b>	<b>Mailing Address</b>	<b>Admissions/Advising</b>
UC-Denver Building	The Business School	Undergraduate: 303-556-5800
1250 14th Street, 2nd Floor	Campus Box 165	Graduate: 303-556-5900
303-556-5802	P.O. Box 173364	
Fax: 303-556-5914	Denver, CO 80217-3364	

[www.business.ucdenver.edu](http://www.business.ucdenver.edu)

## Application Deadlines

<b>Undergraduate</b>	<b>Graduate</b>	<b>Executive MBA</b>	<b>11-month MBA</b>
<i>Fall</i> —August 1	<i>Fall</i> —June 1	<i>Fall</i> —June 1	<i>Fall</i> —June 15
<i>Spring</i> —December 1	<i>Spring</i> —November 1		
<i>Summer</i> —May 1	<i>Summer</i> —April 1		

*Located in the heart of the Rocky Mountain business community, the Business School at the University of Colorado Denver prepares students with the knowledge and skills necessary to become effective, responsible business professionals. We're able to achieve a standard of excellence by bringing together nationally recognized faculty and highly motivated, mature students in an intellectually challenging academic environment. UC Denver's Business School is a research institution. Because our faculty are nationally recognized for scholarly research as well as for their teaching skills, our students have the opportunity to be on the leading edge of business management theory and practice. Our class schedules and curriculum offer flexibility to meet your needs whether you plan to attend full or part time, day or evening. Whether you're an experienced working professional seeking an advanced degree or preparing for a new career in the business world, you'll gain the knowledge and perspective necessary to succeed in today's challenging business environment.*

## **Educational Goals**

The Business School is committed to superb teaching, connecting theory to practice that focuses on:

- current and relevant knowledge and skills necessary for success in the highly competitive global business environment
- experience in cooperative and team-based work skills
- integrated professional and functional expertise
- Sensitivity to cultural and ethnic diversity

Our graduate programs serve both traditional and nontraditional students who have extensive work experience. The MBA serves the needs of students who desire a general business education. The professionally oriented MS degrees serve the needs of students who desire greater specialization, particularly students who have already obtained an undergraduate business degree. Large numbers of our graduate students will be drawn from national and international locales.

Our undergraduate program, which serves both traditional and nontraditional students, leads to a baccalaureate degree in business with a substantial liberal arts component. The program is closely linked, through articulation agreements, to lower-division programs offered by Colorado's four-year and community colleges.

Key elements of our academic programs are the provision of top-quality career advising and placement services, as well as flexible schedules and programs to meet a wide range of student needs. We are committed to assisting our students' efforts to pursue rewarding careers.

## **Faculty**

Our nationally recognized faculty is vigorous and enthusiastic about its teaching and research. Faculty members hold degrees from the nation's leading business schools, including Berkeley, Harvard, Stanford, University of Chicago, University of Pennsylvania, UCLA and Yale. Many of them also bring years of valuable experience in private industry. Their interdisciplinary expertise, academic achievements, scholarly research and business experience provide students with a dynamic learning environment.

## **Scholarships and Financial Aid**

Many programs for financial aid are administered by the Office of Financial Aid . Call 303-556-2886 for detailed information.

Thanks to the generous support of the Colorado business community and others, the Business School has a significant number of scholarships to offer its students. Scholarships are awarded on the basis of merit and/or financial need. The amount of the award and the number of awards available vary.

Thirty different scholarships are available to eligible Business School students, with multiple awards from most scholarships. Go to [www.business.ucdenver.edu](http://www.business.ucdenver.edu) for more details.

- *Undergraduate* scholarships include the Board of Advisors, the Business School Undergraduate Excellence, the Carolyn Lee Henderson, the Robert E. Moore Memorial, the Business School Sustaining Student, the Dean's Community Scholarships, the Scholarship for International Study and the Dean's Scholarship for Continuing Undergraduate Business Students.
- The MBA Outstanding Scholar Award, the MBA Opportunity Scholarship and the MBA Faculty's Scholarship are given to qualifying MBA students.
- *Accounting* scholarships for both graduate and undergraduate accounting students include the Deloitte & Touche and Accounting Program Scholarship, as well as the Price water house Coopers Scholarship for undergraduate junior accounting majors only.
- *MS finance* scholarships are the MS Finance Fellows, open to graduate students in the finance program, and the Carolyn Lee Henderson Scholarship, designated for students in the finance program.
- *MS health administration* scholarships include the Abbott Fellows, AUPHA/McGaw, UC Denver MS Health Administration, Eugenie D. Sontag, Leland R. Kaiser, Medical Group Management and the MS Health Administration Alumni Scholarships.
- *MS information systems* students may apply for the Dean's Scholarship in Information Systems.
- The *MS international business* Merit Scholarship is open to students in the UC Denver MS international business program.
- *MS management or human resources management* students may apply for the Excellence in Management or the Excellence in Human Resource Management Scholarship.
- *MS marketing* students may apply for the MS Marketing Sustaining Student, MS in Marketing Fellows and Robert E. Moore Memorial Scholarships (also open to undergraduate marketing students).
- Four scholarships are available to students who take courses in entrepreneurial studies at the Richard H. and Pamela S. Bard Center for Entrepreneurship Development. These are the Coulter Foundation Scholarships in Entrepreneurial Studies and Business, and the Dean's Pursuit of Excellence, Mehalchin and Trueblood Scholarships.

Further information about these scholarships, including eligibility criteria and application forms, may be obtained by visiting the Business School Web site at [www.business.ucdenver.edu](http://www.business.ucdenver.edu) (click on scholarships) or by calling 303-556-5802.

## Study Abroad

Transfer credit from study abroad programs requires prior written approval from the undergraduate or graduate program director. Students must meet with a business staff advisor to determine course acceptability prior to the semester in which they intend to study abroad. Information on the various programs is available at the Office of International Affairs

## Institute for International Business

The Institute for International Business (IIB) was created in 1988 by the Board of Regents of the University of Colorado to serve as a center for the advanced study and teaching of international business. In 1993, the institute was designated a Center for International Business Education and Research by the U.S. Department of Education, one of only 25 such centers of excellence in the United States. Through the CIBER and other funding sources, the institute strives to help the faculties of the Business School and other university departments to internationalize curriculum, programs, certificates or other student-oriented endeavors. The IIB works in other ways to support faculty in their teaching, research and development activities. In addition, the institute designs and facilitates customized international programs and training for business, cooperates with other organizations to offer seminars and conferences and publishes a quarterly newsletter to familiarize the Denver and regional communities with international business issues. Such initiatives help faculty, students and the business community to acquire the skills and expertise needed to be successful in our increasingly global economy. The institute also conducts and promotes research on the global economic aspects of competitiveness. Call 303-556-4738 for information.

## **Internships**

Internships are included in the experiential learning requirement of the undergraduate business program. To be eligible to enroll in an internship for experiential learning credit, the undergraduate student must meet the following grade and course work requirements:

- the student must be in good standing with a cumulative GPA of at least 2.0, and a GPA in the area of emphasis of at least 2.0
- the student must have completed (a) all required lower-division course work and (b) at least 21 semester hours of the business core courses

Graduate students must be admitted to the Business School, be in good standing with at least a 3.0 GPA and have completed 15 semester hours of graduate work at the Downtown Campus.

Interested students should contact the Experiential Learning Center (303-556-6656) for further details about the program.

## **General Academic Policies**

Academic policies that apply to all students on the UC Denver Downtown Campus are described in “Registration and Records” and University Policies. The policies outlined on the following pages are relevant for both undergraduate and graduate students in the Business School. Individual policies appropriate only to undergraduate or graduate students are described under separate headings. Each student is responsible for knowing and complying with the academic policies and regulations established for the school. The school cannot assume responsibility for problems resulting from a student’s failure to follow the policies stated in this catalog. Similarly, students are responsible for all deadlines, rules and regulations stated in the online schedule planner.

## **Academic Ethics**

Students are expected to conduct themselves in accordance with the highest standards of honesty and integrity. Cheating, plagiarism, illegitimate possession and disposition of examinations, alteration, forgery, falsification of official records and similar acts or any attempt to engage in such acts are grounds for suspension or expulsion from the university. In particular, students are advised that plagiarism consists of any act involving the offering of the work of someone else as the student's own. It is recommended that students consult with the instructors as to the proper preparation of reports, papers, etc., to avoid this and similar offenses. Also, actions that disrupt the administrative process, such as misrepresentation of credentials or academic status, other forms of deception or verbal abuse of university staff are grounds for suspension or probation. All reported acts of dishonesty must be referred to the Business School's Internal Affairs Committee.

## **Admission to Business Classes**

Enrollment in business classes is limited to students who have been admitted to business degree programs and to other students as described in the separate undergraduate and graduate policy sections. The course registration criteria are designed to meet a number of objectives:

- to assure access to business courses for students seeking a business degree
- to serve students in other colleges who have business-related education objectives or requirements
- to serve nondegree students who have specific career or education goals

Refer to the online schedule planner each term for course availability and prerequisites.

## **Attendance Regulations**

Students are required to attend classes, including online classes, on a regular basis. Absences must be arranged with the instructor and must conform with university and instructor policies on attendance.

## **Prerequisites**

Students are expected to know and fulfill all prerequisites when registering. See course listings for relevant prerequisites as they are strictly enforced. The Business School reserves the right to administratively drop students who enroll without the correct prerequisites. This action may result in the loss of tuition.

## **Course Numbering**

The course numbering system used at the Downtown Campus of UC Denver identifies the class standing required for enrollment. Students are expected to take 1000-level courses in their freshman year, 2000-level courses in their sophomore year, 3000-level courses in their junior year and 4000-level courses in their senior year. Courses at the 5000 and 6000 level are

restricted to master's-level business students, and courses at the 7000 level are restricted to PhD students.

## **Adding Courses**

Students may add courses to their original schedule through the census date (first 12 days of the fall or spring semester, first eight days of summer session). Instructor approval may be required to add a course after the first week of classes.

## **Dropping Courses**

Students may drop a course through the census date and it will not appear on the transcript. After census, a student who wishes to drop must obtain written approval from both the instructor and academic dean or designate. The course and a grade of *W* will appear on the transcript. In order to drop beyond the 10th week, it will also be necessary to document circumstances beyond a student's control. Any student who is failing a class will not be allowed to drop, and an *F* will be recorded on the transcript. See the academic calendar for deadlines and costs involved.

## **Withdrawal**

See Registration and Records for universitywide withdrawal policies. Note that the Business School normally requires instructors' signatures on withdrawal forms before the academic dean's approval is granted.

## **Administrative Drop**

The school reserves the right to administratively drop students who are incorrectly enrolled in business courses. Instructors also may recommend that students who fail to meet expected course attendance or course prerequisites be dropped from the course. Generally, students who are administratively dropped will not receive tuition refunds.

Note that students who never attend class are not automatically dropped from the course. The student is responsible for payment and for the grade in each course.

## **Appeal Procedure**

Students should contact a staff advisor in the Business School's programs office for appeal and petition procedures pertaining to rules and regulations of the school. For grade appeals, contact the Business School dean's office.

## **General Grading Policies**

*Plus/Minus Grading.* Faculty have the option to use plus/minus grading.

*Incomplete Grades.* The only incomplete grade given in the school is *I*. An *I* grade is assigned only when documented circumstances clearly beyond the student's control prevent completion of course requirements (exams, papers, etc.). Students must sign a contract outlining how they will make up the missing work with the instructor giving the *I*. Students may not register for the course a second time. All *I* grades must be made up within the contract period (which may not exceed one year), or the *I* will automatically be changed to the grade of *F*.

Also, *I* grades must be completed and recorded at the Office of the Registrar no later than four weeks prior to graduation. The student is responsible for contacting the instructor concerning the removal of incomplete grades.

*Grade Changes.* Grades as reported by instructors are final. Grade changes will be considered only in cases of documented clerical errors or when a student is making up an incomplete grade (*I*). All changes must be made within one year after the course has been taken, unless highly unusual circumstances can be documented and the change has been approved by the school. Normally, grade changes will not be considered under any circumstances after three years.

*Pass-Fail or No Credit (Audit).* With the exception of internships, experiential learning and travel study courses, the Business School does not permit election of pass-fail grading for any business course required for the degree. Students are not allowed to audit business courses.

## Academic Programs

A carefully designed curriculum to prepare students for success in business administration is available for the student seeking either an undergraduate or graduate degree. The school offers courses leading to the bachelor of science, master of business administration (MBA), the master of science (MS) and doctor of philosophy (PhD) degrees. [www.business.ucdenver.edu](http://www.business.ucdenver.edu)

It is possible to pursue two degrees simultaneously, such as an MBA and an MS, or two MS degrees, through our dual degree programs. In addition to the programs in the Business School itself, we partner with other university departments to offer dual programs in MS finance/economics and the MBA in combination with graduate programs in architecture, economics, urban planning and the MD. We also have a joint MBA/MS in international management degree through Thunderbird in Glendale, Arizona.

## Undergraduate Degree Programs

**Associate Dean:** Bruce R. Neumann

**Director Advising and Admissions:** Nancy A. Reed

**E-mail:** [nancy.reed@ucdenver.edu](mailto:nancy.reed@ucdenver.edu)

The undergraduate curriculum leading to the bachelor of science (business administration) degree is intended to help the student achieve the following general objectives:

- an understanding of the activities that constitute a business enterprise and the principles underlying administration of those activities
- the ability to think logically and analytically about the kind of complex problems encountered by management
- facility in the arts of communication
- a comprehension of human relationships involved in an organization
- awareness of the social and ethical responsibilities of those in administrative positions

- skill in the art of learning that will help the student continue self-education after leaving the campus

## **Undergraduate Admissions**

**Telephone:** 303-556-5800

**Fax:** 303-556-5904

### **Admission of Freshman Students**

Freshman applicants must have completed the college preparatory curriculum in high school, graduated in the top 25 percent of their high school class and achieved a score of at least 26 on the ACT or 1100 on the SAT. See Information for Undergraduate Students for further information on freshman admission.

### **Admission of Transfer Students**

Applicants who have completed work at other collegiate institutions should review the information for transfer students in Information for Undergraduate Students. In addition to general university transfer policies, the Business School evaluates course work to determine its appropriateness for the degree bachelor of science (business administration). Students who have completed more than 24 semester hours of transferable course work are evaluated for admission on the basis of their college GPA without regard to their high school performance. Transfer applicants with fewer than 24 transferable hours will be evaluated on the basis of both high school and college work.

Applicants are evaluated only on course work that applies to the business degree program. Generally, this will exclude course work of a technical or vocational nature and courses in activity PE and remedial subjects. For information about specific policies on transfer of credit, consult the undergraduate business program coordinator.

For admission to the Business School, a transfer applicant must have a minimum 3.0 GPA for all work applicable to the bachelor of science (business administration) degree and a 2.0 GPA in business courses. Applicants with less than an overall 3.0 GPA may be evaluated and admitted on a space available basis.

#### **Intra-University Transfer**

Students who want to transfer to the Business School from another college or school of the University of Colorado Denver must formally apply to the Business School. To apply for an intra-university transfer, students must submit an intra-university transfer (IUT) form and transcripts from University of Colorado to the business program coordinator. Transfer forms are available at the Office of Admissions or the Business School Advising Office; transcript request forms are available at the Office of the Registrar. The transcript must include the student's most recent semester at the university. Students with previous course work from other institutions are also required to submit a copy of their transfer credit evaluations (advanced standings). Transfer deadlines are August 1 for fall semester, December 1 for spring semester and May 1 for the

summer session. In general, the admission standards for intra-university transfer are the same as for transfer from other institutions as listed above.

## **Former Students**

A University of Colorado student from another campus, or a Downtown Campus student who has not registered for three consecutive semesters (summers included), is considered a former student and must reapply for admission. Former Downtown Campus business degree students will be automatically readmitted to the school for up to three years from the semester they last attended if they are in good standing (not on probation or suspension) in the school. Students who have not attended for more than three years, or who have completed the equivalent of 12 or more semester hours at another institution of higher education, must meet the admission and degree requirements applicable at the time they reapply.

## **Old Work Policy**

For students newly admitted to the Business School and former business students readmitted to the school after an absence of three semesters, applicable credits up to five years old will be counted toward business degree requirements. Courses more than five years old will be evaluated individually for their current relevance to the degree program. Students may be required to update their knowledge by taking additional courses when past courses are outdated; in such cases, credit will be given for both courses. Generally, business courses more than 10 years old will not apply toward degree credit.

## **Second Undergraduate Degree**

Students may apply to the Business School to earn a second undergraduate degree, provided the first undergraduate degree is in a field other than business. Persons who have already earned an undergraduate degree in business may not apply for a second undergraduate degree in business. Applications are available through the Office of Admissions.

If a student has an academic record that justifies consideration for a graduate program, that student is encouraged to apply for one of the Business School's master's degree programs. Call 303-556-5900 for information or refer to the graduate business section of the catalog.

Students who are accepted for the second undergraduate degree will be required to pursue courses in the sequence normally required for a business degree. For example, if a student registered for a second degree has not had the required mathematics or general education courses, these must be taken before the student will be eligible to register for business courses. Further, the basic business courses (core courses) must be taken before a student begins to pursue the major field.

## **Double Degree Programs**

Numerous career opportunities exist for persons trained in both a specialized field and management. For this reason, students may be interested in combined programs of study leading to completion of degree requirements concurrently in two fields. For additional information, contact an undergraduate business staff advisor at 303-556-5800.

## **Undergraduate Advising and Academic Planning**

### **Admissions Advising**

Persons not yet admitted to the Business School can receive advising on course selection, admission requirements and other matters from an undergraduate staff advisor. To make an appointment, call 303-556-5800.

### **Admitted Students**

Upon admission to the school, students execute a degree plan that identifies the courses required to graduate. This plan contains all the information needed to select courses and monitor progress toward completion of requirements for the bachelor of science (business administration). Business students are expected to assume responsibility for their own advising. This includes scheduling courses each term, meeting prerequisite requirements, being familiar with all the policies and procedures of the college and otherwise managing their own academic careers. Staff advisors are available to answer questions about unusual situations.

Career advising is available from business faculty and from the Career Center, 303-556-2250.

## **Undergraduate Core Curriculum—University of Colorado Denver**

The faculty of the Business School, College of Engineering and Applied Science and the College of Liberal Arts and Sciences have established a core curriculum for undergraduate students. All undergraduate students are required to complete the undergraduate core curriculum in dependent of their college or major.

The undergraduate core curriculum for the Downtown Campus is outlined here; the core requirements for business students are specified in the section labeled “Business Program Requirements.”

The undergraduate core curriculum seeks to provide all baccalaureate students with basic intellectual competencies in English, mathematics, biological and physical sciences, behavioral sciences, social sciences, humanities and arts. Furthermore, the core curriculum promotes an awareness of cultural diversity and international perspective. The majority of the core curriculum is designed to be completed during a student’s freshman and sophomore years in order to provide the foundation for specific training in a student’s major discipline.

### **Graduation Requirements**

The bachelor of science (business administration) degree requires the following:

*Total Credits.* A total of 120 semester hours.

A minimal level of proficiency must be demonstrated in one foreign language or in regional expertise. Students may satisfy the proficiency requirement by taking courses as described below.

*Area of Emphasis.* Completion of at least 9–21 semester hours of approved courses in the area of emphasis.

*Residence.* At least 30 semester hours of business courses (including the business area of emphasis) must be completed after a student's admission to the Business School. The 30 hours for residence must include MGMT 4500 and 27 hours in other 4000-level business courses (including area of emphasis courses).

*GPA Requirement.* To graduate, a student must maintain a minimum cumulative scholastic GPA of 2.0 for all courses attempted at the university acceptable toward the BS (business administration) degree, 2.0 for all business courses and 2.0 for courses in the student's area of emphasis.

*Undergraduate Honors.* Upon recommendation of the faculty, students who demonstrate superior scholarship are given special recognition at graduation. Students must achieve an overall University of Colorado GPA of 3.3 and a GPA of 3.5 in all business courses taken at the University of Colorado to be considered for *cum laude*. Those who achieve an overall University of Colorado GPA of 3.5 and a GPA of 3.7 in all business courses taken at the University of Colorado will be considered for *magna cum laude*. Those who achieve a 3.7 overall GPA and a 3.85 GPA in all business courses will be considered for *summa cum laude*.

*Filing for Graduation.* A senior audit is completed on all students who have completed 90 or more semester hours. Students must file an undergraduate candidacy form and diploma card and request a graduation evaluation prior to registering for their final semester. Failure to do so will delay graduation. Also, students desiring to change their area of emphasis after filing for graduation must have the change approved by the graduation coordinator prior to registering for their final semester. Changes after that time will delay graduation.

### **Undergraduate Core Curriculum for BS in Business**

Intellectual Competencies	<i>Semester Hours</i>
English	6
Mathematics	3
Knowledge Areas	
Biological and Physical Sciences	6-7
Humanities	3

Arts	3
Behavioral Sciences	3
Social Sciences	3
Cultural Diversity	3
International Perspectives	3
Total	34

## **Business Program Requirements**

Satisfaction of all the following:

<i>Program Requirements</i>	<i>Semester Hours</i>
School proficiencies or other courses	0-10
UC Denver Downtown Campus core	34
Business School specific graduation requirements - see Business School policy	12
Business core	33
International studies	3
Experiential Learning	3
Area of emphasis and other courses	21
Other business and nonbusiness courses	4
Total	120

Detailed descriptions of degree course plans that satisfy program requirements follow:

## **Business School Foreign Language Hours Proficiency**

The Business School's foreign language requirement or regional expertise for the 2008–2009 academic year requires that students demonstrate a minimum level of proficiency in one foreign language.

This requirement is met through completion of one of the following:

- a second-year (Level II) high school course with a minimum grade of C (2.0)\*
- a second-semester-level college course (1020) with a minimum grade of C (2.0)
- satisfactory proficiency testing, including taking and passing a proficiency exam

**\*High school courses will not apply toward degree credit; however, they will waive the specific requirement from having to be done at the college level.**

Student's choosing the regional expertise requirement with one year of high school foreign language or one semester of college level work can satisfy the requirement by completing a minimum of 6 semester hours of course work from an approved list that relates to the politics, arts, history, culture or economy of any region of the world other than North America.

Courses used in the expertise area must meet the Business School guidelines and can be chosen from the list specified by the Business School. Students should contact their business advisor to outline their program, 303-556-5800.

Students who must meet all the proficiency requirements through course work at UC Denver may find it necessary to complete more than 120 semester hours to earn the BS in business administration. The proficiency requirement must be completed during the first three terms in attendance at the Downtown Campus.

## **Academic Policies for Selecting Courses**

### **Registration**

For registration, go online to [www.ucdenver.edu/registrar](http://www.ucdenver.edu/registrar).

### **Maximum Units per Term**

The normal scholastic load of an undergraduate business student is 15 semester hours, with a maximum of 18 hours allowed during the fall/spring semesters and 12 hours allowed during the summer session. Hours carried concurrently in the Division of Continuing Education, University of Colorado-Boulder, or the Downtown Campus Extended Studies Programs, whether in classes or through correspondence, are included in the student's term load.

### **Repeating Courses**

A failed course (grade of *F*) may be repeated; however, the *F* will be included in the GPA and will appear on the transcript. Students must earn at least a *C* grade in required business core courses. Core business courses must be repeated if the student earns less than a *C* grade.

## **Courses from Other Institutions**

Business students must have the written approval of the business program director to register for courses (excluding MSCD pooled courses) offered by other institutions, including other University of Colorado locations. Credit will not be given for courses taken without approval. Grades of *C* or better must be earned to receive business degree credit. Generally, only nonbusiness electives or lower-division, nonbusiness requirements are acceptable for transfer from other institutions once a student has been admitted to the Business School. Students who, after admission to the college, take more than 12 semester hours from another institution, must reapply for admission to the college as transfer students and must meet the current admission requirements.

## **Metropolitan State College of Denver Courses**

Business students may select their nonbusiness required and elective courses from those offered by MSCD. Grades of *C* or better must be earned to receive business degree credit; however, the grade is not computed in the University of Colorado GPA and is treated like other transfer credits. MSCD business courses may not be taken for Downtown Campus business degree credit.

## **Graduate-Level Courses**

With prior written approval of the business program coordinator, students may take a maximum of 6 semester hours of graduate-level nonbusiness elective credits. Students must earn grades of *B* or better in graduate courses to apply the credits toward business degree requirements.

## **Pass/Fail**

Only internships, independent studies and nonbusiness elective courses may be taken pass/fail. Required business and nonbusiness courses (including the campus core) may *not* be taken pass/fail. A maximum of 6 hours pass/fail credit may be applied toward the business degree. Courses taken in excess of the maximum will not be applied toward degree credit. Pass/fail determination must be made within the posted deadlines (at census dates) and may not be rescinded (unless approved by the undergraduate committee).

## **Correspondence Courses**

Only 6 semester hours of credit taken through correspondence study (from regionally accredited institutions) will be applied toward the business degree. Business courses may not be taken by correspondence. All correspondence courses must be evaluated by the business program coordinator to determine their acceptability toward degree requirements, and the program coordinator's written approval is required *prior to* the student's registering for courses. Students may contact the Division of Continuing Education, University of Colorado-Boulder, for correspondence course offerings and registration procedures.

## Independent Study

Junior or senior business students desiring to work beyond regular course coverage may take variable credit courses (1–3 semester hours) as nonbusiness electives under the direction of an instructor who approves the project, but the student must have the appropriate approval before registering. A maximum of 3 semester hours of independent study course work may be taken in any one semester; a maximum of 6 semester hours may be applied toward degree requirements. An independent study request form must be signed by the student, the instructor, the program director and the director of advising and admissions.

## Academic Policies for Suspension and Probation

To be in good standing, students must maintain an overall University of Colorado GPA of 2.0 ( $C = 2.0$ ) or better for *all course work attempted* and a 2.0 GPA or better for *all business courses attempted*. PE activity courses, remedial course work, MSCD courses and repeated courses not approved by a business advisor are not included in this average. When semester grades become available, students falling below the 2.0 GPA will be notified of (1) probationary status or (2) suspension. Students are responsible for being aware of their academic status at all times; late grades and/or late grade notification does not waive this responsibility. School rules governing probation and suspension are as follows:

1. Any student whose overall GPA or business course GPA is less than 2.0 will be placed on probation immediately. A student may be removed from probation when the overall GPA and business GPA have been raised to 2.0.
2. A student may remain on probation as long as he/she maintains normal degree progress each semester as determined by the school *and* each term, while on probation, obtains an overall term GPA of 2.5 and term business course GPA of 2.5, with no grade below a C. Failure to meet probationary provisions will result in suspension. Probationary status may continue only until the student has completed a maximum of 12 semester hours or four terms, whichever comes first; summer is considered a term. The student will be suspended if the GPA deficiency is not cleared within this time.
3. Suspended students may not attend any campus of the University of Colorado or any division of the university (including continuing education or extended studies credit classes).
4. Students on suspension may petition for readmission to the school after waiting a minimum of one year from the term in which they were suspended. Generally, petitions are granted only in unusual circumstances. Any suspended student re-admitted to the school will be under contract and placed on a continued probation status until the GPA deficiency has been cleared. Such students will be automatically suspended if, at any time, their overall GPA or business GPA again falls below 2.0.
5. Students earning all failing grades for a semester will have a dean's stop placed on their record and will not be permitted to register without a business advisor's approval.
6. Combined degree students are required to maintain the same standards of performance as Business School students in order to be continued in a combined program.

## Areas of Emphasis

Business students must choose an area of emphasis and complete the requirements for the area. The area of emphasis provides specialization beyond the general background that is provided by the undergraduate core and the business core, both of which are required to be fulfilled prior to completing the area of emphasis courses. Areas of emphasis within the BS in business administration program include:

- Accounting (financial, managerial, accounting/information systems)
- Financial Management (financial management/information systems )
- Human Resources Management
- Information Systems
- International Business
- Management (management/information systems)
- Marketing (marketing/information systems)

## **Graduate Business Programs (MBA/MS/PhD)**

**Associate Dean:** Bruce R. Neumann

**Assistant Dean:** Linda J. Brooker

**Telephone:** 303-556-5900

**Fax:** 303-556-5904

**E-mail:** grad.business@ucdenver.edu

The Business School offers programs leading to a doctor of philosophy, the master of business administration and the master of science in specific fields of business and health administration. In addition, the master of business administration for executives (executive MBA) is offered as a multi campus program of the University of Colorado business schools, and the executive program in health administration (executive MBA/HA) is offered through the executive health network.

The PhD, MBA, the executive MBA and the MS degree in business are accredited by AACSB International, the Association to Advance Collegiate Schools of Business. The health administration MBA and MS degrees are also accredited by the Commission on Accreditation of Healthcare Management Education (CAHME).

For a list of graduate business programs, see Program Curricula below.

## **Requirements for Admission to the MBA and MS Programs**

### **Admissions Advising**

Persons contemplating graduate study are encouraged to learn about admission and program requirements by scheduling an appointment with a graduate advisor or attending one of the regularly scheduled prospective student information meetings. Call 303-556-5900.

Admission to the graduate programs in business is granted only to students showing high promise of success in graduate business study. Admission is based on the following indicators of the candidate's likelihood to succeed in the program.

## **Academic Record**

The bachelor's degree must be earned from a regionally accredited university. The total academic record is considered, including the GPA, the course of study and the quality of the program.

## **Required Testing**

The GMAT is required for admission consideration for any applicant who does not have a post-baccalaureate degree. The GMAT is administered at numerous centers throughout the world. For information and to make application for the test, write to: GMAT, Educational Testing Service, CN 6103, Princeton, NJ 08541; or phone 1-800-GMATNOW; or visit [www.mba.com](http://www.mba.com). The code numbers for UC Denver's graduate business programs are as follows:

MBA: MPB-OG-78

MS: MPB-OG-75

PhD: MPB-OG-29

## **Work Experience**

A record of appropriate employment at increasing levels of responsibility is considered a positive indicator of the likelihood of successful completion of graduate work. A resume must be submitted with the application materials.

## **Background Requirements**

Students applying for graduate programs in business do not need to have taken their undergraduate degrees in business. The MBA program is specifically designed so that the required courses cover the material needed for completion of the degree. There are no prerequisites needed to start the MBA program. Applicants for the MS degree, however, may be required to take background or common body of knowledge courses, depending on the individual's academic background. Students with nonbusiness backgrounds have completed the program successfully. For more detailed information, phone a graduate academic advisor, 303-556-5900.

It is expected that students have an adequate level of personal computer proficiency in a word processing and spreadsheet software, as well as a good working knowledge of basic algebra and proper English.

## **The Admission Process**

Mailing address for applications:

Graduate Admissions  
The Business School

University of Colorado Denver  
Campus Box 165, P.O. Box 173364  
Denver, CO 80217-3364

Students seeking admission to the 11-month MBA, MBA with an emphasis in health administration, MS in health administration or executive programs should consult with the relevant catalog sections for additional application criteria or requirements.

### **Domestic Application Requirements**

- Complete parts I and II of the application for graduate admission and the four essay questions.
- Have required GMAT scores sent directly to the graduate business admissions office from the Educational Testing Service. The code for UC Denver's graduate business programs re as follows:

MBA: MPB-OG-78

MS: MPB-OG-75

PhD: MPB-OG-29

- Have two official transcripts (not student copies) mailed directly from each school, college and university ever attended past high school. Transcripts must be sent even if credit course work completed was not part of a degree program or was taken after an undergraduate degree was earned.
- Resumé
- Enclose a check for \$50 for the MBA, MS or PhD programs, or \$80 for the dual MBA/MS or dual MS/MS, made payable to the University of Colorado. Personal interviews are not required, except for the 11-month MBA, the MBA and MS in health administration, or when meeting a petition requirement.
- If you are denied admission because of our GMAT requirements and can meet three of the following requirements, you can petition for a special admission.
  - have seven to ten years of progressive business work experience
  - an undergraduate GPA of 3.5 or higher
  - success in previous graduate work to demonstrate acceptable quantitative and verbal skills from an AACSB accredited university
  - demonstrated success in passing BUSN 6530 and BUSN 6540 with a grade of B+ or better
  - successful personal interview

*Deadlines.* To be considered for admission, applicants for graduate programs must submit all materials prior to the following dates:

April 1 for summer session admission

June 1 for fall semester admission

November 1 for spring semester admission

The 11-month MBA option only admits students each fall.

Early applications are encouraged because, if admitted, the student receives priority for registration time assignment. Applications received after published deadlines with complete

supporting documentation, scores, fees and transcripts will be considered, but do not receive priority handling.

### **International Application Requirements**

See Information for International Students.

## **Academic Policies for Graduate Students**

### **Advising**

As soon as possible after being admitted, students should schedule an appointment with a graduate advisor to discuss general degree requirements, plus determine if any background course work may be required and/or what common body of knowledge courses might be waived for the MS degrees.

### **Degree Plan**

All students are encouraged to meet with a graduate advisor during their first semester to review their degree plan. Students are encouraged to meet with a graduate advisor throughout their program to ensure the correct sequencing of courses. An advising hold will be placed on students beginning an MS in accounting, an MS in health administration and an MBA in health administration. Students must petition before receiving degree credit for any course changes.

### **Course Load**

The normal course load for full-time graduate students is 9–15 semester hours. However, because many students also are pursuing a career, it is possible to attend classes on a part-time basis by enrolling for 3–6 semester hours. For financial aid purposes, 6 semester hours of graduate study is considered full time. Graduate courses are scheduled primarily in the evening or online to accommodate work schedules.

### **Transfer of Credit**

Upon approval of the program director, a maximum of 12 semester hours of graduate business course work may be transferred to the MBA and 9 semester hours for the MS degrees (9 semester hours for each the MBA and MS degree if under a dual program) from another AACSB accredited graduate school of business, if they have been completed within the last five years with a grade of at least B (not B-). No transfer courses will be accepted if they have been used to satisfy degree requirements of a previously awarded degree. Graduate business courses taken at other University of Colorado campuses are considered transfer hours and are included in the transfer limit. Transfer of quarter hours of graduate business credit may satisfy a course requirement, but may not satisfy the total number of hours requirement. One quarter hour equals .667 semester hours.

## **Time Limits**

Master's students are required to complete all degree requirements within five years and one semester (seven years and one semester to earn dual MBA/MS or MS/MS degrees, or a PhD). Courses completed outside of these time limits will not be accepted toward the degree without petition. Time-limit extensions are given only for external situations that restrict a student's ability to complete the program in a timely manner. If you do not take graduate business courses for more than three semesters, you will need to reapply for admission.

## **Former Students**

Any Downtown Campus student who has not been enrolled in his or her admitted program of study for three consecutive semesters (summers included) is considered a former student and must reapply for admission to the program by submitting part I of the application for graduate admission, in-state tuition classification form, along with the applicable fee. Readmitted students must conform to degree requirements in effect during the term in which they are readmitted. If the new requirements differ significantly from the former degree plan, a petition may be submitted requesting exceptions.

## **Graduation**

Students must complete the online intent to graduate form on the registrar's Web site ([www.ucdenver.edu/registrar](http://www.ucdenver.edu/registrar)) when they register for their last semester. Contact the graduate advising office to confirm receipt at [grad.advising@ucdenver.edu](mailto:grad.advising@ucdenver.edu).

## **Grade Point Average Requirements**

A minimum cumulative GPA of 3.0 must be achieved and maintained for courses taken toward a graduate business degree. All Downtown Campus graduate business courses are computed in the graduate business GPA. Transfer hours and grades from other institutions, including University of Colorado courses taken at the Boulder, Anschutz Medical and Colorado Springs Campuses are not computed in the business GPA, although degree credit may be awarded through a petition process.

## **Probation and Suspension**

If after completing 6 semester hours a student's cumulative graduate business GPA falls below 3.0, the student will be placed on academic probation and given three semesters (one calendar year) or 9 semester hours of graduate business course work (whichever occurs first) in which to achieve the required 3.0 cumulative average. Failure to achieve the required GPA within the allotted time period will result in suspension for one year. Suspended students who showed improvement while on probation or students with unusual circumstances who are unable to meet the time limits will have 30 days from the date of suspension activation to petition for a prolonged probationary period. Suspended students may not attend any campus of the

University of Colorado including continuing education/extended studies. Suspended students may seek to be readmitted after 12 months (three semesters) from the term in which the suspension occurred. A petition form plus a new graduate application part I and in-state tuition classification form must be submitted along with the appropriate fee. Generally petitions of this nature prove successful only on rare occasions.

## **Passing Grades**

Any grade below a *C* (2.0) is a failing grade for graduate students. Graduate students must repeat a required course for which they have received a grade below a *C*. Both the original grade and the grade for the repeated course count in the computation of the business GPA.

## **Repeating Graduate Business Courses**

A failed course (any grade below a *C*) must be repeated if it is a required course. Both the original and the repeated grade will be included in the GPA and will appear on the transcript. A course in which a grade of *C* or better is obtained may not be repeated without written approval from the assistant dean. Graduate business courses repeated without approval may not be used in the graduate business GPA calculation.

## **Drop/Withdrawal**

Classes dropped prior to census date will not appear on the transcript. Thereafter, to drop with a grade of *W*, a student must be earning a grade of *C* or better; otherwise, an *F* will appear on the transcript. Students will not be permitted to drop a course or withdraw from all courses after the 10th week of the semester, unless circumstances outside the student's control are documented. The petition to drop or withdraw must be approved by the assistant dean and the course instructor(s).

## **Registration for Graduate Business Courses**

Students admitted to graduate degree programs have priority for graduate business courses. Nondegree students and graduate students from other University of Colorado schools or colleges may be permitted to attend on a space-available basis by meeting the qualifications and submitting a nondegree application form (available online at [www.business.ucdenver.edu](http://www.business.ucdenver.edu)).

Some graduate-level (6000-level) courses may be offered simultaneously with undergraduate 4000-level courses. However most 6000-level courses are reserved exclusively for graduate students.

## **Master of Business Administration Programs**

The master of business administration (MBA) program provides a general background in management and administration. This background enables the student to have the breadth of exposure and depth of knowledge required for an advanced-level management career. The program is devoted to developing the concepts, analytical tools and communication skills

required for competent and responsible administration of an enterprise viewed in its entirety, within its social, political and economic environment.

The professional MBA program allows the scheduling of classes with maximum flexibility so students can progress through the program at their own pace, by taking as little as one class per semester or as many as five classes per semester, at times that are convenient to their work schedule. The program can be completed in as little as 16 months or as long as five years plus one semester.

Online courses add additional flexibility. Students may complete all degree requirements online, or combine online and campus courses to broaden your choice of electives or to fit a business travel schedule or personal learning style. Choice of online electives is limited.

The MBA program is also available in different configurations: 11-month (full time, see relevant section), health administration and the executive MBA (see relevant section). All MBAs have the same curriculum requirements; they differ only in their focus, the flexibility of course scheduling and the time required to complete the program. The 11-month and executive MBAs are lockstep programs (no open electives, no specialized tracks), where all the students complete all program requirements together. No course transfers, waivers or substitutions are permitted.

For a list of MBA programs, see Program Curricula below.

## **Master of Science Programs**

Master of science degrees (MS) are offered in the fields of accounting, decision sciences, finance, global energy management, health administration, information systems, international business, management and marketing.

The MS degree affords the opportunity for specialization and depth of training within a particular field. The specialization and expertise developed within the MS program prepares the student for more specialized staff positions in industry, the nonprofit sector and government.

The course requirements for the MS degree in each of the fields are divided into two components—common body of knowledge (CBK) and graduate core requirements. The common background requires business courses to develop general breadth and competence in the fields of business administration. These requirements differ among degree programs. Some common background requirements may be waived if evidence of equivalent undergraduate or graduate-level course work is shown and the course work is no more than 10 years old. An undergraduate degree in business administration earned from an AACSB or regionally accredited university will meet most of the CBK requirements. The graduate core requires at least 30 semester hours of graduate-level courses. BUSN courses lower than 6800 may not be used as free electives in the MS programs. Contact a graduate staff advisor for any exceptions.

No comprehensive exams are required.

For a list of graduate MS programs, see Program Curricula below.

## **Dual Degree Programs**

Dual degree program options within the Business School include:

- MBA/MS

- MS/MS
- MBA/MIM
- MBA/MD
- MBA/MURP (Urban and Regional Planning)

## PhD CSIS Program

**Program co-directors:** Gita Alaghband and Mike Mannino

**Telephone:** 303-556-4314 (Alaghband), 303-556-6615 (Mannino)

The computer science department and the Business School offer a joint doctor of philosophy degree program in computer science and information systems (CSIS). The program targets students who have a master's-level education in either computer science or information systems and who seek research training that combines CS and IS along with strong industry interaction. The joint PhD program provides training for academic positions, industrial research positions and senior consulting positions. The specific goals of the program complement these general goals:

- create a pool of graduates with CSIS research training who are qualified for academic and nonacademic careers
- meet student demand for advanced training in CSIS with accommodations for full-time and part-time students
- promote interdisciplinary research between the CSE department and the Business School
- enhance technology transfer between CSIS academic units and front range technology businesses through joint research, student internships, faculty externships and committee participation

## Admission

Prospective students apply to either the computer science and engineering department or the Business School. Applicants who pass the initial screening are reviewed by a joint committee consisting of the two co-directors of the program for the final admittance decision.

Admission criteria include GPA (undergraduate and graduate), standardized test scores (GMAT or GRE), letters of recommendation, prior achievements in academia and industry and the application portfolio essay describing an applicant's motivation and an initial plan for doctoral study. The application portfolio is important to gauge an applicant's motivation for research training.

Due to the program's goals, preference is given to students with a master's degree in either computer science or information systems. Students without a master's degree in either area will need to take additional course work depending on the student's background.

## Program Organization

### Supervision of the PhD Program

The PhD program is supervised by co-directors from the Business School and the CSE department. The duties of the co-directors include scheduling of doctoral courses, setting program policies subject to approval of the Business School and the CSE faculty, working with advisors and doctoral committee chairs to ensure compliance with the program guidelines, resolving disputes, measuring performance of the program over time and providing the final decision on admittance of students.

## **Advisor**

Upon entering the program, each student chooses an advisor who will provide mentoring and guidance in the course of the entire program. The advisor will work with the student to prepare a program of study in the course work part of the program. The advisor will also work with the student in the preparation of the first- and second-year papers. Requests to change the advisor must be approved by the co-directors of the PhD program.

## **Dissertation Committee**

The advisor and four other members form a dissertation committee. To foster interdisciplinary work, you may have your dissertation research co-advised by two faculty members. At least one co-advisor must be a full-time current graduate faculty member in the CSE department or the Business School. The committee must contain at least one faculty member from the CSE department and at least one from the Business School. At least one committee member is from outside of the CSE Department and the Information Systems faculty.

## **Executive Programs**

### **Executive MBA**

### **Faculty and Resources**

The faculty are senior faculty of the business schools from three of the university's campuses. The executive MBA program is offered jointly by the Graduate Schools of Business Administration in Boulder and Colorado Springs and the Business School in Denver. Faculty are nationally recognized, and all possess both practical managerial experience and a demonstrated ability to work effectively with executive-level students.

### **Admission Requirements**

The executive MBA program is designed for men and women who have eight to 10 years experience in a decision-making position. In the selection process, significant attention will be given to the depth and breadth of the candidate's experience, progression in job responsibility, total work experience and the ability to benefit from this integrative classroom/work environment. The admissions committee will base its decision on the application, former academic record, relevant test scores, the employer's nominating letter, other letters of recommendation and a personal interview.

**For application and additional information, write to:**

Executive MBA Program  
University of Colorado Denver  
P.O. Box 480006  
Denver, CO 80248-0006

## **Executive MBA in Health Administration**

**Program Manager:** Pete Taffe  
**Telephone:** 303-623-1888 or 1-800-228-5778

## **Program Sponsors**

The executive program in health administration is a cooperative program of UC Denver and the Network for Healthcare Management.

The University of Colorado Denver serves as the degree-granting institution for the executive program. The graduate program in health administration is located in the Business School.

The Network for Healthcare Management is an educational consortium representing healthcare executives and academic faculty from major health administration graduate programs in the United States and Canada, including Arizona State University, Northwestern University, Ohio State University, San Diego State University, the University of California at Berkeley, the University of California at Los Angeles, the University of Colorado Denver, the University of Michigan, the University of Missouri, the University of North Carolina, the University of Southern California, the University of Toronto, the University of Washington and Virginia Commonwealth University.

## **Program Curricula**

### **Bachelor of Science in Business Administration**

## **Accounting Emphasis BS in Business Administration**

**Program Director:** Michael Roberts  
**Telephone:** 303-556-5884  
**E-mail:** [Michael.Roberts@ucdenver.edu](mailto:Michael.Roberts@ucdenver.edu)

Accounting courses are offered in several fields of professional accountancy at the intermediate, advanced and graduate levels. They provide preparation for practice in one or more of the following fields:

Auditing  
Financial Accounting  
Financial Management  
Management Control Systems  
Managerial Accounting  
Tax Accounting  
Teaching and Research

In all of these fields a thorough knowledge of the social, legal, economic and political environment is needed. A high degree of analytical ability and communication skill is indispensable. A grade of C must be earned in all accounting courses to qualify for graduation.

Courses in English composition, speech, ethics and logic are desirable. Courses in statistics and information systems, beyond the required business core courses, are highly recommended.

## Required Courses

- ACCT 3054 - Accounting Systems and Data Processing. **Semester Hours: 3**
- ACCT 3220 - Intermediate Financial Accounting I. **Semester Hours: 3**
- ACCT 3230 - Intermediate Financial Accounting II. **Semester Hours: 3**
- ACCT 3320 - Intermediate Cost Accounting. **Semester Hours: 3**
- ACCT 4410 - Income Tax Accounting. **Semester Hours: 3**
- ACCT 4620 - Auditing. **Semester Hours: 3**

ACCT free elective (4000 level) (3 semester hours) choose one course from the following:

- ACCT 4240 - Advanced Financial Accounting. **Semester Hours: 3**
- ACCT 4070 - Management Accounting. **Semester Hours: 3**
- ACCT 4330 - Managerial Accounting Problems and Cases. **Semester Hours: 3**
- ACCT 4370 - International Accounting. **Semester Hours: 3**
- ACCT 4520 - Oil and Gas Accounting. **Semester Hours: 3**
- ACCT 4780 - Accounting IS Processes and Control. **Semester Hours: 3**
- ACCT 4800 - Accounting for Government and Nonprofit Organizations. **Semester Hours: 3**
- ACCT 4840 - Independent Study. **Semester Hours: 1 to 8**
- ACCT 4915 - Accounting for the Public Interest. **Semester Hours: 3**
- ACCT 4950 - Special Topics. **Semester Hours: 3**

**Total: 21 Hours**

Students planning to pursue accounting as a career may take more than the above required hours. Many students complete a total of 30 hours of accounting, often taking two accounting courses each semester in their junior and senior years. Students should work closely with the accounting faculty and business advisors in planning their accounting programs.

The accounting program offers several 4000/6000-level courses. Students with credit for a 4000-level course cannot receive credit for the corresponding 6000-level course. Graduate students should take 6000-level courses.

Accounting students often specialize in a particular topical area of accounting.

## **Financial Accounting**

### *Recommended Electives*

- ACCT 4240 - Advanced Financial Accounting. **Semester Hours: 3**
- ACCT 4800 - Accounting for Government and Nonprofit Organizations. **Semester Hours: 3**

## **Managerial Accounting**

### *Recommended Electives*

- ACCT 4330 - Managerial Accounting Problems and Cases. **Semester Hours: 3**
- ACCT 4800 - Accounting for Government and Nonprofit Organizations. **Semester Hours: 3**

## **Accounting and Information Systems (ACIS)**

Within the accounting curriculum students can choose to add courses in information systems to complement their individual interests as well as prior education and work experiences.

## **Required Courses**

- ACCT 3054 - Accounting Systems and Data Processing. **Semester Hours: 3**
- ACCT 3220 - Intermediate Financial Accounting I. **Semester Hours: 3**
- ACCT 3230 - Intermediate Financial Accounting II. **Semester Hours: 3**
- ACCT 3320 - Intermediate Cost Accounting. **Semester Hours: 3**
- ACCT 4410 - Income Tax Accounting. **Semester Hours: 3**
- ACCT 4620 - Auditing. **Semester Hours: 3**
- ACCT 4780 - Accounting IS Processes and Control. **Semester Hours: 3** or
- ISMG 4780 - Accounting IS Processes and Control. **Semester Hours: 3**

## **ISMG Electives**

Choose two:

- ISMG 4500 - Database Management and Applications. **Semester Hours: 3**
- ISMG 4600 - System Analysis and Design. **Semester Hours: 3**
- ISMG 4900 - Project Management and Practice. **Semester Hours: 3**

**Total: 27 Hours**

To further specialize, consider a graduate accounting program. Graduate study in accounting is receiving increasing emphasis by professional organizations and employers. Students meeting admission requirements should consider continuing their education at the graduate level. Qualified undergraduates may petition for permission to take one or two graduate accounting courses as electives (e.g. ACCT 6800, Special Topics).

# Financial Management and Information Systems Emphasis—BS in Business Administration

The financial management and information systems emphasis provides students with skills that they need to succeed in careers that bridge the fields of finance and information systems.

The financial management and information systems specialty incorporates knowledge of financial management and markets, accounting and information systems and technology. This specialization provides the manager with knowledge of financial information systems, databases, risk management and accounting systems.

Job opportunities include positions that require knowledge of both financial management and business information systems and databases. The specialization provides a solid accounting/finance and information systems background for other finance specialist and business analyst positions as well.

## Required Courses

### Finance

- FNCE 3500 - Management of Business Capital. **Semester Hours: 3**
- FNCE 4330 - Investment and Portfolio Management. **Semester Hours: 3**
- FNCE 4350 - Financial Markets and Institutions. **Semester Hours: 3**
- FNCE 4500 - Corporate Financial Decisions. **Semester Hours: 3**

### Accounting

- ACCT 3054 - Accounting Systems and Data Processing. **Semester Hours: 3**
- ACCT 3220 - Intermediate Financial Accounting I. **Semester Hours: 3**
- ACCT 3320 - Intermediate Cost Accounting. **Semester Hours: 3**
- ACCT 4780 - Accounting IS Processes and Control. **Semester Hours: 3 or**
- ISMG 4780 - Accounting IS Processes and Control. **Semester Hours: 3**

### ISMG

- ISMG 4500 - Database Management and Applications. **Semester Hours: 3**
- ISMG 4600 - System Analysis and Design. **Semester Hours: 3**
- ISMG 4900 - Project Management and Practice. **Semester Hours: 3**

## **Total: 33 Hours**

In addition, students must complete FNCE 4370, International Finance, to fulfill the international studies requirement.

# **Financial Management Emphasis—BS in Business Administration**

The financial management emphasis provides students with the skills needed to succeed in careers in financial management. The business community has affirmed that students need skills in both the accounting and finance areas. The financial management specialty incorporates knowledge of corporate financial management, financial institutions and markets, investments, financial accounting and managerial accounting, accounting information systems and information technology. Career opportunities include corporate financial management, finance/accounting positions with financial institutions and accounting positions that are not CPA-track. The specialization provides a solid finance and accounting background for other business positions as well.

## **Required Courses**

- FNCE 3500 - Management of Business Capital. **Semester Hours: 3**
- FNCE 4330 - Investment and Portfolio Management. **Semester Hours: 3**
- FNCE 4350 - Financial Markets and Institutions. **Semester Hours: 3**
- FNCE 4500 - Corporate Financial Decisions. **Semester Hours: 3**
- ACCT 3054 - Accounting Systems and Data Processing. **Semester Hours: 3**
- ACCT 3220 - Intermediate Financial Accounting I. **Semester Hours: 3**
- ACCT 3320 - Intermediate Cost Accounting. **Semester Hours: 3**

## **Total: 24 Hours**

In addition, financial management students must complete FNCE 4370, International Finance, to fulfill the international studies requirement.

\* Students should note that all finance and accounting courses are not offered every semester. Students should take the ACCT 2200 and ACCT 2220 courses as soon as possible to avoid

future problems in their schedules, since these are prerequisites for all courses in the specialization.

# Human Resources Management Emphasis—BS in Business Administration

Human resources management offers opportunities for students to develop professional competence in the areas of personnel administration and development. Students acquire an understanding of, and skills in, developing and implementing human resources systems, including recruitment, selection, evaluation, training, motivation and compensation.

## Required Course

- MGMT 3010 - Managing People for a Competitive Advantage. **Semester Hours: 3**

## Electives

Choose two:

- MGMT 4420 - Human Resources Management: Staffing. **Semester Hours: 3**
- MGMT 4430 - Human Resources Management: Training. **Semester Hours: 3**
- MGMT 4440 - Human Resource Management: Performance Management. **Semester Hours: 3**
- MGMT 4450 - Human Resources Management: Compensation. **Semester Hours: 3**

## Management Electives

Choose three:

- Any MGMT Course (3 semester hours)
- BLAW 4120 - Legal Issues for Entrepreneurs. **Semester Hours: 3**
- ENTP 3000 - Principles of Entrepreneurship. **Semester Hours: 3**

**Total: 18 Hours**

# Information Systems Emphasis—BS in Business Administration

The information systems program at the University of Colorado Denver is a nationally accredited program for students who want to design and implement effective solutions to meet organizational and management needs for information, control and decision making.

An information systems (ISMG) emphasis draws on a diverse set of skills and strengths requiring creative and innovative thinking at the intersections of disciplinary knowledge and practice. Information systems students learn how information technology, effective teamwork and leadership and sound project management combine to enable innovation and change, to improve organizational agility and to add competitive value. Courses require extensive hands-on projects, teamwork and use of high-end technology. A combination of technical skills gained in class work with broad based business process knowledge enables our graduates to be ideally situated to take leading roles in shaping the technology-based future of employers in the Rocky Mountain region and the nation.

## Undergraduate options

The Business School at the University of Colorado Denver offers a bachelor of science in business administration where you may choose information systems as your primary core specialty:

- Information Systems, Bachelor of Science in Business Administration degree

Or you may choose to add an information systems speciality to another business discipline.

- Accounting and Information Systems emphasis
- Financial Management Systems emphasis
- Management and Information Systems emphasis
- Marketing and Information Systems emphasis

## Career Opportunities

Careers in information systems continue to be one of the highest growth markets in the business world. A student completing the information systems program curriculum will be prepared for challenging careers as business analyst, database analyst, Web content manager, project manager, IT consultant and information auditing and compliance specialist. Employment possibilities include financial operations, health care, management consulting, service operations, transportation and logistics and government.

Information systems is becoming the foundation of all business activities, and a solid understanding of the role of information systems in business and in the national and global economy is now critical for every business student. The information systems emphasis focuses on effective use of information technology in business. You are equipped with logical and

analytical thinking in all areas of business and a strong basis for continued career growth in a variety of growing professions. You will develop the technical skills, business know-how and administrative insights required for acquisition, deployment and management of IT resources and services development, operation and evolution of IS infrastructure for use in accounting, finance, marketing, management and other business processes.

## Curriculum

The courses emphasize both team and individual work, allowing students to gain critical thinking skills, knowledge and experience to analyze, design, program, implement and use information.

### Requirements for the Information Systems emphasis

#### Lower Division

- ISMG 2050 - Introduction to Business Problem Solving. **Semester Hours:** 3 (fall or spring)
- ISMG 2800 - Designing for the Web. **Semester Hours:** 3 (spring)

#### Upper Division: Junior Year

- ISMG 3000 - Principles of Information Systems. **Semester Hours:** 3
- ISMG 3500 - Enterprise Data and Content Management. **Semester Hours:** 3 (fall)
- ISMG 3600 - System Strategy, Architecture and Design. **Semester Hours:** 3 (spring)

#### Upper Division: Senior Year

- ISMG 4200 - Building Business Applications. **Semester Hours:** 3 (fall)
- ISMG 4700 - Business Data Communications and Networking. **Semester Hours:** 3 (spring)
- ISMG 4900 - Project Management and Practice. **Semester Hours:** 3 (fall or spring)

#### Important note

It is particularly important to take the required courses in the proper sequence to fulfill the prerequisites and ensure you can complete your degree within four years. Please refer to the sample degree plan for the recommended course sequence.

#### Information Systems Electives

- ACCT 3054 - Accounting Systems and Data Processing. **Semester Hours:** 3
- C SC 2312 - Intermediate Programming. **Semester Hours:** 3
- C SC 2421 - Data Structures and Program Design. **Semester Hours:** 3

- ISMG 4300 - Information Security and Compliance. **Semester Hours: 3**
- ISMG 4750 - Business Intelligence and Financial Modeling. **Semester Hours: 3**
- ISMG 4760 - Customer Relationship Management. **Semester Hours: 3**

## Specialization in a minor area

You may also choose a secondary business minor area to support your career objectives.

### Accounting

Choose two from the following:

- ACCT 3054 - Accounting Systems and Data Processing. **Semester Hours: 3**
- ACCT 3220 - Intermediate Financial Accounting I. **Semester Hours: 3**
- ACCT 3230 - Intermediate Financial Accounting II. **Semester Hours: 3**
- ACCT 4780 - Accounting IS Processes and Control. **Semester Hours: 3**

### Finance

Choose two from the following:

- FNCE 3500 - Management of Business Capital. **Semester Hours: 3**
- FNCE 4330 - Investment and Portfolio Management. **Semester Hours: 3**
- FNCE 4350 - Financial Markets and Institutions. **Semester Hours: 3**
- FNCE 4750 - Business Intelligence and Financial Modeling. **Semester Hours: 3**

### Human Resource Management

Choose two from the following:

- MGMT 3010 - Managing People for a Competitive Advantage. **Semester Hours: 3**
- MGMT 4420 - Human Resources Management: Staffing. **Semester Hours: 3**
- MGMT 4430 - Human Resources Management: Training. **Semester Hours: 3**
- MGMT 4450 - Human Resources Management: Compensation. **Semester Hours: 3**
- MGMT 4770 - Human Resource Information Systems. **Semester Hours: 3**

### Management

Choose two from the following:

- MGMT 4350 - Leading Organizational Change. **Semester Hours: 3**
- MGMT 4370 - Organization Design. **Semester Hours: 3**
- MGMT 4400 - Environments of International Business. **Semester Hours: 3**

### Marketing

Choose two from the following:

- MKTG 3100 - Marketing Research. **Semester Hours: 3**
- MKTG 3200 - Buyer Behavior. **Semester Hours: 3**
- MKTG 4050 - Applied Marketing Management. **Semester Hours: 3**
- MKTG 4760 - Customer Relationship Management. **Semester Hours: 3**

**NOTE:**

All information systems courses are not offered every semester.

## **International Business Emphasis—BS in Business Administration**

Increasingly, businesses are reorienting their thinking, planning and operations to capitalize on opportunities that exist in the world marketplace. Every phase of business is affected by this reorientation. For individuals with the appropriate skills, training and interest, international business provides excellent career opportunities.

The international business curriculum is designed to enhance and build on thorough training in basic business skills and to provide students with additional skills and knowledge appropriate to international business.

### **Required Foundation Courses**

- MGMT 4370 - Organization Design. **Semester Hours: 3**
- MKTG 4050 - Applied Marketing Management. **Semester Hours: 3**

### **Required Emphasis Courses**

- FNCE 4370 - International Financial Management. **Semester Hours: 3**
- MGMT 4400 - Environments of International Business. **Semester Hours: 3**
- MGMT 4410 - Operations of International Business. **Semester Hours: 3**
- MKTG 4200 - International Marketing. **Semester Hours: 3**

### **Total: 18 Hours**

A second area of emphasis in business is highly recommended. In addition, serious consideration should be given to advanced study of a foreign language and to either a minor or a certificate in international affairs, offered by the College of Liberal Arts and Sciences.

### **Elective Business Emphasis Courses (9 credit Hours)**

- Three business courses (3000 or 4000 level), 3 semester hours each

Students are strongly recommended to take courses within the same business discipline, including internationally-oriented courses within the discipline such as MKTG 4220 (Asian Business Development and Marketing) and ACCT 4370 (Internationally Accounting)

# Management Emphasis—BS in Business Administration

The management curriculum provides the foundation for careers in supervision and general management in a wide variety of organizations. It develops skills in management practice through an understanding of general management principles, individual and group behavior, organizational change and design and human resources management.

## Required Foundation Courses

- MKTG 4050 - Applied Marketing Management. **Semester Hours: 3**

## Required Emphasis Courses

- MGMT 3010 - Managing People for a Competitive Advantage. **Semester Hours: 3**
- MGMT 4350 - Leading Organizational Change. **Semester Hours: 3**
- MGMT 4370 - Organization Design. **Semester Hours: 3**

### Choose two:

- Any upper-division MGMT course (3 semester hours)
- BLAW 4120 - Legal Issues for Entrepreneurs. **Semester Hours: 3**
- ENTP 3000 - Principles of Entrepreneurship. **Semester Hours: 3**

## Total: 18 Hours

These 6 hours must be in addition to MGMT courses that were used to satisfy the international business or diversity requirements.

## Management/Information Systems (MGIS)

Within the management curriculum students can choose to add additional courses in information systems to complement their individual interests as well as prior education and work experiences.

*Required Information System courses*

- ISMG 4500 - Database Management and Applications. **Semester Hours: 3**
- ISMG 4600 - System Analysis and Design. **Semester Hours: 3**
- ISMG 4900 - Project Management and Practice. **Semester Hours: 3**

**Total: 9 Hours**

# Marketing Emphasis—BS in Business Administration

Marketing is concerned with directing the activities of the organization toward the satisfaction of customer wants and needs. This involves understanding customers, identifying those wants and needs that the organization can best serve, guiding the development of specific products or services, planning and implementing ways to take products or services to the market, securing the customer's order and finally, monitoring customer response in order to guide future activities.

In most organizations, marketing is a major functional area that provides a wide variety of career opportunities in such fields as personal selling and sales management, advertising and sales promotion, public relations, marketing research, physical distribution, product management, market management, marketing information systems and retail management. Increasingly, career opportunities exist in service businesses and nonprofit organizations.

## Required Foundation Courses

- BLAW 4120 - Legal Issues for Entrepreneurs. **Semester Hours: 3**
- MGMT 4370 - Organization Design. **Semester Hours: 3**

## Required Emphasis Courses

- MKTG 3100 - Marketing Research. **Semester Hours: 3**
  - MKTG 4050 - Applied Marketing Management. **Semester Hours: 3**
- MKTG required 3 courses (9 semester hours): CHOOSE FROM:

## Electives

Choose three:

- MKTG 3200 - Buyer Behavior. **Semester Hours: 3**
- MKTG 4000 - Advertising. **Semester Hours: 3**
- MKTG 4200 - International Marketing. **Semester Hours: 3**
- MKTG 4220 - Asian Business Development and Marketing. **Semester Hours: 3**

- MKTG 4580 - International Transportation. **Semester Hours: 3**
- MKTG 4700 - Personal Selling and Sales Management. **Semester Hours: 3**
- MKTG 4950 - Special Topics. **Semester Hours: 3**

## **Total: 21 Hours**

In addition to the three required courses beyond the core, students may select marketing electives, business electives and nonbusiness electives that support their particular career orientations. The marketing faculty advisor can assist the student in choosing an appropriate set of electives to fit career objectives.

Marketing courses that were used to satisfy the international business requirement cannot be applied to the marketing area of emphasis.

## **Marketing/Information Systems (MKIS)**

Within the marketing curriculum students can choose to add courses in information systems to complement their individual interests as well as prior education and work experiences.

### **Required Information System Courses**

- ISMG 4500 - Database Management and Applications. **Semester Hours: 3**
- ISMG 4600 - System Analysis and Design. **Semester Hours: 3**
- ISMG 4900 - Project Management and Practice. **Semester Hours: 3**

### **Required Emphasis Courses**

- MKTG 3100 - Marketing Research. **Semester Hours: 3**
- MKTG 4050 - Applied Marketing Management. **Semester Hours: 3**
- ISMG 4760 - Customer Relationship Management. **Semester Hours: 3** or
- MKTG 4760 - Customer Relationship Management. **Semester Hours: 3**

### **Choose two:**

- MKTG 3200 - Buyer Behavior. **Semester Hours: 3**
- MKTG 4000 - Advertising. **Semester Hours: 3**
- MKTG 4220 - Asian Business Development and Marketing. **Semester Hours: 3**
- MKTG 4700 - Personal Selling and Sales Management. **Semester Hours: 3**
- MKTG 4720 - Internet Marketing. **Semester Hours: 3**
- MKTG 4950 - Special Topics. **Semester Hours: 3**

## **Total: 24 Hours**

Marketing courses that were used to satisfy the international business requirement cannot be applied to the marketing area of emphasis.

## Non Degree

# Business Administration Minor

Students in other undergraduate schools and colleges at the Downtown Campus wishing to take a minor in business administration must have a 2.0 GPA to enter as a business minor plus a 2.0 GPA in business courses.

## Prerequisites

- ISMG 2050 - Introduction to Business Problem Solving. **Semester Hours: 3**
- MATH 1070 - Algebra for Social Sciences and Business: MA1. **Semester Hours: 3** or
- MATH 1110 - College Algebra: MA1. **Semester Hours: 3** and
- MATH 1080 - Polynomial Calculus: MA1. **Semester Hours: 3**
- DSCI 2010 - Business Statistics. **Semester Hours: 3** or  
a statistics class approved by the Business School and
- ECON 2022 - Principles of Economics: Microeconomics: SS1. **Semester Hours: 3**

## Required Courses

- MGMT 1000 - Introduction to Business. **Semester Hours: 3**
- ACCT 2200 - Financial Accounting and Financial Statement Analysis. **Semester Hours: 3**
- BLAW 3000 - Legal and Ethical Environments of Business I. **Semester Hours: 3**
- MKTG 3000 - Principles of Marketing. **Semester Hours: 3**
- FNCE 3000 - Principles of Finance. **Semester Hours: 3**
- MGMT 3000 - Managing Individuals and Teams. **Semester Hours: 3**

Twelve of these 18 hours must be taken while in residence at the Downtown Campus. If the student has already taken the equivalent of one or more of these courses, other higher-level business courses may be substituted with Business School approval. Up to 6 hours of the 18 required business courses may be taken at another institution. Transfer credit will be granted on the same basis that transfer credit is granted for courses taken by business majors.

## Master of Business Administration

# Business Administration MBA

**Program Director:** Elizabeth Cooperman  
**Telephone:** 303-556-5948  
**E-mail:** Elizabeth.Cooperman@ucdenver.edu

## Faculty

### Professors:

Marcelle Arak, PhD, Massachusetts Institute of Technology  
Heidi Boerstler, PhD/JD, Yale University/University of Denver  
Jean-Claude Bosch, PhD, University of Washington  
Peter Bryant, PhD, Stanford University  
Wayne Cascio, PhD, University of Rochester  
Lawrence Cunningham, DBA, University of Tennessee  
E. Woodrow Eckard, PhD, University of California-Los Angeles  
Richard Foster, PhD, University of Chicago  
James Gerlach, PhD, Purdue University  
Jahangir Karimi, PhD, University of Arizona  
Susan Keaveney, PhD, University of Colorado  
Gary Kochenberger, PhD, University of Colorado  
C. Marlina Fiol, PhD, University of Illinois-Urbana-Champaign  
James Morris, PhD, University of California-Berkeley  
Dennis Murray, PhD, University of Massachusetts-Amherst  
Bruce Neumann, PhD, University of Illinois  
Edward O'Connor, PhD, University of Akron  
John Ruhnka, JD/LLM, Yale School of Law/Cambridge University  
Dean Taylor, PhD, University of Chicago  
Clifford Young, PhD, University of Utah

### Associate Professors:

Ajeyo Banerjee, PhD, University of Massachusetts-Amherst  
Kenneth Bettenhausen, PhD, University of Illinois-Urbana-Champaign  
Kang Rae Cho, PhD, University of Washington  
Gary Colbert, PhD, University of Oregon  
Elizabeth Cooperman, PhD, University of Georgia  
Murray Cote, PhD, Texas A & M University  
Carol Dee, PhD, Louisiana State University  
David Forlani, PhD, University of Minnesota

Blair Gifford, PhD, University of Chicago  
Dawn Gregg, PhD, Arizona State University  
Deborah Kellogg, PhD, University of Southern California  
Sarah Koovor-Misra, PhD, University of Southern California  
Vick Lane, PhD, University of Washington  
Michael Mannino, PhD, University of Arizona  
L. Ann Martin, PhD, University of Minnesota  
Madhavan Parthasarathy, PhD, University of Nebraska  
Michael Roberts, PhD, Georgia State University  
Judy Scott, PhD, University of California-Irvine  
Manuel Serapio, PhD, University of Illinois  
Marlene Smith, PhD, University of Florida  
Steven Walczak, PhD, University of Florida

## **Assistant Professors:**

Vinit Desai, PhD, University of California at Berkeley  
Stephanie Johnson, PhD, Rice University  
George Kiersey, PhD, University of Southern California  
Mary Malina, PhD, University of Colorado  
Robert Nieschwietz, PhD, Arizona State University  
Ronald Ramirez, PhD, University of California-Irvine  
Zhiping Walter, PhD, University of Rochester

## **Senior Instructors:**

John Byrd, PhD, University of Oregon  
Elizabeth Connor, MS, Colorado State University  
Chen Ji, MS, University of Colorado  
Michael Harper, PhD, Rensselaer Polytechnic Institute  
Robert Hockenbury, MS, University of Houston  
Barbara Pelter, PhD, University of California-Davis  
Mary Lee Stansifer, PhD, Northwestern University  
Eric Thompson, MS, University of Colorado  
John Turner, PhD, St. Louis University

## **Instructors:**

Errol Biggs, PhD, Pennsylvania State University  
John Daley, PhD, University of Washington  
Cindy Fischer, MA, University of Colorado  
Linda Fried, JD/LLM, University of Miami  
Wendy Guild, PhD, Massachusetts Institute of Technology  
Fredrick Hampel, MS, Kansas State University  
Barry McConnell, MBA, University of Colorado

Peter Miller, MA, Farleigh Dickenson University  
Jeffrey Nystrom, MS, University of Colorado  
Ira Selkowitz, JD, University of Denver  
Lori Seward, PhD, Virginia Tech  
Mary Lee Stansifer, PhD, University of Florida  
Cindy Sutfin, MS, University of Colorado  
Emily Vera, MS, University of Colorado  
Nicole Vowles, PhD, Victoria University of Wellington, New Zealand

The master of business administration (MBA) program provides a general background in management and administration. This background enables the student to have the breadth of exposure and depth of knowledge required for an advanced-level management career. The program is devoted to developing the concepts, analytical tools and communication skills required for competent and responsible administration of an enterprise viewed in its entirety, within its social, political and economic environment.

The professional MBA program allows the scheduling of classes with maximum flexibility so students can progress through the program at their own pace, by taking as little as one class per semester or as many as five classes per semester, at times that are convenient to their work schedule. The program can be completed in as little as 16 months or as long as five years plus one semester.

Online courses add additional flexibility. Students may complete all degree requirements online, or combine online and campus courses to broaden your choice of electives or to fit a business travel schedule or personal learning style. Choice of online electives is limited.

The MBA program is also available in different configurations: 11-month (full time, see relevant section), health administration and the executive MBA (see relevant section). All MBAs have the same curriculum requirements; they differ only in their focus, the flexibility of course scheduling and the time required to complete the program. The 11-month and executive MBAs are lockstep programs (no open electives, no specialized tracks), where all the students complete all program requirements together. No course transfers, waivers or substitutions are permitted.

## Program Requirements

### Core Requirements

- BUSN 6520 - Managing Individuals and Teams. **Semester Hours: 3**
- BUSN 6530 - Data Analysis for Managers. **Semester Hours: 3**
- BUSN 6540 - Legal and Ethical Environment of Business. **Semester Hours: 3**
- BUSN 6550 - Analyzing and Interpreting Accounting Information. **Semester Hours: 3**
- BUSN 6560 - Marketing Management. **Semester Hours: 3**
- BUSN 6610 - Information Systems Management and Strategy. **Semester Hours: 3**
- BUSN 6620 - Applied Economics for Managers. **Semester Hours: 3**
- BUSN 6630 - Management of Operations. **Semester Hours: 3**
- BUSN 6640 - Financial Management. **Semester Hours: 3**

- BUSN 6710 - Strategic Management. **Semester Hours: 3**

## **Electives**

International business elective (1) (3 semester hours)

Free electives (5) (15 semester hours)

**Total: 48 Hours**

## **Notes and Restrictions:**

*Core Substitution.* Students with extensive and comparable course work in a particular core subject area may petition to substitute a higher-level graduate core course on the basis of prior undergraduate or graduate course work taken at a regionally accredited college or university for the corresponding core class. This does not waive the 48-hour requirement. If a core course is substituted, another graduate level course in the same functional area must be used as a substitute so that the student completes a total of 48 semester hours.

*International Elective.* One 3-hour course with an international focus must be completed. Contact a graduate advisor or refer to a current MBA degree plan for a complete list of options.

*Electives.* The professional MBA curriculum allows for 15 semester hours of elective credit, which can be chosen from graduate-level courses offered by the Business School, except BUSN courses numbered below 6800. Additional graduate-level course work completed at the Downtown Campus outside the Business School may be applied to the MBA degree, but only with prior written approval of the MBA program director.

*Note:* Electives for the 11-month and executive MBA programs are preselected for all students.

## **MBA Specializations**

Graduate students will have an opportunity to take specialized tracks within the professional MBA program by completing a prespecified program of elective courses. The following 15 tracks are available:

Business-to-Business Marketing  
Business Intelligence  
Business-to-Consumer Marketing  
Business Strategy  
Change Management  
Corporate Financial Management  
Decision Sciences  
Enterprise Technology Management  
Entrepreneurship  
Finance  
Financial Analysis  
Human Resources Management  
Information Systems

International Business  
Investment Management  
Managing for Sustainability  
Marketing  
Services Management  
Sports and Entertainment Management

For additional information about the professional MBA program, contact a graduate advisor at 303-556-5900.

# Business Administration—11–Month MBA

**Program Director:** Gary Colbert  
**Administrative Director:** Debbie Follenweider  
**E-mail:** 11-monthMBA@ucdenver.edu  
**Telephone:** 303-556-5911  
**Web site:** [www.busniess.cudenver.edu/11month](http://www.busniess.cudenver.edu/11month)

The 11-month MBA is an accelerated full-time program that brings academically superior students together with select research and teaching faculty. The program enables students to focus their energies in a concentrated, total-immersion program of study earning a nationally accredited, 48-semester-hour MBA degree in just under a year.

The 11-month MBA consists of five eight-week terms, three courses per term, plus a two-week international business course abroad. In addition to a minimum of 18 hours of class time each week, the 11-month MBA students spend an average of 30 hours a week on homework. Students should expect a minimum time commitment of 48 hours per week to successfully complete this program.

## Admission and Application Process

The admissions committee considers each candidate's entire record of achievement demonstrated through academic transcripts, GMAT scores, essays, letters of recommendation, personal interviews (optional at the candidate's discretion), work experience and extracurricular and community activities.

## Previous Education

Applicants' complete academic records, including GPAs and previous course work are considered. Undergraduate degrees do not have to be in business, but they must be from regionally accredited colleges or universities.

## Testing

The GMAT is a requirement for application to the 11-month MBA program and cannot be substituted with other standardized examinations. If you take the GMAT more than once, we will evaluate your application using the highest GMAT score. The GMAT score for students admitted into the 11-month MBA program has averaged around 600. Students must score a minimum 500 to be considered for admission to the 11-month MBA program. The GMAT Web site is [www.mba.com](http://www.mba.com).

The 11-month MBA also requires a highly developed proficiency in written and oral English. International applicants whose first language is not English must take the TOEFL or IELTS exam and earn a minimum score of 575/232 TOEFL or 7 IELTS to be considered for admission to the 11-month MBA program. Information on taking the TOEFL or IELTS can be obtained by visiting [www.ets.org](http://www.ets.org) and [www.ielts.org](http://www.ielts.org).

## Work Experience

Students in the 11-month MBA program have an average of six years of work experience. However, experience ranges from the recently graduated to more than 30 years in business. Professional experience strengthens the application, since it adds relevance and depth to the learning process and enables candidates to contribute to and benefit from the knowledge of fellow classmates in the accelerated time frame of the program.

## Applications

The following are required for consideration of admission to the program.

- completed application for graduate admission, parts I and II, submitted by published deadlines and fee (domestic or international as appropriate)
- two (2) letters of recommendation from professional or academic acquaintances who are familiar with the applicant's academic/professional competence
- GMAT scores taken in the last five years sent directly to the graduate admissions office from the Educational Testing Service. When registering for the GMAT, use code MPB-OG-65
- two (2) official transcripts from each school, college or university previously attended past high school, sent directly to the graduate admissions office. A minimum baccalaureate degree is required
- include answers to the four essay questions demonstrating commitment to an accelerated MBA program
- a resumé outlining work experience
- for international students, a minimum official score of 575/232 TOEFL or 7 IELTS is required to apply

The priority date for domestic applications is June 15 (May 1 for international students). Applications (for domestic students) and current fee information are available at [www.cudenver.edu/business/11month](http://www.cudenver.edu/business/11month).

All of the required admission materials should be sent to:

University of Colorado Denver  
The Business School  
Graduate Admissions  
Campus Box 165, P.O. Box 173364  
Denver, CO 80127-3364

For further information, brochures and application materials, contact the 11-month MBA program at 303-556-5911 or 11-monthMBA@ucdenver.edu.

The 11-month MBA uses a rolling admission system. The committee reviews applications when they are complete in all respects, including transcripts, GMAT scores and letters of recommendation. Candidates are encouraged to submit their application as early in the process as possible. Completed applications are reviewed until early August; applications received after June 15 will be reviewed on a space-available basis. International applicants should have their completed applications in by May 1, to leave them sufficient time for visa and travel arrangements if they are admitted.

A personal interview may also be required for admission to the 11-month MBA.

## 11-Month MBA Scholarships/Loans

General financial assistance is available for qualified students. Students should apply directly to the Downtown Campus Office of Financial Aid. Call 303-556-2886 for information and forms. In addition, 11-month MBA merit-based scholarships are available only to students in the 11-month MBA. Other Business School scholarships are also available to all MBA students.

## Degree Requirements

Students in the 11-month MBA complete 10 MBA core courses, one international business course (conducted abroad) and five special topics courses. All courses require that students work in teams. Due to the program's cohort structure, individual elective options are not available to 11-month MBA students. **No courses may be waived, substituted or transferred into the program.** If a student finds it necessary to leave the accelerated program, credits already earned may be transferred to the professional MBA program on campus.

### *MBA Core Courses*

- BUSN 6520 - Managing Individuals and Teams. **Semester Hours: 3**
- BUSN 6530 - Data Analysis for Managers. **Semester Hours: 3**
- BUSN 6540 - Legal and Ethical Environment of Business. **Semester Hours: 3**
- BUSN 6550 - Analyzing and Interpreting Accounting Information. **Semester Hours: 3**
- BUSN 6560 - Marketing Management. **Semester Hours: 3**
- BUSN 6610 - Information Systems Management and Strategy. **Semester Hours: 3**
- BUSN 6620 - Applied Economics for Managers. **Semester Hours: 3**
- BUSN 6630 - Management of Operations. **Semester Hours: 3**
- BUSN 6640 - Financial Management. **Semester Hours: 3**
- BUSN 6710 - Strategic Management. **Semester Hours: 3**

**Total: 30 Hours**

## **International Course Abroad**

The international course, which involves travel abroad, is completed as an all-day, two-week intensive course.

## **Special Topics Courses**

The special topics courses, revised each year, are selected to create a broad understanding of the most current business issues. These requirements are subject to change.

# **Business Administration—Health Administration MBA**

**Program Director:** Errol L. Biggs

**Telephone:** 303-556-5845

**E-mail:** [errol.biggs@ucdenver.edu](mailto:errol.biggs@ucdenver.edu)

## **Faculty**

### **Professors:**

Heidi Boerstler, PhD/JD, Yale University/University of Denver

Peter Bryant, PhD, Stanford University

C. Marlena Fiol, PhD, University of Illinois-Urbana-Champaign

Richard Foster, PhD, University of Chicago

Bruce Neumann, PhD, University of Illinois

Edward O'Connor, PhD, University of Akron

### **Associate Professors:**

Deborah Kellogg, PhD, University of Southern California

Stephen Ross, MD, University of North Carolina

**Instructors:**

Errol Biggs, PhD, Pennsylvania State University

## **Admission Process**

### **Requirements for Admission**

Selection of students is a multistep process. When making application to the program for the MBA-HA, candidates should send their applications to:

Graduate Admissions  
Graduate School of Business Administration  
University of Colorado Denver  
Campus Box 165, P.O. Box 173364  
Denver, CO 80217-3364

## **Application Requirements**

- complete the application for graduate admission, parts I and II, and submit by published deadlines
- send two (2) letters of recommendation from professional or academic acquaintances who are familiar with the applicant's academic/professional competence
- send required GMAT scores directly to the graduate office from the Educational Testing Service. When registering for the GMAT, use code MPB-OG-78. GRE scores will also be considered.
- pay the appropriate application fee
- send two (2) official transcripts directly from each school, college or university previously attended past high school. A minimum baccalaureate degree is required.
- include answers to the four essay questions
- document any experience in the field of health services administration (preferred but not required)
- complete a personal interview with the health administration committee

Admission to the MBA-HA degree program is on a competitive basis. Therefore, these admission criteria represent minimum entrance qualifications expected of all students.

For further information, brochures and application materials, contact the Business School's Graduate Program in Health Administration, University of Colorado Denver, 303-556-5900.

## **Health Administration Scholarships/Loans**

Financial assistance is available for qualified students. Students should apply directly to the Downtown Campus Office of Financial Aid. Call 303-556-2886 for information and forms.

In addition, some funds are available only to students in the graduate program in health administration:

- Foster G. McGaw Scholarship
- UC Denver MS and MBA Health Administration Scholarship
- Colorado Health Administration Alumni Association Scholarship

Enrollment in the program also makes students eligible to apply for some nationally competitive scholarships from professional organizations.

Call 303-556-5900 for applications or visit [www.business.ucdenver.edu](http://www.business.ucdenver.edu).

## Graduate Program in Health Administration

The graduate program in health administration is consistently ranked as a top program in the United States and attracts students with a variety of backgrounds and experience levels, which further enriches the classroom experience. The HA program is accredited by the Commission on Accreditation of Healthcare Management Education. The program is the only such program in the Rocky Mountain region and was started in 1968. Full-time faculty with distinguished research records and a select group of practicing managers provide students with the latest thinking on the most important health issues.

## Degree Requirements

The curriculum of the MBA with an emphasis in health administration is a synthesis of management concepts and techniques that are applicable to any economic organization, and tools that can be specifically applied to health services systems. The program emphasizes skills that strengthen basic analytic and decision-making processes used by top level managers in selecting broad strategies and by junior managers in administering subunits in health care organizations.

Students enrolled in the master of business administration with an emphasis in health administration must complete a minimum of 48 semester hours of graduate-level course work to receive their degree. The curriculum is based on a series of structured learning sequences. Most of the courses are available in the evening to enable working students to pursue the degree on a part-time basis. The specific course requirements are as follows (recommended sequence):

## Year One

- BUSN 6521 - Managing Individuals and Teams (Health Section). **Semester Hours: 3**
- BUSN 6530 - Data Analysis for Managers. **Semester Hours: 3**
- BUSN 6550 - Analyzing and Interpreting Accounting Information. **Semester Hours: 3**
- HLTH 6010 - Health Care Systems. **Semester Hours: 3**

- BUSN 6541 - Legal and Ethical Environment of Business (Health Section). **Semester Hours: 3**
  - HLTH 6071 - Introduction To Health Information Technology. **Semester Hours: 3**
  - BUSN 6621 - Applied Economics for Managers (health section). **Semester Hours: 3**  
HLTH\_\_\_\_ - Health Elective (3 semester hours)
- Total: 24 Hours**

## Year Two

- HLTH 6040 - Health Care Financial Management. **Semester Hours: 3**
  - BUSN 6640 - Financial Management. **Semester Hours: 3**
  - BUSN 6560 - Marketing Management. **Semester Hours: 3**  
HLTH\_\_\_\_ - International Elective (Health) (3 semester hours)
  - BUSN 6631 - Management of Operations (Health Section). **Semester Hours: 3**
  - BUSN 6711 - Strategic Management (health section). **Semester Hours: 3**
  - HLTH 6911 - Health Field Studies. **Semester Hours: 3**  
HLTH\_\_\_\_ - Health Elective (3 semester hours)
- Total: 24 Hours**

## Notes and Restrictions

Students admitted into the MBA with an emphasis in health administration must meet with a graduate advisor before they register for their first semester. Call 303-556-5900 to schedule an appointment.

*Administrative Residency.* An administrative residency is optional but recommended for students with limited health care experience. The program faculty provide assistance to students in securing the residency, as well as regular consultation during the residency period. The program has been very successful in placing graduates in administrative residencies.

*Length of program.* A maximum of five years and one semester is allowed to complete the health administration program.

## Specialized Tracks in the MBA with an Emphasis in Health Administration

Each track carries its own specific course requirements. To provide a variety of perspectives and experiences within a specific area of health administration, each track includes courses that span various departments within the Business School, other schools at the Downtown Campus and other University of Colorado campuses.

- International Health Management and Policy Track
- Financial Management Track
- Health Information Technology Management Track

# Executive MBA in Health Administration

## Distinctive Features of the Executive Program in Health Administration

1. Drawing on the expertise represented by the faculties of a consortium of western universities, the program offers high-quality courses taught by instructors that are typically not available from a single university.
2. The executive program facilitates learning for professionals who have continuing career and family responsibilities. The program is especially tailored for working individuals, allowing students to remain on their jobs while completing their educational program.
3. The program employs innovation in the technology of educational delivery. Learning methods include:
  - computer-assisted instruction and self-paced learning packages
  - computer conferencing and electronic case analyses
  - on-campus sessions

**For application and additional information, write to:**

Executive Program in Health Administration  
The Business School  
University of Colorado Denver  
P.O. Box 480006  
Denver, CO 80248-0006  
[www.colorado.edu/execed](http://www.colorado.edu/execed)

## Master in Business Administration for Executives, MBA

**Program Director:** W. Scott Guthrie  
**Telephone:** 303-623-1888 or 1-800-228-5778

The executive MBA program provides executive-level students with a broad, rigorous 21-month academic experience leading to the master of business administration degree. The program is designed for persons who hold managerial positions in the private and public sectors. It builds upon the knowledge and experience of these executives with a sophisticated, challenging curriculum that can be pursued simultaneously without career interruption.

The executive MBA program emphasizes strategic leadership; the organization in a complex, international environment; and the applied tools of management. Courses are taught through a variety of methods. Case studies, lectures and computer simulation are combined with research projects and other teaching methods to provide students with tools useful in their present

positions and applicable to more advanced responsibilities as they progress in their management careers.

Each new session of the executive MBA program begins the last week of August. Classes meet for a full day, once a week, on alternating Fridays and Saturdays, making it possible for those who live outside the Denver area to participate.

Two courses are taken simultaneously throughout the program. The program is supplemented by an intensive orientation at the beginning and a two-day seminar at the conclusion of the first academic year. A second-year seminar is held at an international business center outside of North America.

## **Master of Business Administration/Master of Science**

# **Business Administration/Business MBA/MS**

The Business School also offers MBA/MS dual degree programs for each function of business. The program consists of a minimum of 66 semester hours of graduate work and leads to both an MBA degree and an MS degree, which must be completed within seven years and one semester. See MS program pages for a list of functional areas. Contact a graduate academic advisor for details, 303-556-5900.

## **Master of Business Administration/Master of International Management**

# **Business Administration/International Management MBA/MIM**

This unique combined degree is offered in cooperation with the American Graduate School of International Management (the Thunderbird School) located in Glendale, Arizona, a suburb of Phoenix. Thunderbird has established eight dual programs with universities in the United States. The student applies independently to both schools and, if admitted, earns the MBA from UC Denver and a master of international management degree from Thunderbird. The student begins the program at UC Denver and, after completing 36 semester hours (12 courses) required for the MBA, transfers to the Thunderbird campus and takes a minimum of 30 semester hours (10 courses) for the MIM. When all dual degree requirements are finished, the student is awarded a diploma from each school. For more information about admission to the MBA on the Downtown Campus, refer to the appropriate section of this chapter. For specifics about the dual MIM application process, call Thunderbird's associate dean of admissions, Stephen R. Beaver, 1-800-848-9084, or visit [www.tbird.edu](http://www.tbird.edu).

## **Master of Business Administration/Doctor of Medicine**

# **Business Administration/Medicine MBA/MD**

The MBA/MD is for medical students at the University of Colorado Denver School of Medicine who wish to pursue a career in administrative medicine or who seek additional training in administration or business. The program is designed to be completed in five years, at which time both the MD and MBA degrees would be awarded. Candidates for the MBA/MD complete 36 semester hours of course work in the business school and all requirements for the MD.

## **Master of Business Administration/Master of Urban and Regional Planning**

# **Business Administration/Urban and Regional Planning MBA/MURP**

This dual degree enables students to obtain both the master of urban and regional planning offered by the College of Architecture and Planning and the master of business administration offered by the Business School upon completion of 78 semester hours. The dual degree program is composed of the core curricula in each program plus a set of electives jointly approved by the student's advisors.

## **Master of Science**

# **Accounting MS**

**Program Director:** Michael Roberts

**Telephone:** 303-556-6518

**E-mail:** Michael.Roberts@ucdenver.edu

## **Faculty**

**Professors:**

Bruce Neumann, PhD, University of Illinois

**Associate Professors:**

Gary Colbert, PhD, University of Oregon

Carol Dee, PhD, Louisiana State University

L. Ann Martin, PhD, University of Minnesota

Michael Roberts, PhD, Georgia State University

**Assistant Professors:**

George F. Klersey, PhD, University of Southern California

Mary Malina, PhD, University of Colorado Boulder

Robert Nieschwietz, PhD, Arizona State University

**Senior Instructors:**

Elizabeth Connor, MS, Colorado State University

Robert Hockenbury, MS, University of Houston

**Instructors:**

Cindy Fischer, MA, University of Colorado Boulder

Emily Vera, MS, University of Colorado Denver

The master of science in accounting offers three specializations plus a flexible program which allows students to design individualized courses of study. The program provides students the opportunity to acquire a thorough understanding of financial and managerial accounting, auditing and taxation in preparation for successful careers in public or private accounting, as well as government or nonprofit accounting.

Students completing the MS in accounting will complete:

- 6 semester hours of required accounting course work
- 12 semester hours of elective accounting course work\*
- 9 semester hours of a secondary business area
- 3 semester hours of a free accounting elective.

\*The elective course work can be selected from graduate accounting courses or by selecting one of the three specializations offered within the program. Students who select the accounting and information systems audit and control (AISAAC) specialization have completely different requirements which are listed under that specialization.

## A. Background Accounting Courses\*

The MS in accounting also requires completion of the following undergraduate accounting prerequisites.

Must be completed with a grade of B- or higher plus a cumulative GPA of 3.0. Students with grades below a B may be subject to probation.

Required Courses:

- ACCT 2200 - Financial Accounting and Financial Statement Analysis. **Semester Hours:** 3
- ACCT 2220 - Managerial Accounting and Professional Issues. **Semester Hours:** 3
- ACCT 3054 - Accounting Systems and Data Processing. **Semester Hours:** 3
- ACCT 3220 - Intermediate Financial Accounting I. **Semester Hours:** 3
- ACCT 3230 - Intermediate Financial Accounting II. **Semester Hours:** 3
- ACCT 3320 - Intermediate Cost Accounting. **Semester Hours:** 3
- ACCT 4620 - Auditing. **Semester Hours:** 3

**Total: 15-21 Hours**

\*Waived for students with appropriate background. BUSN 6550, Analyzing and Interpreting Accounting Information, may be substituted for ACCT 2200 and ACCT 2220. International course work waivers are by petition only.

Accounting courses may be taken by nondegree or non-matriculated students.

## B. Common Body of Knowledge (CBK)

Based on prior course work, students may be required to take up to three background courses. The following are suggested:

- BUSN 6540 - Legal and Ethical Environment of Business. **Semester Hours:** 3
- BUSN 6620 - Applied Economics for Managers. **Semester Hours:** 3
- BUSN 6640 - Financial Management. **Semester Hours:** 3

## C. MS Accounting Core

**Required Courses (all students)**

*(6 semester hours)*

- ACCT 6250 - Seminar: Financial Accounting. **Semester Hours:** 3
- ACCT 6260 - Seminar: Managerial Accounting. **Semester Hours:** 3

## Accounting Electives

*(12 semester hours)*

To design an individualized course of study, choose four accounting courses with three of those accounting courses numbered 6260 or higher.

**Or, you may select one of the three following specializations to meet this elective requirement.**

## D. Accounting Specializations

If you select one of the three following specializations, you will complete the required courses, complete four of the choices within your selection of specialization, complete the secondary area and complete a free elective.

### Auditing and Forensic Accounting Specialization

**Complete the required courses and choose four of the following courses:**

- ACCT 6280 - Professional Judgment and Decision Making in Accounting. **Semester Hours: 3**
- ACCT 6340 - Financial Statement Analysis. **Semester Hours: 3**
- ACCT 6350 - Current Issues in Professional Accounting. **Semester Hours: 3**
- ACCT 6380 - Forensic Accounting. **Semester Hours: 3**
- ACCT 6470 - Internal Auditing. **Semester Hours: 3**
- ACCT 6510 - Accounting IS Processes and Control. **Semester Hours: 3**
- ACCT 6620 - Advanced Auditing. **Semester Hours: 3**

### Financial Accounting Specialization

**Complete the required courses and choose four of the following courses:**

- ACCT 6024 - Advanced Financial Accounting. **Semester Hours: 3**
  - ACCT 6080 - Accounting for Government and Nonprofit Organizations. **Semester Hours: 3**
  - ACCT 6280 - Professional Judgment and Decision Making in Accounting. **Semester Hours: 3**
  - ACCT 6340 - Financial Statement Analysis. **Semester Hours: 3**
  - ACCT 6350 - Current Issues in Professional Accounting. **Semester Hours: 3**
  - ACCT 6370 - International Accounting. **Semester Hours: 3**
- Three of the courses must be selected with course numbers above ACCT 6260.**

### Taxation Specialization

**Complete the required courses and choose four of the following courses:**

- ACCT 6140 - Tax Planning for Managers. **Semester Hours: 3**

- ACCT 6410 - Advanced Tax For Individuals. **Semester Hours: 3**
  - ACCT 6420 - Advanced Tax for Businesses. **Semester Hours: 3**
  - ACCT 6430 - International Taxation. **Semester Hours: 3**
  - ACCT 6450 - Research Problems in Income Tax Accounting. **Semester Hours: 3**
  - ACCT 6460 - Advance Topics in Taxation. **Semester Hours: 3**
- Three of the courses must be selected with course numbers above ACCT 6260.**

## **E. Secondary Area**

*(9 semester hours)*

Accounting is increasingly diverse and linked to many business decisions. Accountants may eventually work as systems designers, chief financial officers, cost analysts, budget officers or chief executive officers. Students will be better prepared for their careers if they develop competencies in a related field, which may be chosen from a single discipline such as finance, information systems, entrepreneurship, health administration, marketing or management. *The accounting faculty strongly encourage students to gain additional expertise in finance and/or information systems.*

Alternatively, a self-designed secondary area might best achieve a student's individual objectives (must be approved by the program director). A self-designed secondary field must have a common theme or objective if it crosses several disciplines. For example, a secondary area in information systems might include an accounting technology course, a data base management course and a finance technology course. On the other hand, a finance secondary area might include two finance courses and a cost management (accounting) course or a strategic management course. When a BUSN course is a prerequisite for a secondary area, it can be included in the secondary area by petition only. Consult a schedule planner for information about current course offerings and a current catalog for course descriptions.

## **F. Free Accounting Elective**

*(3 semester hours)*

Select one graduate accounting course numbered above ACCT 6000.

## **G. Total: 30 Hours**

### **Accounting and Information Systems Audit and Control (AISAAC) Specialization**

Recently, new regulatory environments have required companies to provide better documentation of their accounting and IT systems to improve the management and disclosure of their business processes for better financial and regulatory controls. Accounting and IT professionals have significant roles in audit and control activities, since they control the systems that monitor and report on finance, planning and operations. The courses within this

specialization cover business-process management and financial controls; the emerging trends and practices in privacy and security; the strategies for integrating governance and compliance; and the IT organization's financial and business intelligence services. These courses will focus on how to leverage the existing IT infrastructure to establish quality in financial and internal audit processes and address the regulatory issues associated with reporting, consolidation and document/content management more effectively and completely.

As you will notice the complete 30 semester hour requirements for this specialization are listed below.

### **Accounting Core**

*(9 semester hours)*

- ACCT 6250 - Seminar: Financial Accounting. **Semester Hours: 3**
- ACCT 6260 - Seminar: Managerial Accounting. **Semester Hours: 3**
- ACCT 6620 - Advanced Auditing. **Semester Hours: 3**

### **AISAAC Common Courses**

*(12 semester hours)*

**Choose four of the following courses:**

- ACCT 6020 - Auditing. **Semester Hours: 3**
- ACCT 6510 - Accounting IS Processes and Control. **Semester Hours: 3** or
- ISMG 6510 - Accounting and Information Systems Processes and Controls. **Semester Hours: 3**
- ISMG 6040 - Business Process Management. **Semester Hours: 3**
- ISMG 6420 - Global Enterprise Systems. **Semester Hours: 3**

**Choose three of the following courses:**

*(9 semester hours)*

- ACCT 6340 - Financial Statement Analysis. **Semester Hours: 3**
- ACCT 6800 - Special Topics. **Semester Hours: 3**
- ISMG 6080 - Database Management Systems. **Semester Hours: 3**
- ISMG 6180 - Information Systems Management and Strategy. **Semester Hours: 3**
- ISMG 6430 - Information Systems Security and Privacy. **Semester Hours: 3**

**Total 30 hours**

# **Decision Sciences MS**

**Program Director:** Marlene A. Smith  
**Telephone:** 303-556-5813  
**E-mail:** Marlene.Smith@ucdenver.edu

The MS in decision sciences focuses on modeling and applications which prepares you for a career as a decision science specialist in industry or government. Today, companies in every conceivable industry are reaping the benefits of using formal mathematical models to assist them in addressing complex business problems. Decision science graduates hold positions that bridge the gap between operations research/statistics specialists and management.

Learn to apply quantitative methods to real-world problems using modern methodologies adopted from statistics, operations research, and management science. Although the MS in decision sciences is founded in operations research methods, it focuses on applications of these methods in the workplace rather than the development of new operations research techniques. The managerial emphasis of our degree is accomplished through a comprehensive set of elective and required course work such as data analysis, operations management, forecasting, project management, simulation and supply chain management. A required practicum course provides students with the opportunity (under the direction of faculty) to solve a real, complex workplace problem for a local Denver organization.

Requirements for the MS degree in decision sciences are met by the following courses and options:

## **Prerequisite course work:**

Accounting: completion of BUSN 6550 or two undergraduate accounting courses with a grade of B- or better along with useable knowledge of spreadsheets.

## **Required Courses**

- BUSN 6530 - Data Analysis for Managers. **Semester Hours:** 3
  - BUSN 6630 - Management of Operations. **Semester Hours:** 3
  - DSCI 6820 - Project Management. **Semester Hours:** 3
  - DSCI 6230 - Business Forecasting. **Semester Hours:** 3
  - DSCI 6460 - Decision Analysis. **Semester Hours:** 3
  - DSCI 6910 - Decision Sciences Practicum. **Semester Hours:** 3
- DSCI Electives (12 semester hours)

**Total: 30 Hours**

## **Notes and Restrictions**

Decision sciences electives must include at least two DSCI courses numbered 6000 or higher. Remaining decision sciences electives may be any of the following courses: DSCI 6000 or higher; MKTG 6050, Marketing Research; or FNCE 6480, Financial Modeling.

Students are not required to take a comprehensive examination or complete a thesis in the major field.

## Finance MS

**Program Director:** Associate Dean of Programs and Students

**Telephone:** 303-556-5804

### Faculty

#### **Professors:**

Marcelle Arak, PhD, Massachusetts Institute of Technology

Jean-Claude Bosch, PhD, University of Washington

E. Woodrow Eckard, PhD, University of California-Los Angeles

Richard Foster, PhD, University of Chicago

James Morris, PhD, University of California-Berkeley

Dean Taylor, PhD, University of Chicago

#### **Associate Professors:**

Ajeyo Banerjee, PhD, University of Massachusetts-Amherst

Elizabeth Cooperman, PhD, University of Georgia

Jian Yang, PhD, Texas A&M University

#### **Senior Instructors:**

John Byrd, PhD, University of Oregon

Chen Ji, MS, University of Colorado

Barbara Pelter, PhD, University of California-Davis

John Turner, PhD, St. Louis University

**Instructors:**

John Daley, PhD, University of Washington

Cindy Sutfin, MS, University of Colorado

The master of science in finance provides the necessary depth and specialized expertise to meet the need of businesses for financial managers, investment analysts and other finance specialists.

The program emphasizes a familiarity with the institutions in our financial system, an understanding of financial markets and instruments, and the analytical skills and tools necessary to make informed decisions about investment and financing.

The program is suited to students from a wide variety of undergraduate backgrounds and is particularly appropriate to students with strong technical and analytical backgrounds.

The MS in finance offers flexibility with on-campus and online courses. The MS finance degree requirements are met by the following courses and options:

## Required Courses

- BUSN 6620 - Applied Economics for Managers. **Semester Hours: 3**
  - BUSN 6640 - Financial Management. **Semester Hours: 3**
  - FNCE 6290 - Quantitative Methods for Finance. **Semester Hours: 3**
  - FNCE 6300 - Macroeconomics and Financial Markets. **Semester Hours: 3**
  - FNCE 6330 - Investment Management Analysis. **Semester Hours: 3**
  - FNCE 6380 - Futures and Options. **Semester Hours: 3 or**
  - FNCE 6382 - Survey of Financial Derivatives: Futures, Options and Swaps. **Semester Hours: 3**
- FNCE Electives (3) (9 semester hours)  
Free Elective (1) (3 semester hours)

## Total: 30 Hours

Prerequisites: BUSN 6550, Analyzing and Interpreting Accounting Information, or the equivalent accounting background. Students are also expected to be knowledgeable in spreadsheet software.

## Notes and Restrictions

*Finance Electives.* Choose three courses in finance from the list of regularly scheduled graduate classes in consultation with an advisor.

*Free Elective.* Students complete 3 semester hours of graduate business course work (excluding BUSN courses numbered below 6800). Modern finance is heavily mathematical and draws extensively on economics and accounting. Courses in these areas are especially useful. Petitions may be submitted to the program director for special courses that fit a student's individual needs.

# Global Energy Management MS

**Program Advisor:** Sarah Dushame

**Telephone:** 303-556-5819

**E-mail:** Sarah.Dushame@ucdenver.edu

## Faculty

### Professors/Instructors

Timothy Antoniuk, MDes, University of Alberta  
William Ascher, PhD, Yale University  
Stephen Brown, PhD, University of Maryland  
Matthew Clarke, PhD, University of Calgary  
William Fox, JD, Catholic University of America  
Mean Husein, PhD, McGill University  
Merrily Kaut, PhD, University of Colorado Denver  
L. Ann Martin, PhD, University of Minnesota

The master of science in global energy management (GEM) prepares individuals for leadership careers in the energy industry. This degree is particularly appropriate for individuals seeking to advance their existing careers in the energy field. Prior work experience within the field is preferred, but not required. The program consists of two components: the core curriculum and the more advanced and specialized elective courses. The MS GEM program requires the completion of the following core classes as well as four elective courses from the selection listed below.

## Required Courses

- GEMM 6000 - 21st Century Global Energy Issues and Realities. **Semester Hours: 3**
- GEMM 6100 - Global Energy Economics and Geography. **Semester Hours: 3**
- GEMM 6200 - Environmental, Regulatory, Legal & Political Environment in the Energy Industry. **Semester Hours: 3**
- GEMM 6300 - Renewable and Alternative Energy: Opportunities & Challenges. **Semester Hours: 3**
- GEMM 6400 - Leadership and Decision Making in the Global Energy Environment. **Semester Hours: 3**
- GEMM 6500 - Energy Accounting in Global Markets. **Semester Hours: 3**
- GEMM 6600 - Financial Management and Hedging in the Global Energy Markets. **Semester Hours: 3**
- GEMM 6410 - People Management in the Global Energy Environment. **Semester Hours: 3**

## Choose four

Choose four of the following courses. These courses are taken during the last two terms of the program and are offered based on enrollment.

- GEMM 6210 - Land Management and Energy Contracts. **Semester Hours: 3**
- GEMM 6430 - Organizational Behavior in the Energy Industry. **Semester Hours: 3**
- GEMM 6450 - Strategic Management of the Energy Industry. **Semester Hours: 3**
- GEMM 6460 - Integrated Information Management for Energy Firms. **Semester Hours: 3**
- GEMM 6470 - Energy Marketing. **Semester Hours: 3**
- GEMM 6610 - Advanced Financial Management in the Energy Industry. **Semester Hours: 3**
- GEMM 6620 - Energy Asset Management. **Semester Hours: 3**
- GEMM 6630 - Production and Supply Chain Management for the Energy Industry. **Semester Hours: 3**

## Prerequisites

Applicants that do not have a science- or energy-related field undergraduate degree or three-plus years experience in the industry are required to take two prerequisite courses as well as the GMAT.

The prerequisite courses include physical geology and introduction to physical engineering. These courses can be taken at any accredited university, but must be approved by a GEM team staff member before registering. Also the prerequisites may be taken prior or concurrently with GEMM 6000 and GEMM 6100.

## Notes and Restrictions

The program is a cohort group, hybrid online, 18-month master of science degree program. As a cohort program, all students start together, progress together and graduate together. Students cannot take time out from the program once it starts and need to plan on remaining in the program for the full 18 months. If it becomes necessary to take a term off, students may not re-enroll until the next cohort group catches up to the point where the student originally dropped out, which is 6 months later. As a hybrid online program, professors and students meet in class face to face for four days (Fridays through Mondays) at the start of each 3-month term with the rest of the term completed online. Please note that the GEM degree program runs on a completely separate schedule from the normal semester terms of the Business School. Please check the Business School Web site for deadlines and dates of each GEM term. All GEMM courses are restricted to those students who have been admitted to the MS GEM program.

## Dual Degrees

In order to participate in the dual degree options offered by the Business School, students in the GEM program must first complete their entire GEM degree before they can begin their second degree.

# Health Administration MS

**Program Director:** Errol L. Biggs

**Telephone:** 303-556-5845

**E-mail:** errol.biggs@ucdenver.edu

## Faculty

### Professors:

Heidi Boerstler, PhD/JD, Yale University/University of Denver

Peter Bryant, PhD, Stanford University

C.Marlena Fiol, PhD, University of Illinois-Urbana-Champaign

Richard Foster, PhD, University of Chicago

Bruce Neumann, PhD, University of Illinois

Edward O'Connor, PhD, University of Akron

### Associate Professors:

Murray Cote, PhD, Texas A & M University

Blair Gifford, PhD, University of Chicago

Deborah Kellogg, PhD, University of Southern California

Stephen Ross, MD, University of North Carolina

**Instructor:**

Errol Biggs, PhD, Pennsylvania State University

The goal of the master of science in health administration degree is to prepare men and women who, after appropriate practical experience in responsible managerial positions, are capable of assuming positions as chief executive officers or senior administrators in complex, multiservice health care organizations or in organizations' purchasing and health services.

The curriculum is a synthesis of management concepts and techniques that are applicable to any economic organization and tools that can be specifically applied to health and health services systems. The program emphasizes skills that heighten basic analytical and decision-making processes used by top-level managers in selecting broad strategies for the institutions and by junior managers in administering subunits of health care organizations. The faculty guide the students in their mastery of theoretical, conceptual and quantitative topics.

The program has enjoyed continuous accreditation by the Commission on Accreditation of Healthcare Management Education since 1970.

## **A. Common Body of Knowledge (CBK)**

- BUSN 6521 - Managing Individuals and Teams (Health Section). **Semester Hours: 3**
- BUSN 6530 - Data Analysis for Managers. **Semester Hours: 3**
- BUSN 6550 - Analyzing and Interpreting Accounting Information. **Semester Hours: 3**
- BUSN 6560 - Marketing Management. **Semester Hours: 3**
- BUSN 6630 - Management of Operations. **Semester Hours: 3**
- BUSN 6640 - Financial Management. **Semester Hours: 3**

**Total: 18 Hours**

Waivers of CBK courses are possible. The entire CBK may be waived if the student has completed an undergraduate business degree from an AACSB-accredited college or university within the last 10 years. Specific courses may be waived based on a case-by-case evaluation of undergraduate or graduate course work in business completed at a regionally accredited college or university within the last 10 years.

## **B. Graduate Core in Health Administration**

- HLTH 6010 - Health Care Systems. **Semester Hours: 3**

- HLTH 6040 - Health Care Financial Management. **Semester Hours: 3**
- HLTH 6911 - Health Field Studies. **Semester Hours: 3**
- BUSN 6541 - Legal and Ethical Environment of Business (Health Section). **Semester Hours: 3**
- BUSN 6621 - Applied Economics for Managers (health section). **Semester Hours: 3**
- BUSN 6711 - Strategic Management (health section). **Semester Hours: 3**
- HLTH Electives (3) (9 semester hours)
- Free Elective (1) (3 semester hours)

**Total: 30 Hours**

## Notes and Restrictions

*Free Elective.* The free elective course can be chosen from the areas of accounting, finance, health administration, information systems, international business, management and marketing. A course with the BUSN prefix can be used as a free elective if the course number is 6800 or higher.

*Management Residency.* A management residency is optional, but recommended for all students, especially those with limited health care experience. The faculty of the program provide assistance to students in securing the residency, as well as regular consultation during the residency period. Information on the full range of local, regional and national residencies is available in the program office.

*Length of Program.* The didactic portion of the degree will take at least two academic years, since most HA courses are offered only once each year and many have prerequisites. Part-time study is facilitated by courses being scheduled for late afternoon and evening hours.

## Specialized Tracks in MS Health Administration

Each track carries its own specific course requirements. To provide a variety of perspectives and experiences within a specific area of health administration, each track includes courses that span various departments within the Business School, other schools on the Downtown Campus and other University of Colorado campuses.

- International health management and policy track
- Financial management track
- Health information technology management track

## Institute for International Business

The international health track is affiliated with the Institute for International Business at UC Denver. The Institute for International Business is one of a few university programs to have received the prestigious CIBER grant from U.S. Department of Education. The grant is being used by the institute to provide effective internationally oriented education, research and

outreach activities. Also, the institute is a participant in an international consortium of universities for faculty and student program and course exchanges. Students in the international health management and policy track will have access to the institute's exchange networks.

## **International Health Travel/Study Course**

**Program Director:** Blair Gifford

**Telephone:** 303-556-6614

**E-mail:** Global-Health@ucdenver.edu\

A unique feature of our international health management and policy track is its emphasis on making sure students gain international experience during their education. The travel study course requirement can be met by taking a University of Colorado health travel/study course, or a student can take a course at a partnering university. An example of a health travel/study was a three-week trip to Thailand and Vietnam to visit numerous cultural- and health-related facilities.

## **Information Systems MS**

**Program Director:** Jahangir Karimi

**Telephone:** 303-556-5881

**E-mail:** Jahangir.Karimi@ucdenver.edu

**Web site:** <http://business.ucdenver.edu/Disciplines/InfoSystems/InfoSystemsMS.htm>

## **Faculty**

### **Professors:**

James Gerlach, PhD, Purdue University

Jahangir Karimi, PhD, University of Arizona

### **Associate Professors:**

Dawn Gregg, PhD, Arizona State University

Michael Mannino, PhD, University of Arizona

Judy Scott, PhD, University of California-Irvine

Steven Walczak, PhD, University of Florida

### **Assistant Professors:**

Ronald Ramirez, PhD, University of California-Irvine

Zhiping Walter, PhD, University of Rochester

**Senior Instructors:**

Eric Thompson, MS, University of Colorado

**Instructor:**

Linda Fried, JD/LLM, University of Miami

The master of science in information systems (MSIS) program at the Business School meets industry needs by providing specializations. The program prepares students for career paths in systems development and management services, enterprise application services, business intelligence, health information technology, information security audit and control, business consulting and development and consumer products and services. Whether students aim to be systems analysts or designers, software engineers, applications programmers, database administrators, Web developers, systems integrators, project managers, LAN administrators or application and technology consultants, the MSIS program provides the necessary knowledge and skills. This entire MS in information systems can be completed online.

The MSIS program offers a wide choice of courses. The course work consists of a common body of knowledge courses plus 30 semester hours, which includes a choice of a specialization. Those specialization include two required courses, 6 courses from a list specific to your chosen specialization and two elective courses. Candidates for the MS degree are not required to take a comprehensive examination or to complete a thesis in the major field.

## **A. Common Body of Knowledge (CBK)**

Waivers of CBK courses are possible. The entire CBK may be waived if the student has completed an undergraduate business degree from an AACSB-accredited college or university within the last 10 years. Specific courses may be waived based on a case-by-case evaluation of undergraduate or graduate course work in business completed at a regionally accredited college or university within the last 10 years.

Four of the following courses are required if you do not meet the above waiver policy.

- BUSN 6530 - Data Analysis for Managers. **Semester Hours: 3**
- BUSN 6550 - Analyzing and Interpreting Accounting Information. **Semester Hours: 3**
- BUSN 6560 - Marketing Management. **Semester Hours: 3**
- BUSN 6630 - Management of Operations. **Semester Hours: 3**
- BUSN 6640 - Financial Management. **Semester Hours: 3**

**Total: 12 Hours for Common Body of Knowledge (CBK)**

## B. Information Systems Specializations

This set of courses consists of selected areas of specialization designed to provide the fundamental knowledge necessary for a career as an IS professional. Up to 9 semester hours may be transferred from an AACSB international accredited graduate school and applied to the information systems specializations upon approval. Students should take the required courses in each specialization before taking the chosen electives in each specialization.

The IS specializations provide students with a set of related courses necessary to acquire skills and expertise within a specific area in the development, management and use of information technology applications. Students are required to choose one specialization and complete the 6 hours of required coursework, 18 hours of selected electives, 3 hours of any other ISMG course or an internship in IS, and 3 hours of any Business School graduate course.

### Accounting and Information Systems Audit and Control (AISAAC) Specialization

Recently, new regulatory environments have required companies to provide better documentation of their accounting and IT systems to improve the management and disclosure of their business processes for better financial and regulatory controls. Accounting and IT professionals have significant roles in audit and control activities, since they control the systems that monitor and report on finance, planning and operations. The courses within this specialization cover business-process management and financial controls; the emerging trends and practices in privacy and security; the strategies for integrating governance and compliance; and the IT organization's financial and business intelligence services. These courses will focus on how to leverage the existing IT infrastructure to establish quality in financial and internal audit processes and address the regulatory issues associated with reporting, consolidation and document/content management more effectively and completely.

#### Prerequisite

- ACCT 6030 - Financial Accounting. **Semester Hours: 3**

#### Required Courses

- ACCT 6020 - Auditing. **Semester Hours: 3**
  - ISMG 6040 - Business Process Management. **Semester Hours: 3**
  - ISMG 6060 - Analysis, Modeling and Design. **Semester Hours: 3**
  - ISMG 6080 - Database Management Systems. **Semester Hours: 3**
  - ISMG 6180 - Information Systems Management and Strategy. **Semester Hours: 3**
  - ISMG 6220 - Business Intelligence Systems. **Semester Hours: 3**
  - ISMG 6420 - Global Enterprise Systems. **Semester Hours: 3**
- Either**
- ACCT 6510 - Accounting IS Processes and Control. **Semester Hours: 3**
- OR**

- ISMG 6510 - Accounting and Information Systems Processes and Controls. **Semester Hours: 3**

**Choose two:**

- ACCT 6340 - Financial Statement Analysis. **Semester Hours: 3**
- ACCT 6360 - Fraud Examination. **Semester Hours: 3**
- ISMG 6430 - Information Systems Security and Privacy. **Semester Hours: 3**
- ISMG 6450 - IT Project Management. **Semester Hours: 3**
- ACCT 6470 - Internal Auditing. **Semester Hours: 3**
- ACCT 6620 - Advanced Auditing. **Semester Hours: 3**

**Business Intelligence Specialization**

Business intelligence (BI) systems combine operational data with analytical tools to present complex and competitive information to planners and decision makers. The objective is to improve the timeliness and quality of inputs to the decision process. BI is used to understand the capabilities available in the firm; the state-of-the-art, trends, and future directions in the markets, the technologies, and the regulatory environment in which the firm compete; and the actions of competitors and the implications of these actions. With this specialization, you get the necessary skills and knowledge in real-time data warehousing, data visualization, data mining, online analytical processing, customer relationships management, dashboards and scorecards, corporate performance management, expert and advanced intelligent systems, and hands-on experience with leading BI tools.

**Required Courses**

- ISMG 6080 - Database Management Systems. **Semester Hours: 3**

**Choose six:**

- DSCI 6828 - Business Applications of Data Mining. **Semester Hours: 3**
- ISMG 6180 - Information Systems Management and Strategy. **Semester Hours: 3**
- ISMG 6420 - Global Enterprise Systems. **Semester Hours: 3**
- ISMG 6430 - Information Systems Security and Privacy. **Semester Hours: 3**
- ISMG 6480 - Data Warehousing and Administration. **Semester Hours: 3**
- ISMG 6810 - Business Intelligence in Healthcare. **Semester Hours: 3 OR**
- ISMG 6820 - Business Intelligence and Financial Modeling. **Semester Hours: 3**
- MKTG 6090 - Customer Relationship Management. **Semester Hours: 3**

**Enterprise Technology Management (ETM) Specialization**

This specialization focuses on information technology as the prime driver of business strategy. It focuses on the strategic, technological, financial and organizational issues involved with the effective management of information technology within an enterprise. The courses in this specialization cover the emerging technologies and the evolving roles and importance of IT in modern organizations; IT-enabled organizational processes and knowledge management; methods to develop, acquire and implement information systems; implementing and managing complex IT projects; security and privacy issues associated with IT.

### **Required Courses**

- ISMG 6040 - Business Process Management. **Semester Hours: 3**
- ISMG 6180 - Information Systems Management and Strategy. **Semester Hours: 3**

### **Choose six:**

- ISMG 6080 - Database Management Systems. **Semester Hours: 3**
- ISMG 6120 - Internet and Mobile Technologies. **Semester Hours: 3**
- ISMG 6420 - Global Enterprise Systems. **Semester Hours: 3**
- ISMG 6430 - Information Systems Security and Privacy. **Semester Hours: 3**
- ISMG 6450 - IT Project Management. **Semester Hours: 3**
- ISMG 6460 - Emerging Technologies. **Semester Hours: 3**

### **Health Information Technology Management Specialization**

Recently, the health care industry has shifted its focus from using proprietary and expensive IT solutions to more innovative IT applications in electronic health records (EHR) and other health information technology (HIT) innovations for sharing information effectively to help manage health care crisis. The courses within this specialization cover the evolving roles and importance of IT in health care industry; the innovative IT applications for delivering health care with reduced cost and increased quality; the management of health care using effective IT systems; and the security and privacy issues associated with health information. These courses will focus on how IT-enabled health care organizations can integrate information from various resources in order to deliver innovative IT solutions to meet unique requirements of health care industry.

### **Required Courses**

- ISMG 6060 - Analysis, Modeling and Design. **Semester Hours: 3**
- ISMG 6080 - Database Management Systems. **Semester Hours: 3**

### **Choose six:**

- HLTH 6071 - Introduction To Health Information Technology. **Semester Hours: 3**
- HLTH 6072 - Fundamentals of Health Information Technology Management. **Semester Hours: 3**
- ISMG 6220 - Business Intelligence Systems. **Semester Hours: 3**

- ISMG 6280 - Service Oriented Architecture. **Semester Hours: 3**
- ISMG 6430 - Information Systems Security and Privacy. **Semester Hours: 3**
- ISMG 6460 - Emerging Technologies. **Semester Hours: 3**
- ISMG 6810 - Business Intelligence in Healthcare. **Semester Hours: 3**

### **Web and Mobile Computing Specialization**

This specialization focuses on building and managing large systems using platforms for Web site development, mobile and wireless applications, and Web services and service oriented architectures. The courses provide expertise in .Net programming, business process management, Internet and mobile technologies, Web site development technologies, data warehousing and administration, and service oriented architecture. Project management course work enables graduates to successfully handle highly complex systems development projects in the business world.

### **Required Courses**

- ISMG 6060 - Analysis, Modeling and Design. **Semester Hours: 3**
- ISMG 6080 - Database Management Systems. **Semester Hours: 3**

### **Choose six:**

- ISMG 6020 - Net Programming Fundamentals. **Semester Hours: 3**
- ISMG 6040 - Business Process Management. **Semester Hours: 3**
- ISMG 6120 - Internet and Mobile Technologies. **Semester Hours: 3**
- ISMG 6240 - Website Development Practice and Technologies. **Semester Hours: 3**
- ISMG 6280 - Service Oriented Architecture. **Semester Hours: 3**
- ISMG 6450 - IT Project Management. **Semester Hours: 3**
- ISMG 6480 - Data Warehousing and Administration. **Semester Hours: 3**

### **Electives**

Students fulfill an additional 6 semester hours by completing the following:

**Note: If you are pursuing the accounting and information systems audit and control specialization, you do not complete these electives. All other students will complete the following electives.**

- an elective course from any of the ISMG graduate courses OR an internship **AND**
- a free elective selected from any graduate course offered by the Business School, except BUSN courses numbered below 6800.

Candidates for the MS degree are not required to take a comprehensive examination or to complete a thesis in the major field.

**Total: 30 hours for MS in Information Systems**

## Geographic Information Systems (GIS) Option

The geographic information systems option expands upon system development skills through the understanding geographic information systems work flows, analysis processes and data models. This option for the mobil and Internet computing specialization and business intelligence specialization addresses how map representations can be abstracted in geo-databases to develop intelligent GIS systems. Learn how GIS can improve efficiencies, decision making, planning, geographic accountability, science-based plans and communication. The GIS option is offered in conjunction with the College of Engineering and Applied Science and a certificate in GIS is awarded by the College of Engineering and Applied Science.

Students must complete all requirements for the MS in information systems, as well as the requirements below.

- C E 5381 - Introduction to Geographic Information Systems. **Semester Hours: 3**

### Total: 12 Hours

- GIS courses are offered online and can be completed concurrently with the information systems courses.
- Students will be able to register for the classes on the Web. There are not any special registration requirements.
- Students need to notify the graduate advising office at the Business School, 303-556-5900, prior to graduation if they are planning to complete the GIS option. Students also need to indicate the completion of the course work when they submit their application for diploma card.

### Choose three:

- C E 5382 - GIS Spatial Database Development. **Semester Hours: 3**
- C E 5383 - GIS Analyses -- Theory and Practice. **Semester Hours: 3**
- C E 5384 - GIS Management and Policies. **Semester Hours: 3**
- C E 5385 - GIS Relational Database Systems. **Semester Hours: 3**
- C E 5386 - GIS Laboratory. **Semester Hours: 3**

## International Business MS

**Advisor:** Manuel G. Serapio, Jr.

**Telephone:** 303-556-5832

**E-mail:** Manuel.Serapio@ucdenver.edu

### Faculty

**Professors:**

Herman Aguinis, PhD, State University of New York-Albany

Wayne Cascio, PhD, University of Rochester

Lawrence Cunningham, DBA, University of Tennessee

John Ruhnka, JD/LLM, Yale School of Law/Cambridge University

**Associate Professors:**

L. Ann Martin, PhD, University of Minnesota

Kang Rae Cho, PhD, University of Washington

Manuel Serapio, PhD, University of Illinois

**Senior Instructors:**

John Byrd, PhD, University of Oregon

John Turner, PhD, St. Louis University

**Instructors:**

Chen Ji, MS, University of Colorado

Mary Lee Stansifer, PhD, Northwestern University

The master of science in international business prepares individuals for the careers in international business or with international organizations.

The MS program in international business requires the completion of the following:

**A. Common Body of Knowledge (CBK)***Required CBK*

- BUSN 6520 - Managing Individuals and Teams. **Semester Hours: 3**
- BUSN 6530 - Data Analysis for Managers. **Semester Hours: 3**
- BUSN 6540 - Legal and Ethical Environment of Business. **Semester Hours: 3**
- BUSN 6550 - Analyzing and Interpreting Accounting Information. **Semester Hours: 3**
- BUSN 6560 - Marketing Management. **Semester Hours: 3**
- BUSN 6620 - Applied Economics for Managers. **Semester Hours: 3**
- BUSN 6640 - Financial Management. **Semester Hours: 3**

## **Total: 21 Hours**

Waivers of CBK courses are possible. Specific courses may be waived based on a case-by-case evaluation of undergraduate or graduate course work in business completed at a regionally accredited college or university within the last 10 years.

## **B. Foreign Language Competency**

Prior to graduation, students must demonstrate proficiency in a foreign language (other than English). This is accomplished through completion of three semesters of college-level course work in a single foreign language with a grade of C or better in all three terms or by passing a proficiency exam.

## **C. Graduate Core in International Business**

### *Required Courses*

- INTB 6000 - Introduction to International Business. **Semester Hours: 3**
  - INTB 6020 - Cross-Cultural Management. **Semester Hours: 3**
  - INTB 6200 - International Business Policy. **Semester Hours: 3**
- International Electives (4) (12 semester hours)  
Free Elective (1) (3 semester hours)  
Advanced Study Requirements in International Business (2) (6 semester hours)

## **Total: 30 Hours**

## **Notes and Restrictions**

*International Topics Electives.* Choose four courses (12 semester hours) from any INTB 6000-level course or higher or any approved international course.

*Free Elective.* One graduate-level class may be selected from any functional area of business, including international business topics classes, except BUSN courses numbered below 6800. International business majors can petition for transfer of 3 semester hours of relevant nonbusiness graduate courses offered at UC Denver's Downtown Campus.

*Advanced Study Requirements.* This 6-semester-hour requirement may be fulfilled by a master's thesis, research internship, international field study/study abroad or advanced courses in international business.

# **Management and Organization MS**

**Program Director:** Kenneth L. Bettenhausen  
**Telephone:** 303-556-5816  
**E-mail:** Kenneth.Bettenhausen@ucdenver.edu

## **Faculty**

### **Professors:**

Heidi Boerstler, PhD/JD, Yale University/University of Denver

Wayne Cascio, PhD, University of Rochester

C. Marlena Fiol, PhD, University of Illinois-Urbana-Champaign

Edward O'Connor, PhD, University of Akron

John Ruhnka, JD/LLM, Yale School of Law/Cambridge University

### **Associate Professors:**

Kenneth Bettenhausen, PhD, University of Illinois-Urbana-Champaign

Blair Gifford, PhD, University of Chicago

Sarah Koovor-Misra, PhD, University of Southern California

### **Assistant Professor:**

Vinit Desai, PhD, University of California at Berkeley

Stephanie Johnson, PhD, Rice University

### **Instructors:**

Linda Fried, JD/LLM, University of Miami

Barry McConnell, MBA, University of Colorado

Jeffrey Nystrom, MS, University of Colorado

Ira Selkowitz, JD, University of Denver

The MS management program prepares students for significant managerial responsibilities in the private and public sectors. Core course requirements provide students with advanced understanding of how to manage interpersonal dynamics, effectively design organizations, implement planned change and organizational transformations and develop human

resources. Students build on this foundation with any four electives in MGMT, ENTP or INTB, or with the courses that comprise one of 12 career-focused specializations.

**The specializations include: business strategy, change and innovation, communications management, enterprise technology management, entrepreneurship and innovation, human resources management, global management, leadership, strategic management, managing for sustainability, quantitative decision methods and sports and entertainment management.** These specializations will help students master the tools and knowledge to be successful in each focused competency.

The MS management and organization degree requirements are met by the following:

## **Management MS Core**

### **Required Management Courses**

- BUSN 6520 - Managing Individuals and Teams. **Semester Hours: 3**
- MGMT 6320 - Organizational Development. **Semester Hours: 3**
- MGMT 6360 - Designing Effective Organizations. **Semester Hours: 3**
- MGMT 6380 - Managing People for Competitive Advantage. **Semester Hours: 3**

**Total: 12 Hours**

### **Management Emphasis (or elective) courses (12-18 semester hours)**

A student may choose to complete the program by taking any four MGMT, INTB or ENTP elective courses.

### **Choose from one of the following emphasis areas:**

- communications management
- enterprise technology management
- entrepreneurship and innovation
- global management
- human resources management
- leadership
- quantitative decision methods
- sports and entertainment management
- strategic management
- sustainability management

## **Communications Management**

### **Required Courses**

- CMMU 5240 - Organizational Communication. **Semester Hours: 3**
- CMMU 5250 - Difference Matters and Organizational Communication. **Semester Hours: 3**
- CMMU 5405 - Technical Communication: Writing. **Semester Hours: 3**

**Choose one:**

- MGMT 6800 - Special Topics in Management. **Semester Hours: 3**
  - MGMT 6803 - Visionary Leadership. **Semester Hours: 3**
  - MGMT 6804 - Bargaining and Negotiation. **Semester Hours: 3**
- Any approved CMMU 5000-level course (see below) (3 semester hours)

**Total: 12 Hours**

**Approved CMMU Elective Courses**

Choose one:

- CMMU 5151 - Group Communication. **Semester Hours: 3**
- CMMU 5222 - Professional Communication. **Semester Hours: 3**
- CMMU 5245 - Advanced Organizational Communication. **Semester Hours: 3**
- CMMU 5260 - Communication and Conflict. **Semester Hours: 3**
- CMMU 5262 - Mediation. **Semester Hours: 3**
- CMMU 5270 - Intercultural Communication. **Semester Hours: 3**
- CMMU 5280 - Communication and Change. **Semester Hours: 3**
- CMMU 5500 - Health Communication. **Semester Hours: 3**
- CMMU 5505 - Technical Communication: Editing. **Semester Hours: 3**
- CMMU 5640 - Advanced Public Relations. **Semester Hours: 3**
- CMMU 5760 - Computer-Mediated Communication. **Semester Hours: 3**
- CMMU 5830 - Visual Principles in Technical Communication. **Semester Hours: 3**

**Enterprise Technology Management**

*Required Courses*

Choose four:

- ISMG 6430 - Information Systems Security and Privacy. **Semester Hours: 3**
- ISMG 6450 - IT Project Management. **Semester Hours: 3**
- ISMG 6460 - Emerging Technologies. **Semester Hours: 3**
- ISMG 6420 - Global Enterprise Systems. **Semester Hours: 3**

**Total: 12 Hours**

**Entrepreneurship and Innovation**

- ENTP 6000 - Fundamentals of Entrepreneurship. **Semester Hours: 3**
- ENTP 6020 - The Business Plan. **Semester Hours: 3** and  
6000-level ENTP courses (2) or  
6000-level ENTP course (1) and 6000-level MGMT course (1) (6 semester hours)

**Total: 12 Hours**

## **Global Management**

### *Required Courses*

- INTB 6000 - Introduction to International Business. **Semester Hours: 3**
- INTB 6020 - Cross-Cultural Management. **Semester Hours: 3**
- MGMT 6040 - International Human Resources Management. **Semester Hours: 3** or
- INTB 6040 - International Human Resources Management. **Semester Hours: 3**  
Any travel-study program or  
6000-level INTB course (3 semester hours)

**Total: 12 Hours**

## **Leadership**

### **Prerequisite**

- BUSN 6530 - Data Analysis for Managers. **Semester Hours: 3**

### **Required Courses**

- INTB 6000 - Introduction to International Business. **Semester Hours: 3** or
- ENTP 6000 - Fundamentals of Entrepreneurship. **Semester Hours: 3**
- MGMT 6803 - Visionary Leadership. **Semester Hours: 3**
- MGMT 6804 - Bargaining and Negotiation. **Semester Hours: 3**
- MGMT 6800 - Special Topics in Management. **Semester Hours: 3**

**Total: 12 Hours**

## **Management of Change**

### *Required Courses*

Choose four:

- BUSN 6811 - IT and New Business Paradigms. **Semester Hours: 3**
- BUSN 6830 - Business and the Natural Environment. **Semester Hours: 3**

- ENTP 6820 - Business Consulting. **Semester Hours: 3**
- MGMT 6730 - Human Resources Management: Performance Management. **Semester Hours: 3**
- MGMT 6803 - Visionary Leadership. **Semester Hours: 3**
- MGMT 6804 - Bargaining and Negotiation. **Semester Hours: 3**
- MGMT 68\_\_ - Leadership in Difficult Times (3 semester hours)
- MGMT 6821 - Managing for Sustainability. **Semester Hours: 3**

**Total: 12 Hours**

### **Managing Human Resources**

#### **Prerequisites**

- BUSN 6530 - Data Analysis for Managers. **Semester Hours: 3**
- MGMT 6380 - Managing People for Competitive Advantage. **Semester Hours: 3**  
HR emphasis prerequisite courses are in addition to the 30-hour MS core.

#### **Required Courses**

Choose four:

- BUSN 6540 - Legal and Ethical Environment of Business. **Semester Hours: 3**
- MGMT 6040 - International Human Resources Management. **Semester Hours: 3** or
- INTB 6040 - International Human Resources Management. **Semester Hours: 3**
- MGMT 6710 - Human Resources Management: Staffing. **Semester Hours: 3**
- MGMT 6720 - Human Resources Management: Training. **Semester Hours: 3**
- MGMT 6730 - Human Resources Management: Performance Management. **Semester Hours: 3**
- MGMT 6740 - Human Resources Management: Compensation. **Semester Hours: 3**

**Total: 12 Hours**

### **Managing for Sustainability**

Courses and course numbers in this emphasis were still being finalized when this catalog went to print. See a graduate advisor for details.

#### **Quantitative Decision Methods**

##### **Prerequisite**

*(completion of prerequisite is in addition to the 30-hour MS in management and organization)*

- BUSN 6530 - Data Analysis for Managers. **Semester Hours: 3**

## Required Courses

Choose four:

- BUSN 6630 - Management of Operations. **Semester Hours:** 3
- BUSN 6820 - Project Management. **Semester Hours:** 3 or
- DSCI 6820 - Project Management. **Semester Hours:** 3
- BUSN 6822 - Services Operations. **Semester Hours:** 3 or
- DSCI 6822 - Services Operations. **Semester Hours:** 3
- BUSN 6824 - Business Forecasting. **Semester Hours:** 3 or
- DSCI 6230 - Business Forecasting. **Semester Hours:** 3
- BUSN 6826 - Supply Chain Management. **Semester Hours:** 3
- BUSN 6828 - Business Applications of Data Mining. **Semester Hours:** 3 or
- DSCI 6828 - Business Applications of Data Mining. **Semester Hours:** 3
- DSCI 6440 - Quality and Process Improvement. **Semester Hours:** 3

**Total: 12 Hours**

*Note:* One of two free electives must be aMGMT, ENTP or INTB course.

## Sports and Entertainment Management

### *Required Courses*

Choose four:

- FNCE 6\_\_\_ - Sports and Entertainment Finance (3 semester hours)
- MGMT 68\_\_ - Sports and Entertainment Management (3 semester hours)
- MGMT 68\_\_ - Law, Contracts and Negotiation in the Sports and Entertainment Industries (3 semester hours)
- MKTG 6\_\_\_ - Sports and Entertainment Marketing (3 semester hours)
- MGMT 5939 - Internship or Cooperative Education. **Semester Hours:** 1 to 3

**Total: 12 Hours**

Courses and course numbers in this emphasis were still being finalized when this catalog went to print. See a graduate advisor for details.

## Strategic Management

Students pursuing a dual MBA/MS in organization and management are not eligible for this emphasis.

### Prerequisites

- BUSN 6530 - Data Analysis for Managers. **Semester Hours:** 3

- BUSN 6550 - Analyzing and Interpreting Accounting Information. **Semester Hours: 3**

### **Required Courses**

- BUSN 6560 - Marketing Management. **Semester Hours: 3**
- BUSN 6640 - Financial Management. **Semester Hours: 3**
- BUSN 6710 - Strategic Management. **Semester Hours: 3**
- MGMT 6803 - Visionary Leadership. **Semester Hours: 3**

**Total: 12 Hours**

### **Free Electives (6 semester hours)**

Free electives can be anything in the Business School (graduate level), except BUSN prefix courses below 6800. Any 6000-level or higher ACCT, FNCE, ENTP, MKTG, MGMT, ISMG, INTB or HLTH course can count as your free elective requirement.

\*For the **communications emphasis**, the student is allowed to use an approved CMMU course as the free elective.

# **Marketing MS**

**Program Director:** David Forlani  
**Telephone:** 303-556-6616  
**E-mail:** David.Forlani@ucdenver.edu

## **Faculty**

### **Professors:**

Lawrence Cunningham, DBA, University of Tennessee

Susan Keaveney, PhD, University of Colorado

Clifford Young, PhD, University of Utah

### **Assistant Professors:**

David Forlani, PhD, University of Minnesota

Vick Lane, PhD, University of Washington

Madhavan Parthasarathy, PhD, University of Nebraska

**Senior Instructor:**

Mary Lee Stansifer, PhD, Northwestern University

**Instructors:**

Peter Miller, MA, Farleigh Dickenson University

Nicole Vowles, PhD, Victoria University of Wellington, New Zealand

The MS in marketing degree is designed to provide the skill sets necessary for you to succeed in middle (e.g., brand manager, advertising account executive) and upper level (e.g., CMO) positions in marketing and for those who interface with an organization's markets (e.g., customer service or operations).

Your MS in marketing degree from the University of Colorado Denver consists of 30 hours:

- 18 semester hours of marketing core courses
- 12 semester hours of graduate electives

We highly recommend that one of the electives include a marketing-related internship, especially for those making a career change or without prior experience in marketing. Further, as has been our policy, if you feel that you would benefit by substituting a one or two graduate electives for a marketing elective, the marketing program director will help to work out a plan designed to meet your specific career needs. You must complete the following 18 hours of marketing core courses and then you can choose from two paths to complete the remaining 12 hours. You can select the “build your own MS marketing degree” option or one of the nine specializations.

## Graduate Core in Marketing

### Required Courses

- BUSN 6560 - Marketing Management. **Semester Hours: 3**
- MKTG 6010 - Marketing Strategy, Evaluation and Development. **Semester Hours: 3**
- MKTG 6020 - International Marketing. **Semester Hours: 3**
- MKTG 6050 - Marketing Research. **Semester Hours: 3**
- MKTG 6060 - Buyer Behavior. **Semester Hours: 3**
- MKTG 6200 - Marketing Dashboards & Scorecards. **Semester Hours: 3**

### Marketing Electives

## Build Your Own MS Marketing Degree with 12 semester hours of MKTG electives

Choose any four MKTG electives, such as:

- MKTG 5939 - Internship/Cooperative Education. **Semester Hours: 1 to 3**
- MKTG 6030 - Sales and Sales Force Management. **Semester Hours: 3**
- MKTG 6040 - Services Marketing. **Semester Hours: 3**
- MKTG 6070 - Integrated Marketing Communications and Brand Identity. **Semester Hours: 3**
- MKTG 6080 - Marketing in Emerging Markets. **Semester Hours: 3**
- MKTG 6090 - Customer Relationship Management. **Semester Hours: 3**
- MKTG 6091 - Strategic Product Marketing. **Semester Hours: 3**
- MKTG 6092 - Internet Marketing. **Semester Hours: 3**
- MKTG 6094 - Marketing Issues in the Chinese Environment. **Semester Hours: 3**
- MKTG 6120 - Non-Profit and Social Marketing. **Semester Hours: 3**
- MKTG 6700 - Marketing Travel Study. **Semester Hours: 3**

**Total: 30 Hours**

**...or complete one of the following marketing specializations (listed alphabetically).**

## **Marketing Specializations**

The specializations are areas of focus that will appeal to those who have specific interests or are looking to apply their marketing acumen in particular contexts (e.g., interface with engineering or work in a multinational or nonprofit environment). A 3-semester-hour internship can be substituted for an elective in any area of specialization with the approval of the marketing program director.

### **Brand Management and Marketing Communications**

Are you interested in a career in advertising, promotions or public relations? How about furthering your career in marketing management? Advertising, promotion and public relations managers are creative, highly-motivated individuals who are flexible yet can meet a deadline. They need good verbal and written communication skills and the ability to work well with people. Similar talents are needed by those involved with brand management. This task is central to all marketers, especially those involved with perceptual positioning and the deliverance of positions in a target market (e.g., those working in any phase of market communication and R&D) The U.S. Bureau of Labor Statistics reports that, because of the high visibility of these positions, these managers are often prime candidates for top C-level positions. The job outlook remains promising but competition will be keen, and the best opportunities will go to those with an MS in marketing or an MS marketing /MBA dual degree. (Don't take our word for it, see <http://www.bls.gov/oco/ocos020.htm>).

#### **Required:**

- MKTG 6070 - Integrated Marketing Communications and Brand Identity. **Semester Hours: 3**

Choose three of the following courses:

- MKTG 6030 - Sales and Sales Force Management. **Semester Hours: 3**
- MKTG 6040 - Services Marketing. **Semester Hours: 3**
- MKTG 6091 - Strategic Product Marketing. **Semester Hours: 3**
- MKTG 6092 - Internet Marketing. **Semester Hours: 3**
- BUSN 6530 - Data Analysis for Managers. **Semester Hours: 3**
- CMMU 5635 - Principles of Public Relations. **Semester Hours: 3**
- CMMU 5640 - Advanced Public Relations. **Semester Hours: 3**
- ISMG 6240 - Website Development Practice and Technologies. **Semester Hours: 3**

## **Global Marketing**

One of the growing themes of the 21st century economy is the growth of world trade. There is continuing demand for individuals who understand the how to conduct marketing across many different international environments as well as rapidly growing areas such as China and the emerging markets. This specialization prepares you to effectively compete and succeed in this environment.

**Required (select one of the following courses):**

- MKTG 6080 - Marketing in Emerging Markets. **Semester Hours: 3**
- MKTG 6094 - Marketing Issues in the Chinese Environment. **Semester Hours: 3**

Choose three of the following courses:

- ENTP 6826 - International Entrepreneurship. **Semester Hours: 3**
- INTB 6020 - Cross-Cultural Management. **Semester Hours: 3**
- INTB 6022 - International Business Negotiations. **Semester Hours: 3**
- INTB 6080 - Global Competition. **Semester Hours: 3**
- INTB 6200 - International Business Policy. **Semester Hours: 3**
- MKTG 6700 - Marketing Travel Study. **Semester Hours: 3**

## **High-Tech/Entrepreneurial Marketing**

The American economy was built on a spirit of innovation, hard work and entrepreneurship, and this is surely going to be the path that assures continued American dominance in the technology and business development fields. Most smart innovators know that, in addition to the financial and managerial aspects of a business, it is the marketing function that often makes the difference between success and failure. Whether your interest is in corporate intrapreneurship and the development of high-technology oriented innovations or individual entrepreneurship and the development of a small business with minimal funds, knowing how to create and implement appropriate marketing strategies is fundamental to achieving your goals. This specialization allows you to focus on the type of new business creation path that best suits your aspirations

while greatly enhancing your endeavor's probability of success. If you aspire to be the next Bill Gates, this is a "must take" degree path for you.

**Required:**

- MKTG 6091 - Strategic Product Marketing. **Semester Hours: 3**
- ENTP 6842 - New Concept Development. **Semester Hours: 3**

Choose two of the following courses:

- MKTG 6030 - Sales and Sales Force Management. **Semester Hours: 3**
- MKTG 6040 - Services Marketing. **Semester Hours: 3**
- MKTG 6070 - Integrated Marketing Communications and Brand Identity. **Semester Hours: 3**
- MKTG 6092 - Internet Marketing. **Semester Hours: 3**
- CMMU 5285 - Communication Processes in Technology Transfer. **Semester Hours: 3**
- ENTP 6000 - Fundamentals of Entrepreneurship. **Semester Hours: 3**
- ENTP 6020 - The Business Plan. **Semester Hours: 3**
- ENTP 6826 - International Entrepreneurship. **Semester Hours: 3**
- ENTP 6860 - Business Planning for Social Entrepreneurs. **Semester Hours: 3**

## **Internet Marketing**

Are you interested in a degree that blends Web development and application strategies with marketing? This, then, is the specialization for you. This specialization covers all aspects of Internet marketing including the functions associated with Web sites for marketing communication and customer support, one-to-one communication to many different receiving devices, marketing via social networks, consumer behavior insights based on offline and online data combination, inventory optimization through CRM-SCM integration, and a focus on ROI and associated performance metrics. With Internet marketing poised to take off globally, especially in developing countries where consumers may not have access to the latest products in local stores, this is indeed the wave of the future.

**Required:**

- MKTG 6040 - Services Marketing. **Semester Hours: 3**
- MKTG 6092 - Internet Marketing. **Semester Hours: 3**

Choose two of the following courses:

- MKTG 6070 - Integrated Marketing Communications and Brand Identity. **Semester Hours: 3**
- MKTG 6090 - Customer Relationship Management. **Semester Hours: 3**

- BUSN 6828 - Business Applications of Data Mining. **Semester Hours: 3**
- **OR** DSCI 6828 - Business Applications of Data Mining. **Semester Hours: 3**
- ISMG 6080 - Database Management Systems. **Semester Hours: 3**
- ISMG 6240 - Website Development Practice and Technologies. **Semester Hours: 3**
- ISMG 6430 - Information Systems Security and Privacy. **Semester Hours: 3**

### **Marketing and Business Intelligence**

A great increase in ERP, CRM, HRMS and SCM applications over the last decade has created a need for specialists who can manage the many sources of information critical for business growth. Further, increased competition due to globalization has made it critical to have effective and faster decision making across all functions, especially the marketing function, where smart analysis and interpretation of enterprise data is often paramount in the formulation of competitive marketing strategy. If you are seeking a fast-growing and fast-paced area of specialization, this may well be the degree path for you.

#### **Required:**

- MKTG 6090 - Customer Relationship Management. **Semester Hours: 3**
- ISMG 6080 - Database Management Systems. **Semester Hours: 3**

Choose one of the following courses:

- ISMG 6480 - Data Warehousing and Administration. **Semester Hours: 3**
- BUSN 6828 - Business Applications of Data Mining. **Semester Hours: 3**
- **OR** DSCI 6828 - Business Applications of Data Mining. **Semester Hours: 3**

### **Marketing for Sustainability**

The world has changed. More than ever, companies around the globe need to introduce smart, sustainable brands to lead the way into the future. The strong core of MS marketing courses will give you the skills to become an effective marketing manager, while the specialized set of sustainability courses will give you the knowledge to work toward a better tomorrow. The sustainability courses will focus on the triad of economic, environmental and social sustainable development.

#### **Required:**

- MKTG 6040 - Services Marketing. **Semester Hours: 3**
- MKTG 6120 - Non-Profit and Social Marketing. **Semester Hours: 3**

Choose two of the following courses:

- BUSN 6830 - Business and the Natural Environment. **Semester Hours: 3**
- BUSN 6850 - Accounting and Finance for Sustainability. **Semester Hours: 3**

- ENTP 6858 - Innovation in the Social Sector. **Semester Hours: 3**
- MGMT 6821 - Managing for Sustainability. **Semester Hours: 3**
- MGMT 6822 - Business Ethics and Corporate Social Responsibility. **Semester Hours: 3**

### **Marketing in Nonprofit Organizations**

Are you someone who would rather help people, communities and the environment rather than focus on turning a profit? Many of our alumni have followed career paths with nonprofit organizations. They tell us that a strong core in marketing combined with specialized knowledge of the unique needs of not-for-profit organizations helped them to succeed.

**Required:**

- MKTG 6040 - Services Marketing. **Semester Hours: 3**
- MKTG 6120 - Non-Profit and Social Marketing. **Semester Hours: 3**

Choose two of the following courses:

- BUSN 6550 - Analyzing and Interpreting Accounting Information. **Semester Hours: 3**
- BUSN 6822 - Services Operations. **Semester Hours: 3**
- OR DSCI 6822 - Services Operations. **Semester Hours: 3**
- ENTP 6858 - Innovation in the Social Sector. **Semester Hours: 3**
- ENTP 6860 - Business Planning for Social Entrepreneurs. **Semester Hours: 3**
- MGMT 6822 - Business Ethics and Corporate Social Responsibility. **Semester Hours: 3**
- MKTG 6030 - Sales and Sales Force Management. **Semester Hours: 3**
- MKTG 6070 - Integrated Marketing Communications and Brand Identity. **Semester Hours: 3**

### **Marketing Research**

Marketing and survey researchers gather information about what people think, measure customer satisfaction and repurchase intentions, help companies decide what goods and services to offer and at what price, and detect up-and-coming trends. Marketing researchers need good quantitative skills, strong analytical skills and a good understanding of marketing and buyer behavior. Many of our alumni got their starts in marketing research positions. According to the U.S. Bureau of Labor Statistics, employment is expected to grow faster than average with the best job opportunities for those with an MS marketing degree (Don't just take our word for it; check out <http://www.bls.gov/oco/ocos013.htm>).

**Required:**

- MKTG 6040 - Services Marketing. **Semester Hours: 3**

- MKTG 6090 - Customer Relationship Management. **Semester Hours: 3**
- Choose two of the following courses:
- BUSN 6530 - Data Analysis for Managers. **Semester Hours: 3**
  - DSCI 6480 - Simulation Modeling. **Semester Hours: 3**
  - BUSN 6828 - Business Applications of Data Mining. **Semester Hours: 3**
  - **OR** DSCI 6828 - Business Applications of Data Mining. **Semester Hours: 3**
  - MKTG 6070 - Integrated Marketing Communications and Brand Identity. **Semester Hours: 3**

### **Sports and Entertainment Marketing**

The sports business industry is one of the largest and fastest growing in the United States. Add to that the burgeoning music, film, theater, television, cable and other entertainment industries and you've got virtually limitless choices. Every one of those industries needs good marketers. The strong core of marketing courses in the MS marketing program will give you the skills you need to hit the ground running with the specialized courses to teach you how to tailor your skills to the unique needs of the sports and entertainment industries.

#### **Required:**

- MKTG 6040 - Services Marketing. **Semester Hours: 3**
- MKTG 6820 - Sports & Entertainment Marketing. **Semester Hours: 3**

Choose two of the following courses:

- BUSN 6860 - Finance in the Sports Entertainment Industries. **Semester Hours: 3**
- MGMT 6832 - Law and Negotiation in the Sports/ Entertainment Industries. **Semester Hours: 3**
- MGMT 6830 - Sports and Entertainment Management. **Semester Hours: 3**
- MKTG 6070 - Integrated Marketing Communications and Brand Identity. **Semester Hours: 3**

### **Master of Science/Master of Arts**

## **Finance/Economics MS/MA**

Students may concurrently pursue an MA in economics offered by the College of Liberal Arts and Sciences and the MS in finance offered by the Business School. Students must complete 27 semester hours of a combination core, 15 semester hours of combination electives and 3 semester hours of a 5000- or 6000-level economics elective.

## **Master of Science/Master of Science**

# **Business/Business MS/MS**

Students may concurrently pursue dual MS degrees in any two fields of business. The program consists of a minimum of 51 semester hours of core course work, which must be completed within a period of seven years. In addition, candidates for the dual degree must satisfy all the common body of knowledge and background requirements prescribed for each degree. Waivers may be approved for some of the CBK or background upon transcript evidence of equivalent previous undergraduate or graduate course work. For more information contact a graduate staff advisor, 303-556-5900.

## **Doctor of Philosophy**

# **CSIS-Business PhD**

## **Program Components**

### **Plan of Study**

A list of course work and other requirements for the degree should be prepared with the advisor and submitted to the program co-directors for approval. The successful completion of all work indicated on the plan of study is an important prerequisite for the conferring of the degree. A plan of study should be submitted for approval by the end of the first semester of the program. The current plan of study should be updated before the beginning of the second year of the program and submitted for re-approval to the co-directors.

### **Preliminary Exam**

According to Graduate School rules, students are required to demonstrate their basic knowledge and preparation toward more advanced doctoral level work. For more information visit the CSIS program Web site.

### **Comprehensive Exam**

Students will submit a paper to fulfill the graduate school's comprehensive exam requirement. The paper should describe an area of research including literature review, problem definition and possible methodologies/models to study a significant problem in computer science or information systems. The paper will be evaluated by a committee of three faculty members. An oral presentation of the paper will be open to the entire CSIS faculty. The committee may adopt additional guidelines to evaluate the paper and presentation. According to graduate school rules, the comprehensive exam must be completed by the end of the fourth year in the program.

In addition to these requirements, the comprehensive exam must meet the other graduate school requirements.

### **Dissertation Proposal**

As the first phase of the dissertation, each student should prepare a proposal that will be evaluated by the doctoral committee. A proposal should be ready for review at least one semester before the expected completion date of the degree. The proposal is submitted for review and approval by the doctoral committee. An oral presentation of the dissertation proposal before the doctoral committee is required for approval. An approved proposal is then submitted to the co-directors of the program for final approval.

## **University-Level Instructional Training**

During the program, each student will obtain training for university level instruction. This requirement can be fulfilled by working with a faculty member as a teaching assistant, attending university-level teacher training or teaching a university-level class. Students who plan a university career will be encouraged to teach one or more courses and participate in training. When teaching or working as a teaching assistant, a student will be compensated according to standard university salaries.

### **Dissertation Completion**

Following completion of the approval of the dissertation proposal, each student prepares and then submits a dissertation. The dissertation is defended before the doctoral committee in a public meeting. Final approval for the dissertation is given by a vote of the dissertation committee after the public defense of the dissertation.

### **Graduation**

Upon completion of all degree requirements, including the dissertation defense, the student receives the degree of doctor of philosophy. Students applying through the CSE receive the PhD from the College of Engineering and Applied Sciences, while students applying through the information systems program receive the PhD from the Business School.

# **School of Education & Human Development**

**Dean**

Lynn Rhodes

## **Associate Deans**

Wanda Blanchett

Luis Rene Galindo

Deanna Sands

## **Assistant Dean**

Christine Feagins

## **Contact**

### **Admissions**

Student Services Center

Lawrence Street Center, 701

303-315-6300

[education@ucdenver.edu](mailto:education@ucdenver.edu)

[www.ucdenver.edu/education](http://www.ucdenver.edu/education)

### **Mailing Address**

School of Education & Human Development

P.O. Box 173364, Campus Box 106

Denver, CO 80217-3364

## **Application Deadlines**

Vary by program. Visit [www.ucdenver.edu/education/apply](http://www.ucdenver.edu/education/apply)

## **Overview**

The School of Education & Human Development prepares and inspires education and mental health leaders to have a profound impact in fostering student opportunity, achievement and success in urban and diverse communities. Areas of study include programs for new teachers, experienced teachers, school administrators, counselors, school psychologists, school librarians as well as technology and research professionals.

## **Mission**

We prepare and inspire education and mental health leaders to have a profound impact in fostering student opportunity, achievement and success in urban and diverse communities.

## **Our Role in the Community**

At the school, we're affecting the future. We attract a large proportion of mid-career students armed with broad experiences and perspectives, who go on to infuse Colorado's classrooms and mental health organizations with diversity and wisdom.

## **Professionals as Students**

Our program and class schedules offer flexibility to meet the needs of professionals who balance graduate education with the demands of work, families and other interests.

## **Accreditation**

The School of Education & Human Development is fully accredited by the Colorado Department of Education (CDE), the National Council for the Accreditation of Teacher Education (NCATE) and the Council for Accreditation of Counseling and Related Education Programs (CACREP) in Agency Counseling, School Counseling and Marriage and Family Therapy, and the National Association of School Psychologists (NASP) in School Psychology.

## **Programs Leading to Degrees and Licenses**

The School of Education & Human Development offers two doctoral programs (currently in development and under review at time of catalog publication), two educational specialist degrees, master's degrees in seven program areas as well as undergraduate degrees with teacher licensure through the College of Liberal Arts and Sciences. Students in these degree programs may pursue a variety of state licenses for teaching and school administration or may elect to earn these licenses without pursuing a graduate degree.

The school's degree programs and the associated state licenses are listed in the following table that also provides contact information. The school's initial professional teacher education program prepares elementary and secondary teachers for a variety of school settings through academic work, professional studies, classroom teaching experiences and community field experiences.

### **School of Education and Human Development Degree Programs and Associated State Licenses**

## **Admissions**

Prospective degree candidates (master's, educational specialist and doctoral) should request application materials from the School of Education & Human Development Student Services Center located in the Lawrence Street Center, Suite 701, by telephone at 303-315-6300 or by e-mail to [education@ucdenver.edu](mailto:education@ucdenver.edu). Information about all degrees, programs and admission requirements can be found on the school's Web site at [www.ucdenver.edu/education](http://www.ucdenver.edu/education).

## **Continuing Education**

In cooperation with schools and other community agencies, the school's continuing education program offers a variety of graduate workshops, courses and academies. While these are designed to meet specific education and training needs of partner organizations, many of the continuing education programs articulate with the school's regular master's degree programs. For more information, call the Center for Continuing Education and Professional Learning, 303-315-4920.

## Centers and Cooperatives

For information about centers and cooperatives in the School of Education & Human Development, visit [www.ucdenver.edu/education](http://www.ucdenver.edu/education) and click on Centers.

Center for Continuing Education and Professional Learning  
 Center for Transforming Learning and Teaching (CTLT)  
 Colorado Principal's Center  
 Culturally Responsive Urban Education (CRUE)  
 Evaluation Center  
 Front Range Board of Cooperative Education Services for Teacher Leadership (BOCES)  
 Laboratory for Educational Assessment Research and Innovation (LEARN)  
 Paraeducator Resource and Research Center (PAR<sup>2</sup>A)  
 Partnerships for Evidence Based Practices in Early Learners (PEBPEL)  
 Positive Early Learning Experiences Center (PELE)  
 Professional Development in Autism Center (PDA)

## Departments and Programs

### Comparison of Programs Offered

# SEHD Degree Programs and Associated State Licenses

## School of Education and Human Development Degree Programs and Associated State Licenses

<b>Programs</b>	<b>Approved Degrees</b>	<b>Licenses and Endorsements</b>
<b>ALPS: Administrative Leadership and Policy Studies</b>	<b>Master of Arts:</b> Administrative Leadership and Policy Studies	Principal License Administrator License

	<b>Educational Specialist (EdS):</b> Administrative Leadership and Policy Studies	
<b>C&amp;P: Curriculum and Pedagogy</b>	<b>Master of Arts:</b> Curriculum and Instruction	Endorsements/emphases: • Elementary Education • Secondary Math, Science or Social Studies
<b>CPCE: Counseling Psychology and Counselor Education</b>	<b>Master of Arts:</b> Counseling Psychology and Counselor Education	<b>Public School Counselor License:</b> 0–21 <b>Encouraged to apply for licensure from the State of Colorado:</b> Couples and Family Therapy Clinical Mental Health Counseling –Interdisciplinary Clinical Mental Health Counseling – Multicultural
<b>Doctoral Studies in Education</b>	<b>Doctor of Education (EdD)*</b> in Leadership for Educational Equity <b>Doctor of Philosophy (PhD)*</b> in Educational Studies and Research <i>*At time of publication these programs are under review for approval at the university system level</i>	
<b>Graduate and Undergraduate Teacher Licensure</b>	<b>Master of Arts:</b> Curriculum and Instruction Educational Psychology Special Education  <b>College of Liberal Arts Degrees:</b> <b>Bachelor of Arts</b> <b>Bachelor of Science</b>	<b>Graduate Teacher Licensure:</b> Elementary Education Secondary Education: Math, Science, Social Studies, English, Foreign Language Special Education: Generalist–K–12  <b>Undergraduate Teacher Licensure:</b> Elementary Education Secondary Education: Math, English, Social Studies, Foreign Language

<b>ECE: Early Childhood Education</b>	<b>Master of Arts:</b> Early Childhood Education	Early Childhood Special Education Specialist Birth - 8
<b>EPSY: Educational Psychology</b>	<b>Master of Arts:</b> Educational Psychology	
<b>ILT: Information and Learning Technologies</b>	<b>Master of Arts:</b> Information and Learning Technologies	Endorsements/emphases: • K–12 ILT Specialist/Teacher Level • School Library
<b>LDE: Linguistically Diverse Education</b>	<b>Master of Arts:</b> Curriculum and Instruction	Endorsement/emphasis: • Linguistically Diverse Education
<b>L2CRT: Literacy, Language and Culturally Responsive Teaching</b>	<b>Master of Arts:</b> Curriculum and Instruction	Endorsements/emphases: • Reading Teacher: K–6, 7–12 • Secondary English Education
<b>SPED: Special Education</b>	<b>Master of Arts:</b> Special Education	Special Education Generalist K-12
<b>SPSY: School Psychology</b>	<b>Educational Specialist (EdS):</b> School Psychology	School Psychology Birth - 21

## Teacher Education Program

Lawrence Street Center, 701  
Campus Box 106  
P.O. Box 173364  
Denver, CO 80217-3364  
**Telephone:** 303-315-6300  
**Fax:** 303-315-6311  
**E-mail:** [education@ucdenver.edu](mailto:education@ucdenver.edu)  
**Web site:** [www.ucdenver.edu/education/ipete](http://www.ucdenver.edu/education/ipete)

Graduate Programs  
Undergraduate Program  
Admissions Requirements

# Teacher Education Licensure Program Overview

The teacher education program is both an undergraduate and graduate level program for general education licensure. (Special education is currently only an option at the graduate level, but undergraduates who want to obtain a special education license are encouraged to consider pursuing their endorsement plus an MA in special education.) The expectations for performance are identical for both undergraduates and graduates because the expectations for newly licensed teachers in the state of Colorado are exactly the same. Undergraduates and graduates work side by side in coursework and internships. There are very slight differences including the course registration numbers (UGs register for 4000 level; Grads register for 5000 level) and undergraduates take 1-2 licensure courses and one internship prior to admission in the program. The teacher education program fosters critically reflective inquiry about teaching and learning and the development of collaborative skills necessary to work effectively with other adults on schooling issues. The program strives to meet the needs of an increasingly diverse population of students, and to productively participate in and lead school renewal by applying democratic principles in educational settings.

## Education Pathways

The graduate teacher education program at UC Denver is designed for individuals with a minimum of a bachelor's degree who seek a master's degree along with an initial Colorado provisional teacher's license in the following areas:

- **Elementary Education (K–6)** (40 semester hours)
- **Secondary Education (7–12)** (37 semester hours)
  - English
  - mathematics
  - science (general science, biology, earth science, physics, chemistry)
  - social studies
  - foreign language (Spanish, French)
- **Special Education Generalist (Ages 5–21)** (58 semester hours)
- **Dual General Education/Special Education** (60-63 semester hours)

## Program Distinctions

### Program Structure

The program admits teacher candidates in two cohort groups, one in the summer/fall and one in the spring. The initial professional teacher education program includes a 12- or 18-month licensure plan. Students will be taking course work at the university and field-based work in one of UC Denver's partner schools. By enrolling in several courses together, elementary and secondary teacher candidates consider how students develop as learners over the entire K–12 school span. This collaborative approach applies to students in the general and special education program as well. This ensures that all elementary and secondary classroom teachers

are well-prepared to work with students with special needs and that all special educators have a solid foundation in general education in curriculum and instruction.

## **Professional Development Schools**

While in the licensure portion of the program, teacher candidates work in a partner school one to four days per week, depending on the internship. University courses are closely interrelated with the four internship experiences in which teacher candidates gradually assume responsibility for teaching. Elementary teacher candidates generally spend an entire academic year in a single partner elementary school, whereas secondary teacher candidates spend their four internships in one of the partner middle schools *and* one of the partner high schools. The partner schools are located in several Denver metropolitan districts with most serving large populations of low-income and/or minority students, as well as a sizeable number of students for whom English is a second language and students with special needs. Each partner school is supported by a site professor from the university one day per week and by a master teacher, called a site coordinator.

## **Assessment**

In 2000, Senate Bill 154 required all Colorado teacher education institutions to become performance based. PBA stands for performance based assessment. PBAs are created that correspond to many of the teacher education courses and concurrent practice in the series of internships. In doing so, knowledge can be evaluated as a result of coursework and performance in schools simultaneously. As teacher candidates progress through the program, they will be introduced to Performance Based Assessments (PBAs) and will be guided and supported in both coursework and internships. Students seeking dual licensure are responsible for four additional PBAs associated with their second endorsement in Special Education.

The PBAs are:

1. Literacy Instruction & Assessment (elementary and secondary versions)
2. Mathematics Instruction & Assessment (elementary)
3. Subject Matter Content (secondary)
4. Student Profile
5. Classroom Management
6. Student Academic Performance Sample (SAPS)
7. Internship Performance Rubric (used at the end of each internship)

Passing the PLACE or PRAXIS II content examination prior to the final internship is also required before a candidate is eligible for a provisional teaching license in Colorado.

## **Programs of Study**

Due to the complex nature of state mandated influences of teacher preparation courses, please see current programs of study in the following link to the teacher education handbook.

## Master's Degree Options

The teacher education program design supports the concept of teacher education as an ongoing developmental process linking preservice, induction and ongoing professional growth experiences. Upon completion of the licensure portion of the program, beginning teachers continue working toward their master's degree (an additional 18-21 semester hours) in the areas of special education, educational psychology, content in English or history in collaboration with the Department of College or Liberal Arts and Sciences, or curriculum and instruction during their first or second year of teaching. This ensures that UC Denver's new teachers are provided with continuing support from the university while in their first few years of teaching.

# Undergraduate Teacher Licensure

## Undergraduate Teacher Education Program

The undergraduate teacher education program at UC Denver is a joint effort between the College of Liberal Arts and Sciences and the School of Education & Human Development. Students earn a bachelor's degree through the College of Liberal Arts and Sciences and a teaching license through the School of Education & Human Development.

This undergraduate program is dedicated to quality teacher education. To that end, our admission standards are rigorous and there are a number of program "gates" that teacher candidates go through to complete licensure.

UC Denver has selective admission standards for entering freshmen, including a 93 institutional index that includes students who are typically in the top third of their class or have a 3.4 GPA or score above a 23 on the ACT or 1100 on the SAT. Students transferring from community colleges must have a minimum of a 2.5 GPA.

*Please note: The admission into the School of Education & Human Development teacher education program is a separate process from admission to the university. Summer and fall admission deadlines are January 15, February 15 and March 15. Spring admission deadlines are August 15, September 15 and October 15.*

## Undergraduate Teacher Education Pathways

Undergraduate teacher candidates can earn a BA and a Colorado provisional teacher's license in the following areas:

- BA—Individually Structured Major Elementary Education Licensure
- BA—English Literature Secondary English Licensure
- BS—Mathematics Secondary Mathematics Licensure

- BA—History Secondary Social Science Licensure
- BA—Political Science Secondary Social Science Licensure
- BA—Spanish Secondary Spanish Licensure
- BA—French Secondary French Licensure

## **Program Distinctions**

## **Program Structure**

The School of Education & Human Development teacher education program admits teacher candidates in two cohort groups: one in the summer/fall and one in the spring. The initial professional teacher education program includes a 12- or 18-month licensure plan. Students will be taking course work at the university and field-based work in one of UC Denver's partner schools. By enrolling in several courses together, elementary and secondary teacher candidates consider how students develop as learners over the entire K–12 school span. This collaborative approach applies to students in the general and special education program as well. This ensures that all elementary and secondary classroom teachers are well-prepared to work with students with special needs and that all special educators have a solid foundation in general education in curriculum and instruction.

## **Professional Development Schools**

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## **Assessment**

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Passing the PLACE or PRAXIS II Content examination prior to the final internship is also required before a candidate is eligible for a provisional teaching license in Colorado.

## **Undergraduate Advising**

Undergraduate teacher candidates will have a team of individuals who work with them throughout the completion of their bachelor's degree and teacher licensure. The following are the members of the advising team:

### **College of Liberal Arts and Science (CLAS) Education Advisor**

The CLAS advisor will assist you upon entry to the university through graduation. The CLAS advisor will monitor your progress through the core curriculum, pre-IPTE curriculum, eligibility requirements for the IPTE program and transfer credits. The CLAS advisor will also approve individually structured major-elementary education contracts for elementary education teacher candidates.

### **Faculty Advisor**

A faculty advisor designated within the academic department works with undergraduate teacher education students pursuing secondary licensure regarding specific requirements within academic major (i.e., English, history, mathematics, Spanish, French, and political science). See the CLAS advisor for specific names and contact information.

### **School of Education and Human Development Advisor**

An advisor in the School of Education and Human Development's Student Services Center (Lawrence St. Center Bldg., 701; 303-315-6300) is able to help with questions about prerequisite completion, taking the PRAXIS II/PLACE exam and other general questions.

## **IPTE Undergraduate Academic Planning Sheets**

Developed in collaboration with the academic departments and IPTE program faculty, advisors will work with the teacher candidates on an academic planning sheet. There is little flexibility in the program course requirements as these requirements meet and exceed the Colorado Department of Education's teacher education professional and content standards.

## **IPTE Undergraduate Community College Articulation**

UC Denver honors the community college articulation agreement to transfer the 60 designated semester hours from the community college to anyone admitted to the teacher licensure program. If the teacher candidate is a transfer student, he/she should work with his/her CLAS advisor early and often to ensure that all courses are transferred properly.

## **Programs of Study**

Due to the complex nature of state mandated influences of teacher preparation courses, for the 2009-2010 term, please refer to the most current version of the teacher education program handbook for academic requirements for this program.

## **Requirements for Admission**

The program conducts rolling admissions each semester. Summer and fall admission deadlines are January 15, February 15 and March 15. Spring admission deadlines are August 15, September 15 and October 15.

## **Teacher Education Information Sessions**

All prospective teacher candidates are strongly encouraged to attend an information session before applying to the program. Information sessions are held twice a month lasting approximately 60-90 minutes. Advisors will be available to provide prospective students transcript reviews and pre-admission advising. To more effectively facilitate this process, please bring copies of all transcripts with you. A calendar of upcoming information sessions can be viewed on the Downtown Campus Web site. Go to [www.ucdenver.edu/education/ipte](http://www.ucdenver.edu/education/ipte) or call the school's Student Services Center at 303-315-6300.

## **Teacher Education Program Requirements**

- Applicants to the IPTE program must hold at least a bachelor's degree with a minimum undergraduate cumulative GPA of 2.75 for admission.

- Graduate candidates with a GPA less than 2.75 are required to take the GRE, with a combined score of 1000 on the verbal and quantitative sections; or the Miller Analogies Test, with an average score of 400–600, before consideration for admittance.
- All elementary education candidates must have a liberal arts major or equivalent content courses that provide a broad background of knowledge. \*
- All secondary education candidates must have a major or major equivalent of at least 30 semester hours in their desired teaching field. \*
- Undergraduate candidates must have an individually structured elementary emphasis.

\*This is determined through transcript evaluations at information sessions.

## License

# Elementary/Secondary Education Licensure

## Teacher Education Program

Lawrence Street Center, 701  
 Campus Box 106  
 P.O. Box 173364  
 Denver, CO 80217-3364  
**Telephone:** 303-315-6300  
**Fax:** 303-315-6311  
**E-mail:** [education@ucdenver.edu](mailto:education@ucdenver.edu)  
**Web site:** [www.ucdenver.edu/education/ipte](http://www.ucdenver.edu/education/ipte)

Graduate Programs  
 Undergraduate Program  
 Admissions Requirements

## Teacher Education Licensure Program Overview

The teacher education program is both an undergraduate and graduate level program for general education licensure. (Special education is currently only an option at the graduate level, but undergraduates who want to obtain a special education license are encouraged to consider pursuing their endorsement plus an MA in special education.) The expectations for performance are identical for both undergraduates and graduates because the expectations for newly

licensed teachers in the state of Colorado are exactly the same. Undergraduates and graduates work side by side in coursework and internships. There are very slight differences including the course registration numbers (UGs register for 4000 level; Grads register for 5000 level) and undergraduates take 1-2 licensure courses and one internship prior to admission in the program. The teacher education program fosters critically reflective inquiry about teaching and learning and the development of collaborative skills necessary to work effectively with other adults on schooling issues. The program strives to meet the needs of an increasingly diverse population of students, and to productively participate in and lead school renewal by applying democratic principles in educational settings.

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## Program Distinctions

### Program Structure

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### Professional Development Schools

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with the four internship experiences in which teacher candidates gradually assume responsibility for teaching. Elementary teacher candidates generally spend an entire academic year in a single partner elementary school, whereas secondary teacher candidates spend their four internships in one of the partner middle schools *and* one of the partner high schools. The partner schools are located in several Denver metropolitan districts with most serving large populations of low-income and/or minority students, as well as a sizeable number of students for whom English is a second language and students with special needs. Each partner school is supported by a site professor from the university one day per week and by a master teacher, called a site coordinator.

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## **Programs of Study**

Due to the complex nature of state mandated influences of teacher preparation courses, please see current programs of study in the following link to the teacher education handbook.

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experiences. Upon completion of the licensure portion of the program, beginning teachers continue working toward their master's degree (an additional 18-21 semester hours) in the areas of special education, educational psychology, content in English or history in collaboration with the Department of College or Liberal Arts and Sciences, or curriculum and instruction during their first or second year of teaching. This ensures that UC Denver's new teachers are provided with continuing support from the university while in their first few years of teaching.

# Undergraduate Teacher Licensure

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### **Faculty Advisor**

A faculty advisor designated within the academic department works with undergraduate teacher education students pursuing secondary licensure regarding specific requirements within academic major (i.e., English, history, mathematics, Spanish, French, and political science). See the CLAS advisor for specific names and contact information.

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### **IPTE Undergraduate Academic Planning Sheets**

Developed in collaboration with the academic departments and IPTE program faculty, advisors will work with the teacher candidates on an academic planning sheet. There is little flexibility in the program course requirements as these requirements meet and exceed the Colorado Department of Education's teacher education professional and content standards.

# **IPTE Undergraduate Community College Articulation**

UC Denver honors the community college articulation agreement to transfer the 60 designated semester hours from the community college to anyone admitted to the teacher licensure program. If the teacher candidate is a transfer student, he/she should work with his/her CLAS advisor early and often to ensure that all courses are transferred properly.

## **Programs of Study**

Due to the complex nature of state mandated influences of teacher preparation courses, for the 2009-2010 term, please refer to the most current version of the teacher education program handbook for academic requirements for this program.

## **Requirements for Admission**

The program conducts rolling admissions each semester. Summer and fall admission deadlines are January 15, February 15 and March 15. Spring admission deadlines are August 15, September 15 and October 15.

## **Teacher Education Information Sessions**

All prospective teacher candidates are strongly encouraged to attend an information session before applying to the program. Information sessions are held twice a month lasting approximately 60-90 minutes. Advisors will be available to provide prospective students transcript reviews and pre-admission advising. To more effectively facilitate this process, please bring copies of all transcripts with you. A calendar of upcoming information sessions can be viewed on the Downtown Campus Web site. Go to [www.ucdenver.edu/education/ipte](http://www.ucdenver.edu/education/ipte) or call the school's Student Services Center at 303-315-6300.

## **Teacher Education Program Requirements**

- Applicants to the IPTE program must hold at least a bachelor's degree with a minimum undergraduate cumulative GPA of 2.75 for admission.
- Graduate candidates with a GPA less than 2.75 are required to take the GRE, with a combined score of 1000 on the verbal and quantitative sections; or the Miller Analogies Test, with an average score of 400–600, before consideration for admittance.
- All elementary education candidates must have a liberal arts major or equivalent content courses that provide a broad background of knowledge. \*
- All secondary education candidates must have a major or major equivalent of at least 30 semester hours in their desired teaching field. \*
- Undergraduate candidates must have an individually structured elementary emphasis.

\*This is determined through transcript evaluations at information sessions.

# Special Education

**Office:** Lawrence Street Center, 701

**Telephone:** 303-315-6300

**Fax:** 303-315-6311

**E-mail:** [education@ucdenver.edu](mailto:education@ucdenver.edu)

**Web site:** [www.ucdenver.edu/education](http://www.ucdenver.edu/education)

## Special Education Program Overview

The special education program within the initial professional teacher education division offers a special education generalist license and a special education endorsement as well as a master of arts degree in special education. All special education program options foster the development of critical reflection, inquiry about teaching and learning, as well as the breadth and depth in content knowledge necessary to work effectively in elementary and secondary classrooms. The program faculty promote the ability of teacher candidates to meet the needs of an increasingly diverse population of K–12 learners, as well as to participate productively in and lead school renewal.

The faculty in the program in special education value collaborative relationships between general and special educators, so we offer our teacher candidates the option of pursuing a dual endorsement in both general and special education to offer our teacher candidates the option of pursuing a dual endorsement in both general and special education.

## Special Education Program Distinctions

### Special Education Licensing Pathways

To be licensed as a special education generalist for grades ages 5-21, a teacher candidate must hold a bachelor's degree from a four-year accepted institution of higher education, have completed the plan of study from one of the program options for the preparation of special education generalist, have passed the approved elementary content and special education assessments and have demonstrated all required state and national standards.

Program options for the special education generalist include: 1) initial licensure as a special education generalist; 2) dual licensure in either elementary or secondary education and as a special education generalist; and, 3) for those who already hold a Colorado teaching license, an added endorsement, which is also fully online. There is also an option to count these courses towards a masters in special education which will require an additional 9 semester hours of course work.

The time needed to complete the various special education generalist program options varies based on the needs of teacher candidates. In addition to traditional on-campus offerings, a wide

selection of courses are available in online formats. During the academic year, core special education courses are scheduled in late afternoons, evenings and on Saturdays to avoid conflict with teaching responsibilities.

## **Professional Development Schools**

While in the licensure portion of the program, teacher candidates work in a partner school one to four days per week, depending on the internship. University courses are closely interrelated with the four internship experiences in which teacher candidates gradually assume responsibility for teaching. Special education teacher candidates engage in a series of four internships from the beginning of the program to the end of the program. Dual teacher candidates engage in five internships that result in a general education license at the elementary or secondary level and then complete a fifth internship and additional course work; this can be done during an additional full time semester or can be worked out flexibly as the student assumes their first teaching position to complete their special education license. The partner schools are located in several Denver metropolitan districts with most serving large populations of low-income and/or minority students, as well as a sizeable number of students for whom English is a second language and students with special needs. Each partner school is supported by a site professor from the university one day per week and by a master teacher, called a site coordinator.

## **Assessment**

In 2000, Senate Bill 154 required all Colorado teacher education institutions to become performance based. PBA stands for performance based assessment. PBAs are created that correspond to many of the teacher education courses and concurrent practice in the series of internships. In doing so, knowledge can be evaluated as a result of coursework and performance in schools simultaneously. As teacher candidates progress through the program, they will be introduced to Performance Based Assessments (PBAs) and will be guided and supported in both course work and internships. Students seeking dual licensure are responsible for four additional PBAs associated with their second endorsement in special education.

The PBAs are:

1. Literacy Instruction & Assessment (elementary and secondary versions)
2. Mathematics Instruction & Assessment (elementary)
3. Subject Matter Content (secondary)
4. Student Profile
5. Classroom Management
6. Student Academic Performance Sample (SAPS)
7. Internship Performance Rubric (used at the end of each internship)

The four additional PBAs that all teacher candidates in the special education program are expected to proficiently complete include:

1. Assessment
2. Collaboration & Positive Behavior Supports
3. Literacy Instruction for Students with Identified Special Needs
4. The Individualized Education Program (I.E.P.) Process

Passing the PLACE or PRAXIS II Content examinations prior to the final internship is also required before a candidate is eligible for a provisional teaching license in Colorado.

## **Programs of Study**

Due to the complex nature of state mandated influences of teacher preparation courses for the 2009-2010 term, please refer to the most current version of Special Education Handbook for academic requirements for this program.

## **Requirements for Admission**

The program conducts rolling admissions each semester. Summer and fall admission deadlines are January 15, February 15 and March 15. Spring admission deadlines are August 15, September 15 and October 15.

## **Teacher Education Information Sessions**

All prospective teacher candidates are strongly encouraged to attend an information session before applying to the program. Information sessions are held twice a month lasting approximately 60-90 minutes. Advisors will be available to provide prospective students transcript reviews and pre-admission advising. To more effectively facilitate this process, please bring copies of all transcripts with you. A calendar of upcoming information sessions can be viewed on the Downtown Campus Web site. Go to [www.ucdenver.edu/education](http://www.ucdenver.edu/education) or call the school's Student Services Center at 303-315-6300.

## **Teacher Education Program Requirements**

- Applicants to the IPTE program must hold at least a bachelor's degree with a minimum undergraduate cumulative GPA of 2.75 for admission.
- Graduate candidates with a GPA less than 2.75 are required to take the GRE, with a combined score of 1000 on the verbal and quantitative sections; or the Miller Analogies Test, with an average score of 400–600, before consideration for admittance.
- All elementary education candidates must have a liberal arts major or equivalent content courses that provide a broad background of knowledge. \*
- All secondary education candidates must have a major or major equivalent of at least 30 semester hours in their desired teaching field. \*

\*This is determined through transcript evaluations at information sessions.

# Undergraduate Teacher Licensure

## Undergraduate Teacher Education Program

The undergraduate teacher education program at UC Denver is a joint effort between the College of Liberal Arts and Sciences and the School of Education & Human Development. Students earn a bachelor's degree through the College of Liberal Arts and Sciences and a teaching license through the School of Education & Human Development.

This undergraduate program is dedicated to quality teacher education. To that end, our admission standards are rigorous and there are a number of program “gates” that teacher candidates go through to complete licensure.

UC Denver has selective admission standards for entering freshmen, including a 93 institutional index that includes students who are typically in the top third of their class or have a 3.4 GPA or score above a 23 on the ACT or 1100 on the SAT. Students transferring from community colleges must have a minimum of a 2.5 GPA.

*Please note: The admission into the School of Education & Human Development teacher education program is a separate process from admission to the university. Summer and fall admission deadlines are January 15, February 15 and March 15. Spring admission deadlines are August 15, September 15 and October 15.*

## Undergraduate Teacher Education Pathways

Undergraduate teacher candidates can earn a BA and a Colorado provisional teacher's license in the following areas:

- BA—Individually Structured Major Elementary Education Licensure
- BA—English Literature Secondary English Licensure
- BS—Mathematics Secondary Mathematics Licensure
- BA—History Secondary Social Science Licensure
- BA—Political Science Secondary Social Science Licensure
- BA—Spanish Secondary Spanish Licensure
- BA—French Secondary French Licensure

## Program Distinctions

## Program Structure

The School of Education & Human Development teacher education program admits teacher candidates in two cohort groups: one in the summer/fall and one in the spring. The initial

professional teacher education program includes a 12- or 18-month licensure plan. Students will be taking course work at the university and field-based work in one of UC Denver's partner schools. By enrolling in several courses together, elementary and secondary teacher candidates consider how students develop as learners over the entire K–12 school span. This collaborative approach applies to students in the general and special education program as well. This ensures that all elementary and secondary classroom teachers are well-prepared to work with students with special needs and that all special educators have a solid foundation in general education in curriculum and instruction.

## **Professional Development Schools**

While in the licensure portion of the program, teacher candidates work in a partner school one to four days per week, depending on the internship. University courses are closely interrelated with the four internship experiences in which teacher candidates gradually assume responsibility for teaching. Elementary teacher candidates generally spend an entire academic year in a single partner elementary school, whereas secondary teacher candidates spend their four internships in one of the partner middle schools *and* one of the partner high schools. The partner schools are located in several Denver metropolitan districts with most serving large populations of low-income and/or minority students, as well as a sizeable number of students for whom English is a second language and students with special needs. Each partner school is supported by a site professor from the university one day per week and by a master teacher, called a site coordinator.

## **Assessment**

In 2000, Senate Bill 154 required all Colorado teacher education institutions to become performance based. PBA stands for performance based assessment. PBAs are created that correspond to many of the teacher education courses and concurrent practice in the series of internships. In doing so, knowledge can be evaluated as a result of coursework and performance in schools simultaneously. As teacher candidates progress through the program, they will be introduced to Performance Based Assessments (PBAs) and will be guided and supported in both coursework and internships. Students seeking dual licensure are responsible for four additional PBAs associated with their second endorsement in Special Education.

The PBAs are:

1. Literacy Instruction & Assessment (elementary and secondary versions)
2. Mathematics Instruction & Assessment (elementary)
3. Subject Matter Content (secondary)
4. Student Profile
5. Classroom Management
6. Student Academic Performance Sample (SAPS)
7. Internship Performance Rubric (used at the end of each internship)

Passing the PLACE or PRAXIS II Content examination prior to the final internship is also required before a candidate is eligible for a provisional teaching license in Colorado.

## **Undergraduate Advising**

Undergraduate teacher candidates will have a team of individuals who work with them throughout the completion of their bachelor's degree and teacher licensure. The following are the members of the advising team:

### **College of Liberal Arts and Science (CLAS) Education Advisor**

The CLAS advisor will assist you upon entry to the university through graduation. The CLAS advisor will monitor your progress through the core curriculum, pre-IPTE curriculum, eligibility requirements for the IPTE program and transfer credits. The CLAS advisor will also approve individually structured major-elementary education contracts for elementary education teacher candidates.

### **Faculty Advisor**

A faculty advisor designated within the academic department works with undergraduate teacher education students pursuing secondary licensure regarding specific requirements within academic major (i.e., English, history, mathematics, Spanish, French, and political science). See the CLAS advisor for specific names and contact information.

### **School of Education and Human Development Advisor**

An advisor in the School of Education and Human Development's Student Services Center (Lawrence St. Center Bldg., 701; 303-315-6300) is able to help with questions about prerequisite completion, taking the PRAXIS II/PLACE exam and other general questions.

### **IPTE Undergraduate Academic Planning Sheets**

Developed in collaboration with the academic departments and IPTE program faculty, advisors will work with the teacher candidates on an academic planning sheet. There is little flexibility in the program course requirements as these requirements meet and exceed the Colorado Department of Education's teacher education professional and content standards.

### **IPTE Undergraduate Community College Articulation**

UC Denver honors the community college articulation agreement to transfer the 60 designated semester hours from the community college to anyone admitted to the teacher licensure

program. If the teacher candidate is a transfer student, he/she should work with his/her CLAS advisor early and often to ensure that all courses are transferred properly.

## **Programs of Study**

Due to the complex nature of state mandated influences of teacher preparation courses, for the 2009-2010 term, please refer to the most current version of the teacher education program handbook for academic requirements for this program.

## **Master of Arts**

# **Special Education MA**

## **Special Education**

**Office:** Lawrence Street Center, 701

**Telephone:** 303-315-6300

**Fax:** 303-315-6311

**E-mail:** [education@ucdenver.edu](mailto:education@ucdenver.edu)

**Web site:** [www.ucdenver.edu/education](http://www.ucdenver.edu/education)

## **Special Education Program Overview**

The special education program within the initial professional teacher education division offers a special education generalist license and a special education endorsement as well as a master of arts degree in special education. All special education program options foster the development of critical reflection, inquiry about teaching and learning, as well as the breadth and depth in content knowledge necessary to work effectively in elementary and secondary classrooms. The program faculty promote the ability of teacher candidates to meet the needs of an increasingly diverse population of K–12 learners, as well as to participate productively in and lead school renewal.

The faculty in the program in special education value collaborative relationships between general and special educators, so we offer our teacher candidates the option of pursuing a dual endorsement in both general and special education to offer our teacher candidates the option of pursuing a dual endorsement in both general and special education.

## **Special Education Program Distinctions**

## **Special Education Licensing Pathways**

To be licensed as a special education generalist for grades ages 5-21, a teacher candidate must hold a bachelor's degree from a four-year accepted institution of higher education, have completed the plan of study from one of the program options for the preparation of special education generalist, have passed the approved elementary content and special education assessments and have demonstrated all required state and national standards.

Program options for the special education generalist include: 1) initial licensure as a special education generalist; 2) dual licensure in either elementary or secondary education and as a special education generalist; and, 3) for those who already hold a Colorado teaching license, an added endorsement, which is also fully online. There is also an option to count these courses towards a masters in special education which will require an additional 9 semester hours of course work.

The time needed to complete the various special education generalist program options varies based on the needs of teacher candidates. In addition to traditional on-campus offerings, a wide selection of courses are available in online formats. During the academic year, core special education courses are scheduled in late afternoons, evenings and on Saturdays to avoid conflict with teaching responsibilities.

## **Professional Development Schools**

While in the licensure portion of the program, teacher candidates work in a partner school one to four days per week, depending on the internship. University courses are closely interrelated with the four internship experiences in which teacher candidates gradually assume responsibility for teaching. Special education teacher candidates engage in a series of four internships from the beginning of the program to the end of the program. Dual teacher candidates engage in five internships that result in a general education license at the elementary or secondary level and then complete a fifth internship and additional course work; this can be done during an additional full time semester or can be worked out flexibly as the student assumes their first teaching position to complete their special education license. The partner schools are located in several Denver metropolitan districts with most serving large populations of low-income and/or minority students, as well as a sizeable number of students for whom English is a second language and students with special needs. Each partner school is supported by a site professor from the university one day per week and by a master teacher, called a site coordinator.

## **Assessment**

In 2000, Senate Bill 154 required all Colorado teacher education institutions to become performance based. PBA stands for performance based assessment. PBAs are created that correspond to many of the teacher education courses and concurrent practice in the series of internships. In doing so, knowledge can be evaluated as a result of coursework and performance in schools simultaneously. As teacher candidates progress through the program, they will be introduced to Performance Based Assessments (PBAs) and will be guided and supported in both course work and internships. Students seeking dual licensure are responsible for four additional PBAs associated with their second endorsement in special education.

The PBAs are:

1. Literacy Instruction & Assessment (elementary and secondary versions)
2. Mathematics Instruction & Assessment (elementary)
3. Subject Matter Content (secondary)
4. Student Profile
5. Classroom Management
6. Student Academic Performance Sample (SAPS)
7. Internship Performance Rubric (used at the end of each internship)

The four additional PBAs that all teacher candidates in the special education program are expected to proficiently complete include:

1. Assessment
2. Collaboration & Positive Behavior Supports
3. Literacy Instruction for Students with Identified Special Needs
4. The Individualized Education Program (I.E.P.) Process

Passing the PLACE or PRAXIS II Content examinations prior to the final internship is also required before a candidate is eligible for a provisional teaching license in Colorado.

## **Programs of Study**

Due to the complex nature of state mandated influences of teacher preparation courses for the 2009-2010 term, please refer to the most current version of Special Education Handbook for academic requirements for this program.

## **Requirements for Admission**

The program conducts rolling admissions each semester. Summer and fall admission deadlines are January 15, February 15 and March 15. Spring admission deadlines are August 15, September 15 and October 15.

## **Teacher Education Information Sessions**

All prospective teacher candidates are strongly encouraged to attend an information session before applying to the program. Information sessions are held twice a month lasting approximately 60-90 minutes. Advisors will be available to provide prospective students transcript reviews and pre-admission advising. To more effectively facilitate this process, please bring copies of all transcripts with you. A calendar of upcoming information sessions can be viewed on the Downtown Campus Web site. Go to [www.ucdenver.edu/education](http://www.ucdenver.edu/education) or call the school's Student Services Center at 303-315-6300.

## Teacher Education Program Requirements

- Applicants to the IPTE program must hold at least a bachelor's degree with a minimum undergraduate cumulative GPA of 2.75 for admission.
- Graduate candidates with a GPA less than 2.75 are required to take the GRE, with a combined score of 1000 on the verbal and quantitative sections; or the Miller Analogies Test, with an average score of 400–600, before consideration for admittance.
- All elementary education candidates must have a liberal arts major or equivalent content courses that provide a broad background of knowledge. \*
- All secondary education candidates must have a major or major equivalent of at least 30 semester hours in their desired teaching field. \*

\*This is determined through transcript evaluations at information sessions.

## Counseling Psychology and Counselor Education

# Counseling Psychology and Counselor Education MA

- Degree
- Admission Requirements
- Matriculation Requirements

**Program Leader:** Diane Estrada

**Office:** Lawrence Street Center, 701

**Telephone:** 303-315-6300

**Fax:** 303-315-6311

**E-mail:** [education@ucdenver.edu](mailto:education@ucdenver.edu)

**Web site:** [www.ucdenver.edu/education/cpce](http://www.ucdenver.edu/education/cpce)

## Faculty

Information about faculty in the Counseling Psychology and Counselor Education program is available online at [www.ucdenver.edu/education](http://www.ucdenver.edu/education).

## Degree

The master of arts degree in counseling psychology and counselor education prepares professionals for community/mental health agencies, private practice and public schools. Students should obtain faculty advising regarding requirements.

Programs consist of 63 semester hours (66 for the multicultural/diversity strand). Core requirements that are common to all areas of study are followed by courses specific to each program. All programs require a practicum (150 clock hours) and an internship (600 clock hours). For most students, the master's degree is a three-year program with course work for two

years followed by a year of practicum and internship. All beginning students enroll in CPCE 5010 - Counseling Theories. The clinical mental health counseling, school counseling and couple and family therapy programs are nationally accredited by CACREP, the Council for the Accreditation of Counseling and Related Educational Programs.

All students are expected to have online computer capability for communication and instructional purposes. For students in off-campus programs, some courses may be offered via computer technology.

## **Admission Requirements**

Successful applicants to the counseling psychology and counselor education (CPCE) program will have obtained a minimum 2.75 undergraduate GPA and will score at least 900 on the verbal and quantitative sections of the GRE or at least 396 on the Miller Analogy Test. Also, applicants will submit a current resume, a statement of goals and four letters of recommendation (academic letters strongly advised). Applicants meeting these minimum standards will be invited to a half-day group interview that involves program orientation, small group interviews, a writing assignment and a group exercise.

Application materials are available by calling the Student Services Center at 303-315-6300 or coming to Lawrence Street Center, Suite 701. All materials must be submitted to the Student Services Center in one complete packet by the appropriate deadline: September 15 for spring semester, January 15 for summer and fall semesters. Application materials include the following:

- part I of the application for admission
- tuition classification form
- \$50 application fee (make checks payable to the University of Colorado Denver)
- written statement
- four letters of recommendation - academic letters strongly advised (in sealed and signed envelopes)
- two official transcripts from each higher education institution attended (in original sealed envelope)
- official GRE or MAT scores sent directly to the University of Colorado Denver (if you do not already hold a graduate degree; see CPCE application checklist)
- oath and consent
- fingerprint card
- online written response

## **Matriculation Requirements**

CPCE students must earn at least a B in skills-oriented courses (CPCE 5100, 5160, 6140, 7100, 5910, 5930) or must repeat these courses until they do so. In addition, all students must make a formal case presentation in CPCE 5930 (internship) to demonstrate their clinical knowledge. Students must also take a national comprehensive examination (after 30 semester hours). Students may opt to write a research-based thesis instead of taking the national written examination.

## Program Areas

Students accepted into the CPCE program follow one of three programs offering counseling psychology and counselor education. The couple and family therapy program follows licensure requirements designated by the state of Colorado for licensure as a marriage and family therapist. The clinical mental health counseling program follows state licensure requirements for licensed professional counselor, and the school counseling program follows state department of education licensure requirements.

## Program Areas

### Counseling Psychology and Counselor Education Core

*(required in all program areas)*

- CPCE 5010 - Counseling Theories. **Semester Hours: 3**
- CPCE 5100 - Techniques of Counseling. **Semester Hours: 3**
- CPCE 5110 - Group Counseling. **Semester Hours: 3**
- CPCE 5150 - Family Therapy Theory. **Semester Hours: 3**
- CPCE 5330 - Counseling Issues and Ethics. **Semester Hours: 3**
- CPCE 5400 - Career Development. **Semester Hours: 3**
- CPCE 5810 - Multicultural Counseling Issues for Individuals and Families. **Semester Hours: 3**
- CPCE 5910 - Practicum in CPCE. **Semester Hours: 6**
- CPCE 5930 - Internship in Counseling Psychology and Counselor Education. **Semester Hours: 1 to 6**
- EPSY 6200 - Human Development Over the Life Span. **Semester Hours: 3**
- REM 5200 - Introduction to Research Methods. **Semester Hours: 3**
- REM 5300 - Introduction to Measurement. **Semester Hours: 3**

**Total: 42 Hours**

### Additional Requirements for Program Area One: Clinical Mental Health Counseling (MA)

- CPCE 5160 - Techniques in Family Therapy. **Semester Hours: 3**
- CPCE 5280 - Addictions Counseling. **Semester Hours: 3**
- CPCE 5820 - Strategies of Agency Counseling. **Semester Hours: 3-6**
- CPCE 6250 - Mental Health Diagnosis. **Semester Hours: 3**
- CPCE 7100 - Advanced Theories and Techniques in Psychotherapy. **Semester Hours: 3**

Two Electives (6 semester hours)

**Total: 21 Hours**

### **Additional Requirements for Multicultural/Diversity Strand in Clinical Mental Health Counseling**

- CPCE 5160 - Techniques in Family Therapy. **Semester Hours: 3**
- CPCE 5280 - Addictions Counseling. **Semester Hours: 3**
- CPCE 5820 - Strategies of Agency Counseling. **Semester Hours: 3-6**
- CPCE 6250 - Mental Health Diagnosis. **Semester Hours: 3**
- CPCE 7100 - Advanced Theories and Techniques in Psychotherapy. **Semester Hours: 3**
- CPCE 5830 - ST: Gender and Sexual Orientation **Semester Hours: 3**
- CPCE 6100 - Spiritual Dimensions of Counseling. **Semester Hours: 3**
- CPCE 6810 - Advanced Multicultural Counseling. **Semester Hours: 3**

**Total: 24 Hours**

### **Additional Requirements for Program Area Two: Public School Counseling Certificate (MA)\***

- CPCE 5280 - Addictions Counseling. **Semester Hours: 3**
- CPCE 5420 - Organizational Development. **Semester Hours: 3**
- CPCE 5815 - Intro to School Counseling. **Semester Hours: 3**
- CPCE 5915 - Fieldwork in School Counseling. **Semester Hours: 3**
- CPCE 6140 - Counseling Children, Adolescents and Their Parents. **Semester Hours: 3**
- CPCE 6220 - Youth Challenges and Resiliency. **Semester Hours: 3**
- CPCE 6250 - Mental Health Diagnosis. **Semester Hours: 3**

**Total: 21 Hours**

\* Students without teaching experience must accumulate 10 hours of observation time in a school setting. Three hundred of the 600 hours of internship must be in a concentrated environment. Full time experience consisting of at least a four-hour block of time each day is required. Students may not do their concentrated experience in their teaching building. Three hundred (300) hours of concentrated experience are needed at both the middle and secondary level for a K–12 program. CPCE 5150, 6140 and 7100 are necessary for students to work with school-related family issues, individual counseling and children’s counseling in practicum and internship. CPCE 5160 is necessary prior to couple and family therapy. Ten hours of laboratory experiences working with youth are required as part of this course.

## **Additional Requirements for Program Area Three: Couple and Family Therapy (MA)**

- CPCE 5160 - Techniques in Family Therapy. **Semester Hours: 3**
- CPCE 5170 - Issues In Family Studies. **Semester Hours: 3**
- CPCE 5180 - Counseling Couples. **Semester Hours: 3**
- CPCE 6000 - Introduction to Sex Therapy. **Semester Hours: 3**
- CPCE 6140 - Counseling Children, Adolescents and Their Parents. **Semester Hours: 3**
- CPCE 6160 - Advanced Assessment: Theory and Treatment in Family Systems. **Semester Hours: 3**
- CPCE 6250 - Mental Health Diagnosis. **Semester Hours: 3**

**Total: 21 Hours**

## **Master of Arts**

# **Counseling Psychology and Counselor Education MA**

- Degree
- Admission Requirements
- Matriculation Requirements

**Program Leader:** Diane Estrada

**Office:** Lawrence Street Center, 701

**Telephone:** 303-315-6300

**Fax:** 303-315-6311

**E-mail:** [education@ucdenver.edu](mailto:education@ucdenver.edu)

**Web site:** [www.ucdenver.edu/education/cpce](http://www.ucdenver.edu/education/cpce)

## **Faculty**

Information about faculty in the Counseling Psychology and Counselor Education program is available online at [www.ucdenver.edu/education](http://www.ucdenver.edu/education).

## **Degree**

The master of arts degree in counseling psychology and counselor education prepares professionals for community/mental health agencies, private practice and public schools. Students should obtain faculty advising regarding requirements.

Programs consist of 63 semester hours (66 for the multicultural/diversity strand). Core requirements that are common to all areas of study are followed by courses specific to each

program. All programs require a practicum (150 clock hours) and an internship (600 clock hours). For most students, the master's degree is a three-year program with course work for two years followed by a year of practicum and internship. All beginning students enroll in CPCE 5010 - Counseling Theories. The clinical mental health counseling, school counseling and couple and family therapy programs are nationally accredited by CACREP, the Council for the Accreditation of Counseling and Related Educational Programs.

All students are expected to have online computer capability for communication and instructional purposes. For students in off-campus programs, some courses may be offered via computer technology.

## **Admission Requirements**

Successful applicants to the counseling psychology and counselor education (CPCE) program will have obtained a minimum 2.75 undergraduate GPA and will score at least 900 on the verbal and quantitative sections of the GRE or at least 396 on the Miller Analogy Test. Also, applicants will submit a current resume, a statement of goals and four letters of recommendation (academic letters strongly advised). Applicants meeting these minimum standards will be invited to a half-day group interview that involves program orientation, small group interviews, a writing assignment and a group exercise.

Application materials are available by calling the Student Services Center at 303-315-6300 or coming to Lawrence Street Center, Suite 701. All materials must be submitted to the Student Services Center in one complete packet by the appropriate deadline: September 15 for spring semester, January 15 for summer and fall semesters. Application materials include the following:

- part I of the application for admission
- tuition classification form
- \$50 application fee (make checks payable to the University of Colorado Denver)
- written statement
- four letters of recommendation - academic letters strongly advised (in sealed and signed envelopes)
- two official transcripts from each higher education institution attended (in original sealed envelope)
- official GRE or MAT scores sent directly to the University of Colorado Denver (if you do not already hold a graduate degree; see CPCE application checklist)
- oath and consent
- fingerprint card
- online written response

## **Matriculation Requirements**

CPCE students must earn at least a B in skills-oriented courses (CPCE 5100, 5160, 6140, 7100, 5910, 5930) or must repeat these courses until they do so. In addition, all students must make a formal case presentation in CPCE 5930 (internship) to demonstrate their clinical knowledge. Students must also take a national comprehensive examination (after 30 semester hours). Students may opt to write a research-based thesis instead of taking the national written examination.

## Program Areas

Students accepted into the CPCE program follow one of three programs offering counseling psychology and counselor education. The couple and family therapy program follows licensure requirements designated by the state of Colorado for licensure as a marriage and family therapist. The clinical mental health counseling program follows state licensure requirements for licensed professional counselor, and the school counseling program follows state department of education licensure requirements.

## Program Areas

### Counseling Psychology and Counselor Education Core

*(required in all program areas)*

- CPCE 5010 - Counseling Theories. **Semester Hours: 3**
- CPCE 5100 - Techniques of Counseling. **Semester Hours: 3**
- CPCE 5110 - Group Counseling. **Semester Hours: 3**
- CPCE 5150 - Family Therapy Theory. **Semester Hours: 3**
- CPCE 5330 - Counseling Issues and Ethics. **Semester Hours: 3**
- CPCE 5400 - Career Development. **Semester Hours: 3**
- CPCE 5810 - Multicultural Counseling Issues for Individuals and Families. **Semester Hours: 3**
- CPCE 5910 - Practicum in CPCE. **Semester Hours: 6**
- CPCE 5930 - Internship in Counseling Psychology and Counselor Education. **Semester Hours: 1 to 6**
- EPSY 6200 - Human Development Over the Life Span. **Semester Hours: 3**
- REM 5200 - Introduction to Research Methods. **Semester Hours: 3**
- REM 5300 - Introduction to Measurement. **Semester Hours: 3**

**Total: 42 Hours**

### Additional Requirements for Program Area One: Clinical Mental Health Counseling (MA)

- CPCE 5160 - Techniques in Family Therapy. **Semester Hours: 3**
  - CPCE 5280 - Addictions Counseling. **Semester Hours: 3**
  - CPCE 5820 - Strategies of Agency Counseling. **Semester Hours: 3-6**
  - CPCE 6250 - Mental Health Diagnosis. **Semester Hours: 3**
  - CPCE 7100 - Advanced Theories and Techniques in Psychotherapy. **Semester Hours: 3**
- Two Electives (6 semester hours)

**Total: 21 Hours**

### **Additional Requirements for Multicultural/Diversity Strand in Clinical Mental Health Counseling**

- CPCE 5160 - Techniques in Family Therapy. **Semester Hours: 3**
- CPCE 5280 - Addictions Counseling. **Semester Hours: 3**
- CPCE 5820 - Strategies of Agency Counseling. **Semester Hours: 3-6**
- CPCE 6250 - Mental Health Diagnosis. **Semester Hours: 3**
- CPCE 7100 - Advanced Theories and Techniques in Psychotherapy. **Semester Hours: 3**
- CPCE 5830 - ST: Gender and Sexual Orientation **Semester Hours: 3**
- CPCE 6100 - Spiritual Dimensions of Counseling. **Semester Hours: 3**
- CPCE 6810 - Advanced Multicultural Counseling. **Semester Hours: 3**

**Total: 24 Hours**

### **Additional Requirements for Program Area Two: Public School Counseling Certificate (MA)\***

- CPCE 5280 - Addictions Counseling. **Semester Hours: 3**
- CPCE 5420 - Organizational Development. **Semester Hours: 3**
- CPCE 5815 - Intro to School Counseling. **Semester Hours: 3**
- CPCE 5915 - Fieldwork in School Counseling. **Semester Hours: 3**
- CPCE 6140 - Counseling Children, Adolescents and Their Parents. **Semester Hours: 3**
- CPCE 6220 - Youth Challenges and Resiliency. **Semester Hours: 3**
- CPCE 6250 - Mental Health Diagnosis. **Semester Hours: 3**

**Total: 21 Hours**

\* Students without teaching experience must accumulate 10 hours of observation time in a school setting. Three hundred of the 600 hours of internship must be in a concentrated environment. Full time experience consisting of at least a four-hour block of time each day is required. Students may not do their concentrated experience in their teaching building. Three hundred (300) hours of concentrated experience are needed at both the middle and secondary level for a K–12 program. CPCE 5150, 6140 and 7100 are necessary for students to work with school-related family issues, individual counseling and children's counseling in practicum and internship. CPCE 5160 is necessary prior to couple and family therapy. Ten hours of laboratory experiences working with youth are required as part of this course.

### **Additional Requirements for Program Area Three: Couple and Family Therapy (MA)**

- CPCE 5160 - Techniques in Family Therapy. **Semester Hours: 3**
- CPCE 5170 - Issues In Family Studies. **Semester Hours: 3**
- CPCE 5180 - Counseling Couples. **Semester Hours: 3**
- CPCE 6000 - Introduction to Sex Therapy. **Semester Hours: 3**
- CPCE 6140 - Counseling Children, Adolescents and Their Parents. **Semester Hours: 3**

- CPCE 6160 - Advanced Assessment: Theory and Treatment in Family Systems.  
**Semester Hours: 3**
- CPCE 6250 - Mental Health Diagnosis. **Semester Hours: 3**

**Total: 21 Hours**

## School Psychology

# School Psychology EdS/Licensure

- Degree
- Admission Requirements

**Program Leader:** Franci Crepeau-Hobson

**Office:** Lawrence Street Center, 1113

**Phone:** 303-315-6315

**Fax:** 303-315-6349

**E-mail:** [education@ucdenver.edu](mailto:education@ucdenver.edu)

**Web site:** [www.ucdenver.edu/education/spsy](http://www.ucdenver.edu/education/spsy)

## Faculty

Information about faculty in the school psychology program is available online at [www.ucdenver.edu/education](http://www.ucdenver.edu/education).

## Degree

The educational specialist degree in school psychology is a 74 graduate semester-hour program that leads to licensure in school psychology by the Colorado Department of Education, national certification in school psychology by the National School Psychology Certification Board and the educational specialist degree (EdS) in school psychology.

This NASP-approved program allows students to create individual plans for meeting program requirements on a full- or part-time basis, during summer and academic year terms and during evening and weekend hours.

The school psychology faculty have adopted a preventative model of school mental health services. Upon completion of the program, students will be able to:

- screen for and recognize the early warning signs of social, emotional or academic risk, distinguishing between these and the typical development of infants, children and adolescents (birth–age 21)
- communicate effectively and consult collaboratively with students, parents, school professionals and community leaders to enhance the academic and mental health skills of students

- incorporate data-based decision making through formal and informal assessment procedures and planning interventions that enhance students' cognitive, social-emotional and behavioral competencies
- plan, implement and evaluate the effectiveness of preventative and remedial therapeutic interventions that strengthen students' mental health and academic skills
- advocate for children and families through the application of legal, ethical and professional standards for practice

## Admission Requirements

Successful applicants to the school psychology (SPSY) program will have obtained a minimum 3.0 undergraduate GPA and will score at least 1000 on the verbal and quantitative sections of the GRE. Also, applicants will submit a current resume, a statement of goals and three letters of recommendations. Applicants meeting these minimum standards will be invited to a half-day group interview that involves program orientation, a writing assignment and a group dynamics exercise.

Application materials are available by calling the Student Services Center at 303-315-6300 or coming to Lawrence Street Center, Suite 701. All materials must be submitted to the Student Services Center in one complete packet by the appropriate deadline —February 15 for fall semester. Application materials include the following:

- part I of the application for admissions
- tuition classification form
- \$50 application fee (make checks payable to the University of Colorado Denver )
- written statement
- three letters of recommendations (in sealed and signed envelopes)
- two official transcripts from each higher education institution attended (in the original, sealed envelope)
- official GRE scores sent directly to the University of Colorado Denver
- oath and consent
- fingerprint card
- online written response

## Requirements for the Educational Specialist Degree in School Psychology and Licensure

Students will complete course work in child development, learning and cognition, educational methods, professional issues, assessment, counseling, intervention and consultation. Specific course requirements include one prerequisite course, 20 graduate courses and 14 graduate semester hours (1700 clock hours) of supervised experiences. Prerequisites include an undergraduate or graduate course in exceptional children and an undergraduate or graduate course in tests and measurement. Students will complete the following core course work:

- CPCE 5100 - Techniques of Counseling. **Semester Hours: 3**
- CPCE 5810 - Multicultural Counseling Issues for Individuals and Families. **Semester Hours: 3**

- EPSY 5100 - Advanced Child Growth and Development. **Semester Hours: 3** or
- EPSY 5140 - Advanced Adolescent Growth and Development. **Semester Hours: 3**
- EPSY 5240 - Cognition and Instruction. **Semester Hours: 3**
- REM 5400 - Introduction to Evaluation of Programs and Persons. **Semester Hours: 3**
- REM 7110 - Intermediate Statistics. **Semester Hours: 3**
- SPED 5780 - Literacy Intervention for Students with Disabilities. **Semester Hours: 3**
- SPSY 5600 - Functional Behavior Assessment and Planning. **Semester Hours: 3**
- SPSY 5800 - Workshop: Topics in School Psychology. **Semester Hours: 1 to 3**
- Early Childhood Assessment & Intervention
  
- Advanced Topics in Assessment III
  
- SPSY 6100 - School Psychology: Professional & Legal Foundations. **Semester Hours: 3**
- SPSY 6150 - Psychoeducational Assessment I. **Semester Hours: 4**
- SPSY 6160 - Psychoeducational Assessment II. **Semester Hours: 3**
- SPSY 6200 - Risk, Resilience, and Prevention in School Mental Health. **Semester Hours: 3**
- SPSY 6350 - School-Based Interventions: Children, Youth and Families. **Semester Hours: 4**
- SPSY 6400 - School-Based Interventions: Groups, Classrooms and Systems. **Semester Hours: 3**
- SPSY 6410 - Psychoeducational Services for Linguistically Diverse Students. **Semester Hours: 3**
- SPSY 6420 - Crisis Prevention, Planning and Intervention. **Semester Hours: 3**
- SPSY 6450 - School-Based Consultation for Mental Health Professionals. **Semester Hours: 3**
- SPSY 6500 - Identifying and Planning for the Mental Health Needs of Children and Adolescents. **Semester Hours: 3**

## Supervised Experiences

- SPSY 6911 - School Psychology Practicum. **Semester Hours: 1 to 6**
- SPSY 6930 - School Psychology Internship. **Semester Hours: 1 to 6**

## Total: 74 Hours

The education specialist in school psychology degree also requires satisfactory completion of two professional portfolios (pre-internship and EdS) demonstrating mastery of the program objectives and passing scores ( = 660) on the PRAXIS specialty exam in school psychology.

## Professional Expectations

All students in the SPSY program are expected to show a strong commitment to the program and to maintain a high academic, professional, ethical standards and sensitivity to diversity. Inappropriate or unprofessional conduct is cause for discipline or dismissal from the program.

## Education Specialist

# School Psychology EdS/Licensure

- Degree
- Admission Requirements

**Program Leader:** Franci Crepeau-Hobson

**Office:** Lawrence Street Center, 1113

**Phone:** 303-315-6315

**Fax:** 303-315-6349

**E-mail:** [education@ucdenver.edu](mailto:education@ucdenver.edu)

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## Faculty

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This NASP-approved program allows students to create individual plans for meeting program requirements on a full- or part-time basis, during summer and academic year terms and during evening and weekend hours.

The school psychology faculty have adopted a preventative model of school mental health services. Upon completion of the program, students will be able to:

- screen for and recognize the early warning signs of social, emotional or academic risk, distinguishing between these and the typical development of infants, children and adolescents (birth–age 21)
- communicate effectively and consult collaboratively with students, parents, school professionals and community leaders to enhance the academic and mental health skills of students

- incorporate data-based decision making through formal and informal assessment procedures and planning interventions that enhance students' cognitive, social-emotional and behavioral competencies
- plan, implement and evaluate the effectiveness of preventative and remedial therapeutic interventions that strengthen students' mental health and academic skills
- advocate for children and families through the application of legal, ethical and professional standards for practice

## Admission Requirements

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- written statement
- three letters of recommendations (in sealed and signed envelopes)
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- fingerprint card
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## Requirements for the Educational Specialist Degree in School Psychology and Licensure

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- EPSY 5100 - Advanced Child Growth and Development. **Semester Hours: 3** or
- EPSY 5140 - Advanced Adolescent Growth and Development. **Semester Hours: 3**
- EPSY 5240 - Cognition and Instruction. **Semester Hours: 3**
- REM 5400 - Introduction to Evaluation of Programs and Persons. **Semester Hours: 3**
- REM 7110 - Intermediate Statistics. **Semester Hours: 3**
- SPED 5780 - Literacy Intervention for Students with Disabilities. **Semester Hours: 3**
- SPSY 5600 - Functional Behavior Assessment and Planning. **Semester Hours: 3**
- SPSY 5800 - Workshop: Topics in School Psychology. **Semester Hours: 1 to 3**  
Early Childhood Assessment & Intervention  
Advanced Topics in Assessment III
- SPSY 6100 - School Psychology: Professional & Legal Foundations. **Semester Hours: 3**
- SPSY 6150 - Psychoeducational Assessment I. **Semester Hours: 4**
- SPSY 6160 - Psychoeducational Assessment II. **Semester Hours: 3**
- SPSY 6200 - Risk, Resilience, and Prevention in School Mental Health. **Semester Hours: 3**
- SPSY 6350 - School-Based Interventions: Children, Youth and Families. **Semester Hours: 4**
- SPSY 6400 - School-Based Interventions: Groups, Classrooms and Systems. **Semester Hours: 3**
- SPSY 6410 - Psychoeducational Services for Linguistically Diverse Students. **Semester Hours: 3**
- SPSY 6420 - Crisis Prevention, Planning and Intervention. **Semester Hours: 3**
- SPSY 6450 - School-Based Consultation for Mental Health Professionals. **Semester Hours: 3**
- SPSY 6500 - Identifying and Planning for the Mental Health Needs of Children and Adolescents. **Semester Hours: 3**

### **Supervised Experiences**

- SPSY 6911 - School Psychology Practicum. **Semester Hours: 1 to 6**
- SPSY 6930 - School Psychology Internship. **Semester Hours: 1 to 6**

### **Total: 74 Hours**

The education specialist in school psychology degree also requires satisfactory completion of two professional portfolios (pre-internship and EdS) demonstrating mastery of the program objectives and passing scores ( = 660) on the PRAXIS specialty exam in school psychology.

### **Professional Expectations**

All students in the SPSY program are expected to show a strong commitment to the program and to maintain a high academic, professional, ethical standards and sensitivity to diversity. Inappropriate or unprofessional conduct is cause for discipline or dismissal from the program.

## Curriculum and Pedagogy

# Curriculum and Pedagogy MA

**Office:** Lawrence Street Center, 701

**Telephone:** 303-315-6300

**Fax:** 303-315-6311

**E-mail:** [education@ucdenver.edu](mailto:education@ucdenver.edu)

**Web site:** [www.ucdenver.edu/education](http://www.ucdenver.edu/education)

## Faculty

Information about faculty in the Division of Teacher Education and Professional Learning is available online at [www.ucdenver.edu/education/c&p](http://www.ucdenver.edu/education/c&p).

## Areas of Study

### Curriculum and Pedagogy

#### Master of Arts for Practicing Teachers

#### Science-Math-Social Studies

The curriculum and pedagogy (C&P) studies lead to an advanced master's degree in curriculum and instruction. All programs require 36 semester hours, including the C&P core or its equivalent. The core courses provide a sound basis in curriculum theory, teacher inquiry, appreciation of diversity and philosophical foundations. The various specializations allow teachers to focus in an area of interest.

Elementary teachers take the math and science concentration. Secondary teachers may choose mathematics, science or social studies.

Each of these programs is designed to prepare teachers to qualify for master certification from the National Board of Professional Teaching Standards, as well as prepare for licensure renewal with the Colorado Department of Education.

## Core (Required in Elementary Math and Science, Secondary Science, Secondary Math and Secondary Social Studies)

- ELED 6110 - Curriculum Development and School Improvement. **Semester Hours:** 3 Or
- SECE 6110 - Curriculum Development and School Improvement. **Semester Hours:** 3
- FNDS 5050 - Critical Issues in American Education. **Semester Hours:** 3
- REM 5XXX - One 5000-level course in research and evaluation methodology. **Semester Hours:** 3

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**Total: 9 Hours**

## **Elementary Math and Science**

27 semester hours of electives, chosen with advisor's approval (27 semester hours)

**Total: 36 Hours**

## **Science (Secondary)**

- SECE 5340 - Multicultural Science Education. **Semester Hours: 3**
- SECE 5350 - Issues and Problems in Science Education. **Semester Hours: 3**
- SECE 5500 - The Nature of Science. **Semester Hours: 3**
- SECE 5650 - Environmental Education. **Semester Hours: 3**
- 15 hours of electives in science or education chosen with advisor's approval

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**Total: 36 Hours**

## **Mathematics (Secondary)**

- SECE 5400 - Curriculum in Secondary Mathematics. **Semester Hours: 3** or
- SECE 5410 - Advanced Methods and Strategies in Secondary Mathematics. **Semester Hours: 3**
- SECE 5401 - Assessment in Mathematics Education. **Semester Hours: 3**

## **Choose three:**

- ELED 5416 - Math-Science Connections: Outdoor. **Semester Hours: 3**
- SECE 5417 - Structure of Rational Numbers. **Semester Hours: 3**
- SECE 5418 - Mathematical Modeling. **Semester Hours: 3**
- SECE 5419 - Exploring the Structure of Geometry Using Technology. **Semester Hours: 3**
- SECE 5420 - Teaching Mathematics to Low Achievers. **Semester Hours: 3**
- SECE 5440 - Topics in Mathematics Education. **Semester Hours: 3**
- 12 hours of electives from the School of Education & Human Development or the mathematics department, chosen with an advisor's approval

## **Total: 36 Hours**

### **Social Studies (Secondary)**

Below is a sample plan, please refer to the School of Education & Human Development Web site for the advising plan at [www.ucdenver.edu/education/c&p](http://www.ucdenver.edu/education/c&p).

- HIST 5464 - Problems and Methods in Teaching History and Social Studies I. **Semester Hours: 3**
- HIST 5465 - Problems and Methods in Teaching History and Social Studies II. **Semester Hours: 3**
- HIST 5466 - Teaching About Ethnicity, Race, and Prejudice. **Semester Hours: 3**
- HIST 6951 - Masters Project: Advanced History Curriculum Development. **Semester Hours: 1 to 6**
- EPSY 5XXX - Educational Psychology Elective. **Semester Hours: 3**
- IT 5XXX - Instructional Technology elective. **Semester Hours: 3**
- 9 semester hours of electives, chosen with advisor's approval: history, sociology, economics, education courses strongly recommended.

## **Total: 36 Hours**

### **Comprehensive Exam**

C&P programs requires a master's comprehensive exam that consists of a project or a comprehensive portfolio for the program completion requirement. Details may be obtained from your faculty advisor and from the "C&P Handbook" available at [www.ucdenver.edu/education/c&p](http://www.ucdenver.edu/education/c&p).

### **Master of Arts**

## **Curriculum and Pedagogy MA**

**Office:** Lawrence Street Center, 701

**Telephone:** 303-315-6300

**Fax:** 303-315-6311

**E-mail:** [education@ucdenver.edu](mailto:education@ucdenver.edu)

**Web site:** [www.cudenver.edu/education](http://www.cudenver.edu/education)

### **Faculty**

Information about faculty in the Division of Teacher Education and Professional Learning is available online at [www.ucdenver.edu/education/c&p](http://www.ucdenver.edu/education/c&p).

## Areas of Study

### Curriculum and Pedagogy

#### Master of Arts for Practicing Teachers

#### Science-Math-Social Studies

The curriculum and pedagogy (C&P) studies lead to an advanced master's degree in curriculum and instruction. All programs require 36 semester hours, including the C&P core or its equivalent. The core courses provide a sound basis in curriculum theory, teacher inquiry, appreciation of diversity and philosophical foundations. The various specializations allow teachers to focus in an area of interest.

Elementary teachers take the math and science concentration. Secondary teachers may choose mathematics, science or social studies.

Each of these programs is designed to prepare teachers to qualify for master certification from the National Board of Professional Teaching Standards, as well as prepare for licensure renewal with the Colorado Department of Education.

#### Core (Required in Elementary Math and Science, Secondary Science, Secondary Math and Secondary Social Studies)

- ELED 6110 - Curriculum Development and School Improvement. **Semester Hours: 3** Or
- SECE 6110 - Curriculum Development and School Improvement. **Semester Hours: 3**
- FNDS 5050 - Critical Issues in American Education. **Semester Hours: 3**  
REM 5XXX - One 5000-level course in research and evaluation methodology. **Semester Hours: 3**

**Total: 9 Hours**

#### Elementary Math and Science

27 semester hours of electives, chosen with advisor's approval (27 semester hours)

**Total: 36 Hours**

#### Science (Secondary)

- SECE 5340 - Multicultural Science Education. **Semester Hours: 3**
- SECE 5350 - Issues and Problems in Science Education. **Semester Hours: 3**
- SECE 5500 - The Nature of Science. **Semester Hours: 3**
- SECE 5650 - Environmental Education. **Semester Hours: 3**

15 hours of electives in science or education chosen with advisor's approval

**Total: 36 Hours**

### **Mathematics (Secondary)**

- SECE 5400 - Curriculum in Secondary Mathematics. **Semester Hours: 3** or
- SECE 5410 - Advanced Methods and Strategies in Secondary Mathematics. **Semester Hours: 3**
- SECE 5401 - Assessment in Mathematics Education. **Semester Hours: 3**

**Choose three:**

- ELED 5416 - Math-Science Connections: Outdoor. **Semester Hours: 3**
- SECE 5417 - Structure of Rational Numbers. **Semester Hours: 3**
- SECE 5418 - Mathematical Modeling. **Semester Hours: 3**
- SECE 5419 - Exploring the Structure of Geometry Using Technology. **Semester Hours: 3**
- SECE 5420 - Teaching Mathematics to Low Achievers. **Semester Hours: 3**
- SECE 5440 - Topics in Mathematics Education. **Semester Hours: 3**

12 hours of electives from the School of Education & Human Development or the mathematics department, chosen with an advisor's approval

**Total: 36 Hours**

### **Social Studies (Secondary)**

Below is a sample plan, please refer to the School of Education & Human Development Web site for the advising plan at [www.ucdenver.edu/education/c&p](http://www.ucdenver.edu/education/c&p).

- HIST 5464 - Problems and Methods in Teaching History and Social Studies I. **Semester Hours: 3**
- HIST 5465 - Problems and Methods in Teaching History and Social Studies II. **Semester Hours: 3**
- HIST 5466 - Teaching About Ethnicity, Race, and Prejudice. **Semester Hours: 3**
- HIST 6951 - Masters Project: Advanced History Curriculum Development. **Semester Hours: 1 to 6**

EPSY 5XXX - Educational Psychology Elective. **Semester Hours: 3**

IT 5XXX - Instructional Technology elective. **Semester Hours: 3**

9 semester hours of electives, chosen with advisor's approval: history, sociology, economics, education courses strongly recommended.

**Total: 36 Hours**

## **Comprehensive Exam**

C&P programs requires a master's comprehensive exam that consists of a project or a comprehensive portfolio for the program completion requirement. Details may be obtained from your faculty advisor and from the "C&P Handbook" available at [www.ucdenver.edu/education/c&p](http://www.ucdenver.edu/education/c&p).

## **Information and Learning Technologies**

# **Information and Learning Technologies MA**

Lawrence Street Center, 701

**Telephone:** 303-315-6300

**Fax:** 303-315-6311

**E-mail:** [education@ucdenver.edu](mailto:education@ucdenver.edu)

**Web site:** [www.ucdenver.edu/education](http://www.ucdenver.edu/education)

## **Faculty**

Information about Information ILT faculty is available online at [www.ucdenver.edu/education](http://www.ucdenver.edu/education)

## **Master's Degree**

The ILT master's program helps people design and use various resources and technologies for learning. Applying sound principles of instructional design, graduates can integrate a variety of learning technologies into their teaching including multimedia presentations, social-networking tools, and tools for authoring, production, assessment, and participation. Program graduates learn to implement learning technologies in specific professional settings—either K–12 schools or adult learning settings such as business or higher education.

Students are assigned to tracks according to their professional goals:

- The instructional design track prepares students to work in adult learning settings such as business, higher education, healthcare, nonprofits or government.
- The eLearning track prepares educators to develop online courses and learning materials, and to teach and facilitate learning in those eLearning environments.

- The K–12 teaching track helps teachers integrate technologies into schools and classrooms with a focus on improving teaching practices. Teachers may earn a state endorsement in instructional technology

Once admitted, students begin a plan of study that typically takes about two years to complete. Some students are organized into a cohort to complete courses together at a fixed sequence. Other students select courses at a more flexible pace. Consult the ILT Web site for more information about specific plans of study, course offerings and expectations of cohort groups.

ILT faculty members also participate in the school's doctoral program. Students interested in a PhD may participate in a technology-focused doctoral lab with a number of ILT faculty members. The program also delivers an online certificate on eLearning design.

## **Admission Requirements**

Admission decisions are based on undergraduate and graduate grades, external letters of recommendation, writing samples and fit with the program as reflected in a letter of intent. In some cases, results of a test (GRE) are also required. Prospective students should consult the ILT program Web site for complete admission procedures and requirements.

## **Professional Expectations**

All students in the ILT program are expected to show a strong commitment to the program and to maintain high academic, professional and ethical standards. Inappropriate or unprofessional conduct is cause for discipline or dismissal from the program.

## **Technology Expectations**

The ILT program uses computers and related technologies either as a focus or a tool for learning. Students are expected to obtain an e-mail account and check it frequently. In addition to on-campus facilities, ILT students need convenient access to Internet-connected computers off campus, either at their place of work or at home. In addition to textbooks, software purchases may be required or recommended for specific classes.

## **Program Requirements**

### **Instructional Design**

Students complete at least 36 graduate semester hours of course work from a set of core courses and approved electives within and outside the ILT program. The plan of study is nationally accredited by NCATE and AECT and is consistent with standards for instructional designers.

To stay current with the needs of a changing industry, faculty in the Information and Learning Technologies program may choose to change curriculum requirements at semester for incoming students to the program. For the 2009-2010 term, please refer to the most current version of the

handbook for academic requirements for this program. ILT Instructional Design Handbook Feb 09

## eLearning Design and Implementation

Students may complete a 30 semester hours online master's degree with an eLearning emphasis. The focus of this master's track is on the planning, design, development, delivery, facilitation and evaluation of online learning resources and programs. A certificate is also available in this area, constituting the first-year requirements of the master's program.

Sample plan for eLearning			
	Fall	Spring	Summer
Year 1	IT 5660 - Designing and Teaching in eLearning Environments.	IT 5670 - Developing eLearning Instruction.	IT 5680 - Integrating Media in eLearning Environments.
Year 2	IT 5130 - Instructional Message Design. IT 5650 - Policies and Planning for eLearning Programs.	IT 6720 - Research in Information and Learning Technologies. IT 6740 - Learning Processes Applied to Instructional Technology.	IT 5160 - Managing Information and Learning Technology Programs. Elective

## K-12 Teaching

Students may select a master's program or an endorsement program in instructional technology. For the full master of arts degree, students complete at least 36 graduate semester hours of course work consisting of a core set of courses and approved electives. The plan of study is accredited by NCATE and AECT and is designed in line with standards of the Colorado Department of Education. Students may also complete an endorsement-only program in Instructional Technology consisting of 24 graduate semester hours.

To stay current with the needs of a changing industry, faculty in the Information and Learning Technologies program may choose to change curriculum requirements at semester for incoming students to the program. For the 2009-2010 term, please refer to the most current version of the handbook for academic requirements for this program. ILT K-12 Hndbk Feb 09 , ILT Instruct Tech Endsmt Hndbk Feb 09

## **Certificate**

# **Designing E-learning Environments Graduate Certificate**

The DeE certificate is an 15-semester-hour program offered entirely online that focuses specifically on the skills needed to design and facilitate online learning opportunities for learners in K–12, higher education and corporate settings. This program is perfect for educators who are not interested in a graduate degree. More information is available at [www.ucdenver.edu/academics/colleges/SchoolOfEducation/Academics/MASTERS/ILT/Pages/eLearning.aspx](http://www.ucdenver.edu/academics/colleges/SchoolOfEducation/Academics/MASTERS/ILT/Pages/eLearning.aspx).

## **Sample plan for eLearning Certificate**

### **Year 1**

Fall: I T 5660 - Designing and Teaching in eLearning Environments.

Spring: I T 5670 - Developing eLearning Instruction.

Summer: I T 5680 - Integrating Media in eLearning Environments.

## **Comprehensive Examination for All ILT Students**

The comprehensive exam consists of a professional portfolio where in students demonstrate program competencies through work products and related accomplishments. The portfolio is created throughout the student's program and submitted for faculty review the final semester.

For more information or for complete details about ILT programs, see the ILT Web site.

# **Digital Storytelling Graduate Certificate**

A 9-semester-hour certificate in digital storytelling includes face-to-face workshops as well as a 4-semester-hour online course. Participants develop digital stories using nonlinear video editing programs and other presentation tools. They learn to integrate digital storytelling methods into existing courses and curricula for all ages.

## **Endorsement**

# **Instructional Technology Endorsement**

K–12 teachers may elect to complete a 24-semester-hour program leading to state endorsement in instructional technology at the teacher or specialist level. Teachers beginning

their careers may complete the initial teacher licensing program, followed by 24 semester hours for teacher-level endorsement. More experienced teachers may complete 24 semester hours for the specialist-level endorsement.

## **Comprehensive Examination for All ILT Students**

The comprehensive exam consists of a professional portfolio where in students demonstrate program competencies through work products and related accomplishments. The portfolio is created throughout the student's program and submitted for faculty review the final semester. For more information, see the ILT Web site.

For complete details about ILT programs, endorsement requirements and certificates, see the ILT Web site.

To stay current with the needs of a changing industry, faculty in the information and learning technologies program may choose to change curriculum requirements at semester for incoming students to the program. For the 2009-2010 term, please refer to the most current version of the handbook for academic requirements for this program. ILT Instruct Tech Endsmt Hndbk Feb 09, IPTe Info and Learning Tech Hndbk Feb 09

## **School Library Endorsement**

## **School Library and Instructional Leadership MA**

**Office:** Lawrence Street Center, 701

**Telephone:** 303-315-6300

**Fax:** 303-315-6311

**E-mail:** [education@ucdenver.edu](mailto:education@ucdenver.edu)

**Web site:** [www.ucdenver.edu/education/schoollibrary](http://www.ucdenver.edu/education/schoollibrary)

### **Faculty**

Information about SLIL faculty is available online at [www.ucdenver.edu/education/schoollibrary](http://www.ucdenver.edu/education/schoollibrary).

### **Program Overview**

The school library and instructional leadership program within the ILT master's degree program is a nationally recognized NCATE-AASL revised and approved school library media education program that leads to the Colorado Department of Education endorsement for school libraries.

The program integrates information literacy standards through the use of collaborative planning, as approved by the American Association of School Libraries. Technology and library resources are seen as tools to increase student achievement by integrating the information literacy standards with the content standards of the classroom teacher. The program adheres to the constructivist theory of resource-based learning and promotes an appreciation of children's and adolescent literature. The program believes that school librarians require education as a teacher as well as a librarian, as advocated by the American Library Association and the International Association of School Libraries. As a school librarian, you will provide collaborative instruction, information access and leadership through the management of your library program and the library resources. Courses are offered in a completely online program, an evening on-campus program, or a monthly Saturday cohort scheduled in communities across Colorado.

Once admitted, students begin a plan of study that typically takes about two years to complete. Consult the SLIL Web site for more information about specific plans of study, course offerings and expectations of cohort groups.

## **Admission Requirements**

Admission decisions are based on undergraduate and graduate grades, external letters of recommendation, writing samples and fit with the program as reflected in a letter of intent. In some cases, results of a test (GRE) are also required. Prospective students should consult the SLIL program Web site for complete admission procedures and requirements.

## **Professional Expectations**

All students in the SLIL program are expected to show a strong commitment to the program and to maintain high academic, professional and ethical standards. Inappropriate or unprofessional conduct is cause for discipline or dismissal from the program.

## **Technology Expectations**

The SLIL program uses computers and related technologies either as a focus or a tool for learning. Students are expected to obtain an e-mail account and check it frequently. In addition to on-campus facilities, SLIL students need convenient access to Internet-connected computers off campus, either at their place of work or at home. In addition to textbooks, software purchases may be required or recommended for specific classes.

## **Program Requirements**

School library students also have a choice between endorsement-only and full master's programs. The master's program requires a minimum of 36 graduate semester hours. Students complete a plan of study consisting of courses and professional field experience. To receive Colorado teacher endorsement, students are required to pass the PLACE test in school library. This is a Colorado Department of Education requirement.

## An Example of Two-Year Plan for School Library Program

Courses are offered only in certain semesters and courses should be taken in a particular sequence based on when you start the program. Advising is required prior to enrolling in a course, even as a non-degree student, in order to ensure the most effective course sequencing and availability of courses.

### Typical First Year

Fall	Spring	Summer
SL 5530 - Foundations of School Librarianship.* LLC 5790 - Children's Literature Through the Ages.***	SL 5020 - Collection Development.	SL 5110 - Integrating Instructional Technology Practices in School Libraries. (MA only) LLC 5740 - Adolescent Literature. ***

### Second Year

Fall	Spring	Summer
SL 5160 - Managing School Library Programs. REM 5080 - Research for Teachers. *** SL 5911 - School Library Field Experience-Elementary. **	SL 5030 - Information Literacy and Reference. SL 5912 - School Library Field Experience-Secondary. ** Elective (2 semester hours) (MA only)****	SL 5040 - Information Storage and Utilization. SL 6999 - Leadership and Practice in School Libraries. (MA Only)

\* SL 5530 Foundations in School Librarianship should be taken as the first course in your program.

\*\* 80 hours of field experience hours are required. Field experience may be completed over the course of a year; online seminar hours will be completed during the field experience timeframe. Field experiences are completed within a pre-approved school library. See Field Experience Policy for more information.

\*\*\* LLC 5740; LLC 5790; and REM 5080 are offered on-campus in other semesters as well.

\*\*\*\*Electives are usually attendance at Colorado Association of Libraries (CAL) conference in the fall; CASL in the spring; or TIE in the summer.

## Comprehensive Examination for All SLIL Students

The comprehensive exam consists of a professional portfolio where in students demonstrate program competencies through work products and related accomplishments. The portfolio is created throughout the student's program and submitted for faculty review the final semester.

For more information, see the ILT Web site. For complete details about the SLIL program and endorsement requirements, see the ILT Web site at [www.ucdenver.edu/education/schoollibrary](http://www.ucdenver.edu/education/schoollibrary).

## Master of Arts

# Information and Learning Technologies MA

Lawrence Street Center, 701

**Telephone:** 303-315-6300

**Fax:** 303-315-6311

**E-mail:** [education@ucdenver.edu](mailto:education@ucdenver.edu)

**Web site:** [www.ucdenver.edu/education](http://www.ucdenver.edu/education)

## Faculty

Information about Information ILT faculty is available online at [www.ucdenver.edu/education](http://www.ucdenver.edu/education)

## Master's Degree

The ILT master's program helps people design and use various resources and technologies for learning. Applying sound principles of instructional design, graduates can integrate a variety of learning technologies into their teaching including multimedia presentations, social-networking tools, and tools for authoring, production, assessment, and participation. Program graduates learn to implement learning technologies in specific professional settings—either K–12 schools or adult learning settings such as business or higher education.

Students are assigned to tracks according to their professional goals:

- The instructional design track prepares students to work in adult learning settings such as business, higher education, healthcare, nonprofits or government.
- The eLearning track prepares educators to develop online courses and learning materials, and to teach and facilitate learning in those eLearning environments.
- The K–12 teaching track helps teachers integrate technologies into schools and classrooms with a focus on improving teaching practices. Teachers may earn a state endorsement in instructional technology

Once admitted, students begin a plan of study that typically takes about two years to complete. Some students are organized into a cohort to complete courses together at a fixed sequence. Other students select courses at a more flexible pace. Consult the ILT Web site for more information about specific plans of study, course offerings and expectations of cohort groups.

ILT faculty members also participate in the school's doctoral program. Students interested in a PhD may participate in a technology-focused doctoral lab with a number of ILT faculty members. The program also delivers an online certificate on eLearning design.

## **Admission Requirements**

Admission decisions are based on undergraduate and graduate grades, external letters of recommendation, writing samples and fit with the program as reflected in a letter of intent. In some cases, results of a test (GRE) are also required. Prospective students should consult the ILT program Web site for complete admission procedures and requirements.

## **Professional Expectations**

All students in the ILT program are expected to show a strong commitment to the program and to maintain high academic, professional and ethical standards. Inappropriate or unprofessional conduct is cause for discipline or dismissal from the program.

## **Technology Expectations**

The ILT program uses computers and related technologies either as a focus or a tool for learning. Students are expected to obtain an e-mail account and check it frequently. In addition to on-campus facilities, ILT students need convenient access to Internet-connected computers off campus, either at their place of work or at home. In addition to textbooks, software purchases may be required or recommended for specific classes.

## **Program Requirements**

### **Instructional Design**

Students complete at least 36 graduate semester hours of course work from a set of core courses and approved electives within and outside the ILT program. The plan of study is nationally accredited by NCATE and AECT and is consistent with standards for instructional designers.

To stay current with the needs of a changing industry, faculty in the Information and Learning Technologies program may choose to change curriculum requirements at semester for incoming students to the program. For the 2009-2010 term, please refer to the most current version of the handbook for academic requirements for this program. ILT Instructional Design Handbook Feb 09

## **eLearning Design and Implementation**

Students may complete a 30 semester hours online master's degree with an eLearning emphasis. The focus of this master's track is on the planning, design, development, delivery, facilitation and evaluation of online learning resources and programs. A certificate is also available in this area, constituting the first-year requirements of the master's program.

Sample plan for eLearning			
	Fall	Spring	Summer
Year 1	I T 5660 - Designing and Teaching in eLearning Environments.	I T 5670 - Developing eLearning Instruction.	I T 5680 - Integrating Media in eLearning Environments.
Year 2	I T 5130 - Instructional Message Design. I T 5650 - Policies and Planning for eLearning Programs.	I T 6720 - Research in Information and Learning Technologies. I T 6740 - Learning Processes Applied to Instructional Technology.	I T 5160 - Managing Information and Learning Technology Programs. Elective

## K-12 Teaching

Students may select a master's program or an endorsement program in instructional technology. For the full master of arts degree, students complete at least 36 graduate semester hours of course work consisting of a core set of courses and approved electives. The plan of study is accredited by NCATE and AECT and is designed in line with standards of the Colorado Department of Education. Students may also complete an endorsement-only program in Instructional Technology consisting of 24 graduate semester hours.

To stay current with the needs of a changing industry, faculty in the Information and Learning Technologies program may choose to change curriculum requirements at semester for incoming students to the program. For the 2009-2010 term, please refer to the most current version of the handbook for academic requirements for this program. ILT K-12 Hndbk Feb 09 , ILT Instruct Tech Endsmt Hndbk Feb 09

# School Library and Instructional Leadership MA

**Office:** Lawrence Street Center, 701  
**Telephone:** 303-315-6300

**Fax:** 303-315-6311

**E-mail:** [education@ucdenver.edu](mailto:education@ucdenver.edu)

**Web site:** [www.ucdenver.edu/education/schoollibrary](http://www.ucdenver.edu/education/schoollibrary)

## **Faculty**

Information about SLIL faculty is available online at [www.ucdenver.edu/education/schoollibrary](http://www.ucdenver.edu/education/schoollibrary).

## **Program Overview**

The school library and instructional leadership program within the ILT master's degree program is a nationally recognized NCATE-AASL revised and approved school library media education program that leads to the Colorado Department of Education endorsement for school libraries. The program integrates information literacy standards through the use of collaborative planning, as approved by the American Association of School Libraries. Technology and library resources are seen as tools to increase student achievement by integrating the information literacy standards with the content standards of the classroom teacher. The program adheres to the constructivist theory of resource-based learning and promotes an appreciation of children's and adolescent literature. The program believes that school librarians require education as a teacher as well as a librarian, as advocated by the American Library Association and the International Association of School Libraries. As a school librarian, you will provide collaborative instruction, information access and leadership through the management of your library program and the library resources. Courses are offered in a completely online program, an evening on-campus program, or a monthly Saturday cohort scheduled in communities across Colorado.

Once admitted, students begin a plan of study that typically takes about two years to complete. Consult the SLIL Web site for more information about specific plans of study, course offerings and expectations of cohort groups.

## **Admission Requirements**

Admission decisions are based on undergraduate and graduate grades, external letters of recommendation, writing samples and fit with the program as reflected in a letter of intent. In some cases, results of a test (GRE) are also required. Prospective students should consult the SLIL program Web site for complete admission procedures and requirements.

## **Professional Expectations**

All students in the SLIL program are expected to show a strong commitment to the program and to maintain high academic, professional and ethical standards. Inappropriate or unprofessional conduct is cause for discipline or dismissal from the program.

## **Technology Expectations**

The SLIL program uses computers and related technologies either as a focus or a tool for learning. Students are expected to obtain an e-mail account and check it frequently. In addition to on-campus facilities, SLIL students need convenient access to Internet-connected computers off campus, either at their place of work or at home. In addition to textbooks, software purchases may be required or recommended for specific classes.

## Program Requirements

School library students also have a choice between endorsement-only and full master's programs. The master's program requires a minimum of 36 graduate semester hours. Students complete a plan of study consisting of courses and professional field experience. To receive Colorado teacher endorsement, students are required to pass the PLACE test in school library. This is a Colorado Department of Education requirement.

### An Example of Two-Year Plan for School Library Program

Courses are offered only in certain semesters and courses should be taken in a particular sequence based on when you start the program. Advising is required prior to enrolling in a course, even as a non-degree student, in order to ensure the most effective course sequencing and availability of courses.

#### Typical First Year

Fall	Spring	Summer
SL 5530 - Foundations of School Librarianship.* LLC 5790 - Children's Literature Through the Ages.***	SL 5020 - Collection Development.	SL 5110 - Integrating Instructional Technology Practices in School Libraries. (MA only) LLC 5740 - Adolescent Literature. ***

#### Second Year

Fall	Spring	Summer
SL 5160 - Managing School Library Programs. REM 5080 - Research for Teachers. *** SL 5911 - School Library Field Experience-Elementary. **	SL 5030 - Information Literacy and Reference. SL 5912 - School Library Field Experience-Secondary. ** Elective (2 semester hours) (MA only)****	SL 5040 - Information Storage and Utilization. SL 6999 - Leadership and Practice in School Libraries. (MA Only)

\* SL 5530 Foundations in School Librarianship should be taken as the first course in your program.

\*\* 80 hours of field experience hours are required. Field experience may be completed over the course of a year; online seminar hours will be completed during the field experience timeframe.

Field experiences are completed within a pre-approved school library. See Field Experience Policy for more information.

\*\*\* LLC 5740; LLC 5790; and REM 5080 are offered on-campus in other semesters as well.

\*\*\*\*Electives are usually attendance at Colorado Association of Libraries (CAL) conference in the fall; CASL in the spring; or TIE in the summer.

## **Comprehensive Examination for All SLIL Students**

The comprehensive exam consists of a professional portfolio where in students demonstrate program competencies through work products and related accomplishments. The portfolio is created throughout the student's program and submitted for faculty review the final semester. For more information, see the ILT Web site. For complete details about the SLIL program and endorsement requirements, see the ILT Web site at [www.ucdenver.edu/education/schoollibrary](http://www.ucdenver.edu/education/schoollibrary).

## **Linguistically Diverse Education**

### **Requirements for LDE Program**

#### **(Degree/Endorsement or Certificates - TESOL, CIEL, CRUE)**

**Office:** Lawrence Street Center, 701

**Telephone:** 303-315-6300

**Fax:** 303-315-6311

**E-mail:** [education@ucdenver.edu](mailto:education@ucdenver.edu)

**Web site:** [www.ucdenver.edu/education/lde](http://www.ucdenver.edu/education/lde)

## **Faculty**

Information about faculty in this program is available at [www.ucdenver.edu/education/lde](http://www.ucdenver.edu/education/lde). The faculty of linguistically diverse education (LDE) believe that effective teaching requires an awareness of and the ability to respond to individual differences. LDE faculty also emphasize the importance of teachers as scholars and reflective practitioners. In particular, teachers must understand how linguistic and cultural diversity affect their teaching. Two themes run throughout all program offerings. The first concerns the importance of recognizing a variety of literacies—“home” literacies, school literacy, “mainstream” literacy, first and second language literacies—and to develop teaching practices that utilize an understanding of the complexity of literacy development across language contexts. The second theme involves the meaningful use of language and literacy to improve the quality of one's life. As an approach to teaching, this theme emphasizes the creation of diverse, rich environments in which learners experience oral and written language as part of authentic tasks, and where concern for the cultural and linguistic heritage of the students is evident.

## Program Options

The LDE program offers options leading to the following:

- a master of arts in curriculum and instruction
- the Colorado Endorsement for Linguistically Diverse Education
- a Teaching English to Speakers of Other Languages (TESOL) certificate
- a Content Instruction for English Learners (CIEL) certificate
- a Culturally Responsive Urban Education (CRUE) certificate

The program is intended for:

- novice teachers who have completed their Colorado teaching credentials in UC Denver's graduate teacher education licensure program and are enrolled in the MA in curriculum and instruction with an emphasis in LDE (see 27 semester-hour option)
- veteran elementary and secondary teachers returning to graduate studies for the master's degree (36 semester hours)
- veteran elementary and secondary teachers returning to acquire Colorado endorsement credentials (24 semester hours)
- individuals interested in teaching English abroad (TESOL: 15 semester hours)
- veteran elementary and secondary teachers returning to graduate studies for a certificate to aid them in helping their English language learners succeed (CIEL: 9 semester hours)
- elementary and secondary teachers who desire preparation in better meeting the needs of culturally diverse learners (CRUE: 9 semester hours)
- individuals interested in teaching adults (MA: 36 semester hours)

The MA is a field-based professional development program involving university faculty and practicing LDE instructors in public school and intensive English settings. Courses, laboratories and practica emphasize scholarly approaches to complex problems of practice and feature interactive, collaborative and practical approaches to working with English language learners.

We advocate a sociocultural approach to issues of language and learning, acknowledging the legitimacy of linguistic and cultural differences and recognizing that academic settings represent important socializing forces in students' lives. Because of this, we emphasize the "whole learner" in our teaching and in teacher education and teacher development, understanding that individuals do not merely add a language to their repertoire of communication but make fundamental identity adjustments as they progress in their studies. For this reason, all our course work, laboratories and practica experiences are field-based, putting our program participants in contact with veteran teachers and English language learners. We draw heavily on recent scholarship in collaborative approaches to school-university partnerships and systemic school change in developing classroom methods and materials, curricula and teacher development experiences.

The MA program also provides a foundation in teaching English in a variety of contexts in the United States and abroad. Teachers who work in LDE programs or in other content areas (such as art, language arts, math, music, science, social studies or technology), but who wish to integrate LDE principles and strategies into their instruction for their English language learners, will find the MA program relevant to their interests and goals.

Course work includes language teaching methodology, language acquisition, linguistic analysis of English, multicultural foundations, assessment, literacy and other areas. This program has been developed as an advanced course of study for practicing teachers or individuals with some teaching experience.

Applicants who are new to teaching, and who wish to teach in U.S. K–12 public school settings, should inquire about the teacher education licensure program. Applicants who are new to teaching, but who do not need a teaching license (certification) because they do not wish to teach in U.S. public schools, may consider the TESOL certificate to gain initial teaching experiences before applying for the MA.

## Program Requirements and Courses

To complete the LDE program and earn a master’s degree and/or endorsement, or to earn a TESOL certificate, students must complete the appropriate course work as outlined in the table below.

<b>Requirements for LDE Program (Degree/Endorsement or TESOL Certificate)</b>					
<b>Course</b>	<b>MA without CDE Endorsement in LDE</b>	<b>MA and CDE Endorsement in LDE</b>	<b>CDE Endorsement in LDE Only</b>	<b>MA and CDE Endorsement in LDE (when added to UC Denver's graduate teacher education licensure program)</b>	<b>TESOL Certificate</b>
LLC 5910 - Foundations of Language, Literacy and Culture.	Required	Required	Required	Required	
<i>One course from culture options:</i> LLC 5140 - Multicultural Education. LLC 5150 - Culture of the Classroom.	Select One	Select One	Select One	Select One	

LLC 5160 - Historical and Legal Foundations of Bilingual Education.					
LLC 5070 - Linguistic Analysis of English: Implications for Teaching.	Required	Required	Required	Required	Required
LLC 5030 - Language/Literacy Acquisition Part I.	Required	Required	Required	Required	Required
LLC 5820 - Techniques in Teaching English as a Second Language.	Required	Required	Required	Required	Required
LLC 5050 - Linguistic and Cultural Issues in Linking Assessment and Instruction.	Required	Required	Required	Required	Required
<i>One course from field-based teaching options:</i> LLC 5020 - Workshop in Literacy and Language Teaching. LLC 5825 - Methods and Materials of Language Teaching. LLC 5826 - Language Teaching Lab. LLC 5730 - Language and Literacy Across the Curriculum. LLC 5770 - Effective Literacy Instruction for Second Language Learners.	5826 preferred	Elem: 5825 preferred  Sec: 5826 preferred	Elem: 5825 preferred  Sec: 5826 preferred	Elem: 5825 preferred  Sec: 5826 preferred	5826

LLC 5035 - Language and Literacy: Acquisition, Processes, and Cognition, Part II.	Required	Required			
LLC 6912 - Seminar and Practicum in Literacy and Language, ESL and Bilingual Education.	Required	Required	Required	Required	
<i>One course from research and evaluation methodology:</i> REM 5050 - Assessment for Teachers. REM 5080 - Research for Teachers.	Select One	Select One		Select One	
<i>One course from educational psychology:</i> EPSY 5110 - Human Learning. EPSY 5220 - Adult Learning and Education.	Select One	Select One			
Graduate-level University of Colorado elective	Select One	Select One			
Cumulative online portfolio	Required	Required	Required	Required	
LDE PLACE Exam		Required	Required	Required	
Total Semester Hours	36	36	24	27	15

## CRUE or CIEL Certificate Requirements

Those considering the CRUE certificate will find course requirements at [www.cruecenter.org/certificate.php](http://www.cruecenter.org/certificate.php). Students interested in the CIEL certificate must complete the following:

LLC 5030 – Language and Literacy Acquisition I. Semester Hours: 3

-OR-

LLC 5070 – Linguistic Analysis of English. Semester Hours: 3

LLC 5050 – Linguistic and Cultural Issues in Linking Assessment and Instruction. Semester Hours: 3

-OR-

LLC 5820 – Techniques in Teaching ESL. Semester Hours: 3

-OR-

LLC 5825 – Methods and Materials of Language Teaching. Semester Hours: 3

-OR-

LLC 5826 – Language Teaching Laboratory. Semester Hours: 3

LLC 6912 - Seminar and Practicum in Literacy and Language, ESL and Bilingual Education  
Semester Hours: 3

**Total: 9 Hours**

## **Cumulative Portfolio of Performance Based Assessments (PBAS)**

The portfolio is required for the CDE endorsement, counts as the comprehensive exam for the master's degree and permits you to document your development over the course of your program. Portfolios are reviewed by LDE faculty members. At least two faculty members must agree that the portfolio is acceptable in order to pass. The portfolio process is reviewed in every class as each of the PBAs is completed in the classes, helping students to update their portfolios throughout the program. For more portfolio guidelines, visit the Web site at [www.ucdenver.edu/education/lde](http://www.ucdenver.edu/education/lde).

## **PLACE Exam for Linguistically Diverse Education Endorsement**

To add the endorsement to their teaching license, students must pass the PLACE (Program for Licensing Assessments for Colorado Educators) exam for linguistically diverse education, secure and submit the appropriate paperwork from the Colorado Department of Education, and pay fees required for the PLACE and for the endorsement paperwork. Information about PLACE is online at [www.place.nesinc.com](http://www.place.nesinc.com).

## **Course Scheduling**

During the fall and spring semesters, most university courses are offered in the late afternoon and evening and meet for three hours once a week over a 16-week semester. Some alternative course schedules are available, such as meeting on five Friday-evening/all-day Saturday combinations. In the summer semester, three-to eight-week sessions are offered, and courses may be in the morning, afternoon or evening. A current schedule of courses is available online at <http://courses.ucdenver.edu>.

## **Planning**

For practicing full-time teachers, we recommend taking one course each fall and spring semester and up to two courses each summer. Students may simultaneously complete requirements for the MA and the endorsement for linguistically diverse education. Support for course planning is available in LDE advising sessions—usually held once in fall and once in spring. These sessions help students build their programs around course sequences and availability (some courses are offered only once per year).

## **Active Status in the Graduate School**

Students must complete their programs within seven years, maintaining a GPA of 3.0. Students typically take four courses each calendar year. Failure to enroll over three contiguous semesters will result in a requirement to resubmit part I of the application for admission and a letter of intent.

## **Certificate**

# **Content Instruction for English Learners (CIEL) Graduate Certificate**

## **Linguistically Diverse Education**

## **Requirements for LDE Program**

## **(Degree/Endorsement or Certificates - TESOL, CIEL, CRUE)**

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## Program Options

The LDE program offers options leading to the following:

- a master of arts in curriculum and instruction
- the Colorado Endorsement for Linguistically Diverse Education
- a Teaching English to Speakers of Other Languages (TESOL) certificate
- a Content Instruction for English Learners (CIEL) certificate
- a Culturally Responsive Urban Education (CRUE) certificate

The program is intended for:

- novice teachers who have completed their Colorado teaching credentials in UC Denver’s graduate teacher education licensure program and are enrolled in the MA in curriculum and instruction with an emphasis in LDE (see 27 semester-hour option)
- veteran elementary and secondary teachers returning to graduate studies for the master’s degree (36 semester hours)
- veteran elementary and secondary teachers returning to acquire Colorado endorsement credentials (24 semester hours)
- individuals interested in teaching English abroad (TESOL: 15 semester hours)
- veteran elementary and secondary teachers returning to graduate studies for a certificate to aid them in helping their English language learners succeed (CIEL: 9 semester hours)
- elementary and secondary teachers who desire preparation in better meeting the needs of culturally diverse learners (CRUE: 9 semester hours)
- individuals interested in teaching adults (MA: 36 semester hours)

The MA is a field-based professional development program involving university faculty and practicing LDE instructors in public school and intensive English settings. Courses, laboratories and practica emphasize scholarly approaches to complex problems of practice and feature interactive, collaborative and practical approaches to working with English language learners.

We advocate a sociocultural approach to issues of language and learning, acknowledging the legitimacy of linguistic and cultural differences and recognizing that academic settings represent important socializing forces in students' lives. Because of this, we emphasize the "whole learner" in our teaching and in teacher education and teacher development, understanding that individuals do not merely add a language to their repertoire of communication but make fundamental identity adjustments as they progress in their studies. For this reason, all our course work, laboratories and practica experiences are field-based, putting our program participants in contact with veteran teachers and English language learners. We draw heavily on recent scholarship in collaborative approaches to school-university partnerships and systemic school change in developing classroom methods and materials, curricula and teacher development experiences.

The MA program also provides a foundation in teaching English in a variety of contexts in the United States and abroad. Teachers who work in LDE programs or in other content areas (such as art, language arts, math, music, science, social studies or technology), but who wish to integrate LDE principles and strategies into their instruction for their English language learners, will find the MA program relevant to their interests and goals.

Course work includes language teaching methodology, language acquisition, linguistic analysis of English, multicultural foundations, assessment, literacy and other areas. This program has been developed as an advanced course of study for practicing teachers or individuals with some teaching experience.

Applicants who are new to teaching, and who wish to teach in U.S. K–12 public school settings, should inquire about the teacher education licensure program. Applicants who are new to teaching, but who do not need a teaching license (certification) because they do not wish to teach in U.S. public schools, may consider the TESOL certificate to gain initial teaching experiences before applying for the MA.

## Program Requirements and Courses

To complete the LDE program and earn a master's degree and/or endorsement, or to earn a TESOL certificate, students must complete the appropriate course work as outlined in the table below.

<b>Requirements for LDE Program (Degree/Endorsement or TESOL Certificate)</b>					
<b>Course</b>	<b>MA without CDE Endorsement in LDE</b>	<b>MA and CDE Endorsement in LDE</b>	<b>CDE Endorsement in LDE Only</b>	<b>MA and CDE Endorsement in LDE (when added to UC Denver's graduate</b>	<b>TESOL Certificate</b>

				<i>teacher education licensure program)</i>	
LLC 5910 - Foundations of Language, Literacy and Culture.	Required	Required	Required	Required	
<i>One course from culture options:</i> LLC 5140 - Multicultural Education. LLC 5150 - Culture of the Classroom. LLC 5160 - Historical and Legal Foundations of Bilingual Education.	Select One	Select One	Select One	Select One	
LLC 5070 - Linguistic Analysis of English: Implications for Teaching.	Required	Required	Required	Required	Required
LLC 5030 - Language/Literacy Acquisition Part I.	Required	Required	Required	Required	Required
LLC 5820 - Techniques in Teaching English as a Second Language.	Required	Required	Required	Required	Required
LLC 5050 - Linguistic and Cultural Issues in Linking Assessment and Instruction.	Required	Required	Required	Required	Required
<i>One course from field-based teaching options:</i> LLC 5020 -	5826 preferred	Elem: 5825 preferred	Elem: 5825 preferred	Elem: 5825 preferred	5826

<p>Workshop in Literacy and Language Teaching.          LLC 5825 - Methods and Materials of Language Teaching.          LLC 5826 - Language Teaching Lab.          LLC 5730 - Language and Literacy Across the Curriculum.          LLC 5770 - Effective Literacy Instruction for Second Language Learners.</p>		<p>Sec: 5826 preferred</p>	<p>Sec: 5826 preferred</p>	<p>Sec: 5826 preferred</p>	
<p>LLC 5035 - Language and Literacy: Acquisition, Processes, and Cognition, Part II.</p>	<p>Required</p>	<p>Required</p>			
<p>LLC 6912 - Seminar and Practicum in Literacy and Language, ESL and Bilingual Education.</p>	<p>Required</p>	<p>Required</p>	<p>Required</p>	<p>Required</p>	
<p><i>One course from research and evaluation methodology:</i>          REM 5050 - Assessment for Teachers.          REM 5080 - Research for Teachers.</p>	<p>Select One</p>	<p>Select One</p>		<p>Select One</p>	
<p><i>One course from educational psychology:</i>          EPSY 5110 - Human Learning.          EPSY 5220 - Adult</p>	<p>Select One</p>	<p>Select One</p>			

Learning and Education.					
Graduate-level University of Colorado elective	Select One	Select One			
Cumulative online portfolio	Required	Required	Required	Required	
LDE PLACE Exam		Required	Required	Required	
Total Semester Hours	36	36	24	27	15

## CRUE or CIEL Certificate Requirements

Those considering the CRUE certificate will find course requirements at [www.cruecenter.org/certificate.php](http://www.cruecenter.org/certificate.php). Students interested in the CIEL certificate must complete the following:

LLC 5030 – Language and Literacy Acquisition I. Semester Hours: 3

-OR-

LLC 5070 – Linguistic Analysis of English. Semester Hours: 3

LLC 5050 – Linguistic and Cultural Issues in Linking Assessment and Instruction. Semester Hours: 3

-OR-

LLC 5820 – Techniques in Teaching ESL. Semester Hours: 3

-OR-

LLC 5825 – Methods and Materials of Language Teaching. Semester Hours: 3

-OR-

LLC 5826 – Language Teaching Laboratory. Semester Hours: 3

LLC 6912 - Seminar and Practicum in Literacy and Language, ESL and Bilingual Education  
Semester Hours: 3

**Total: 9 Hours**

## Cumulative Portfolio of Performance Based Assessments (PBAS)

The portfolio is required for the CDE endorsement, counts as the comprehensive exam for the master's degree and permits you to document your development over the course of your program. Portfolios are reviewed by LDE faculty members. At least two faculty members must agree that the portfolio is acceptable in order to pass. The portfolio process is reviewed in every class as each of the PBAs is completed in the classes, helping students to update their portfolios throughout the program. For more portfolio guidelines, visit the Web site at [www.ucdenver.edu/education/lde](http://www.ucdenver.edu/education/lde).

## **PLACE Exam for Linguistically Diverse Education Endorsement**

To add the endorsement to their teaching license, students must pass the PLACE (Program for Licensing Assessments for Colorado Educators) exam for linguistically diverse education, secure and submit the appropriate paperwork from the Colorado Department of Education, and pay fees required for the PLACE and for the endorsement paperwork. Information about PLACE is online at [www.place.nesinc.com](http://www.place.nesinc.com).

## **Course Scheduling**

During the fall and spring semesters, most university courses are offered in the late afternoon and evening and meet for three hours once a week over a 16-week semester. Some alternative course schedules are available, such as meeting on five Friday-evening/all-day Saturday combinations. In the summer semester, three-to eight-week sessions are offered, and courses may be in the morning, afternoon or evening. A current schedule of courses is available online at <http://courses.cudenver.edu>.

## **Planning**

For practicing full-time teachers, we recommend taking one course each fall and spring semester and up to two courses each summer. Students may simultaneously complete requirements for the MA and the endorsement for linguistically diverse education. Support for course planning is available in LDE advising sessions—usually held once in fall and once in spring. These sessions help students build their programs around course sequences and availability (some courses are offered only once per year).

## **Active Status in the Graduate School**

Students must complete their programs within seven years, maintaining a GPA of 3.0. Students typically take four courses each calendar year. Failure to enroll over three contiguous semesters will result in a requirement to resubmit part I of the application for admission and a letter of intent.

# **Culturally Responsive Urban Education (CRUE) Graduate Certificate**

## **Linguistically Diverse Education**

### **Requirements for LDE Program**

#### **(Degree/Endorsement or Certificates - TESOL, CIEL, CRUE)**

**Office:** Lawrence Street Center, 701

**Telephone:** 303-315-6300

**Fax:** 303-315-6311

**E-mail:** [education@ucdenver.edu](mailto:education@ucdenver.edu)

**Web site:** [www.ucdenver.edu/education/lde](http://www.ucdenver.edu/education/lde)

## **Faculty**

Information about faculty in this program is available at [www.ucdenver.edu/education/lde](http://www.ucdenver.edu/education/lde). The faculty of linguistically diverse education (LDE) believe that effective teaching requires an awareness of and the ability to respond to individual differences. LDE faculty also emphasize the importance of teachers as scholars and reflective practitioners. In particular, teachers must understand how linguistic and cultural diversity affect their teaching. Two themes run throughout all program offerings. The first concerns the importance of recognizing a variety of literacies—“home” literacies, school literacy, “mainstream” literacy, first and second language literacies—and to develop teaching practices that utilize an understanding of the complexity of literacy development across language contexts. The second theme involves the meaningful use of language and literacy to improve the quality of one’s life. As an approach to teaching, this theme emphasizes the creation of diverse, rich environments in which learners experience oral and written language as part of authentic tasks, and where concern for the cultural and linguistic heritage of the students is evident.

## **Program Options**

The LDE program offers options leading to the following:

- a master of arts in curriculum and instruction
- the Colorado Endorsement for Linguistically Diverse Education
- a Teaching English to Speakers of Other Languages (TESOL) certificate
- a Content Instruction for English Learners (CIEL) certificate
- a Culturally Responsive Urban Education (CRUE) certificate

The program is intended for:

- novice teachers who have completed their Colorado teaching credentials in UC Denver's graduate teacher education licensure program and are enrolled in the MA in curriculum and instruction with an emphasis in LDE (see 27 semester-hour option)
- veteran elementary and secondary teachers returning to graduate studies for the master's degree (36 semester hours)
- veteran elementary and secondary teachers returning to acquire Colorado endorsement credentials (24 semester hours)
- individuals interested in teaching English abroad (TESOL: 15 semester hours)
- veteran elementary and secondary teachers returning to graduate studies for a certificate to aid them in helping their English language learners succeed (CIEL: 9 semester hours)
- elementary and secondary teachers who desire preparation in better meeting the needs of culturally diverse learners (CRUE: 9 semester hours)
- individuals interested in teaching adults (MA: 36 semester hours)

The MA is a field-based professional development program involving university faculty and practicing LDE instructors in public school and intensive English settings. Courses, laboratories and practica emphasize scholarly approaches to complex problems of practice and feature interactive, collaborative and practical approaches to working with English language learners.

We advocate a sociocultural approach to issues of language and learning, acknowledging the legitimacy of linguistic and cultural differences and recognizing that academic settings represent important socializing forces in students' lives. Because of this, we emphasize the "whole learner" in our teaching and in teacher education and teacher development, understanding that individuals do not merely add a language to their repertoire of communication but make fundamental identity adjustments as they progress in their studies. For this reason, all our course work, laboratories and practica experiences are field-based, putting our program participants in contact with veteran teachers and English language learners. We draw heavily on recent scholarship in collaborative approaches to school-university partnerships and systemic school change in developing classroom methods and materials, curricula and teacher development experiences.

The MA program also provides a foundation in teaching English in a variety of contexts in the United States and abroad. Teachers who work in LDE programs or in other content areas (such as art, language arts, math, music, science, social studies or technology), but who wish to integrate LDE principles and strategies into their instruction for their English language learners, will find the MA program relevant to their interests and goals.

Course work includes language teaching methodology, language acquisition, linguistic analysis of English, multicultural foundations, assessment, literacy and other areas. This program has been developed as an advanced course of study for practicing teachers or individuals with some teaching experience.

Applicants who are new to teaching, and who wish to teach in U.S. K–12 public school settings, should inquire about the teacher education licensure program. Applicants who are new to teaching, but who do not need a teaching license (certification) because they do not wish to

teach in U.S. public schools, may consider the TESOL certificate to gain initial teaching experiences before applying for the MA.

## Program Requirements and Courses

To complete the LDE program and earn a master's degree and/or endorsement, or to earn a TESOL certificate, students must complete the appropriate course work as outlined in the table below.

<b>Requirements for LDE Program (Degree/Endorsement or TESOL Certificate)</b>					
<b>Course</b>	<b>MA without CDE Endorsement in LDE</b>	<b>MA and CDE Endorsement in LDE</b>	<b>CDE Endorsement in LDE Only</b>	<b>MA and CDE Endorsement in LDE (when added to UC Denver's graduate teacher education licensure program)</b>	<b>TESOL Certificate</b>
LLC 5910 - Foundations of Language, Literacy and Culture.	Required	Required	Required	Required	
<i>One course from culture options:</i> LLC 5140 - Multicultural Education. LLC 5150 - Culture of the Classroom. LLC 5160 - Historical and Legal Foundations of Bilingual Education.	Select One	Select One	Select One	Select One	
LLC 5070 - Linguistic Analysis of English:	Required	Required	Required	Required	Required

Implications for Teaching.					
LLC 5030 - Language/Literacy Acquisition Part I.	Required	Required	Required	Required	Required
LLC 5820 - Techniques in Teaching English as a Second Language.	Required	Required	Required	Required	Required
LLC 5050 - Linguistic and Cultural Issues in Linking Assessment and Instruction.	Required	Required	Required	Required	Required
<i>One course from field-based teaching options:</i> LLC 5020 - Workshop in Literacy and Language Teaching. LLC 5825 - Methods and Materials of Language Teaching. LLC 5826 - Language Teaching Lab. LLC 5730 - Language and Literacy Across the Curriculum. LLC 5770 - Effective Literacy Instruction for Second Language Learners.	5826 preferred	Elem: 5825 preferred  Sec: 5826 preferred	Elem: 5825 preferred  Sec: 5826 preferred	Elem: 5825 preferred  Sec: 5826 preferred	5826
LLC 5035 - Language and Literacy: Acquisition, Processes, and Cognition, Part II.	Required	Required			

LLC 6912 - Seminar and Practicum in Literacy and Language, ESL and Bilingual Education.	Required	Required	Required	Required	
<i>One course from research and evaluation methodology:</i> REM 5050 - Assessment for Teachers. REM 5080 - Research for Teachers.	Select One	Select One		Select One	
<i>One course from educational psychology:</i> EPSY 5110 - Human Learning. EPSY 5220 - Adult Learning and Education.	Select One	Select One			
Graduate-level University of Colorado elective	Select One	Select One			
Cumulative online portfolio	Required	Required	Required	Required	
LDE PLACE Exam		Required	Required	Required	
Total Semester Hours	36	36	24	27	15

## CRUE or CIEL Certificate Requirements

Those considering the CRUE certificate will find course requirements at [www.cruecenter.org/certificate.php](http://www.cruecenter.org/certificate.php). Students interested in the CIEL certificate must complete the following:

LLC 5030 – Language and Literacy Acquisition I. Semester Hours: 3

-OR-

LLC 5070 – Linguistic Analysis of English. Semester Hours: 3

LLC 5050 – Linguistic and Cultural Issues in Linking Assessment and Instruction. Semester Hours: 3

-OR-

LLC 5820 – Techniques in Teaching ESL. Semester Hours: 3

-OR-

LLC 5825 – Methods and Materials of Language Teaching. Semester Hours: 3

-OR-

LLC 5826 – Language Teaching Laboratory. Semester Hours: 3

LLC 6912 - Seminar and Practicum in Literacy and Language, ESL and Bilingual Education  
Semester Hours: 3

**Total: 9 Hours**

## **Cumulative Portfolio of Performance Based Assessments (PBAS)**

The portfolio is required for the CDE endorsement, counts as the comprehensive exam for the master's degree and permits you to document your development over the course of your program. Portfolios are reviewed by LDE faculty members. At least two faculty members must agree that the portfolio is acceptable in order to pass. The portfolio process is reviewed in every class as each of the PBAs is completed in the classes, helping students to update their portfolios throughout the program. For more portfolio guidelines, visit the Web site at [www.ucdenver.edu/education/lde](http://www.ucdenver.edu/education/lde).

## **PLACE Exam for Linguistically Diverse Education Endorsement**

To add the endorsement to their teaching license, students must pass the PLACE (Program for Licensing Assessments for Colorado Educators) exam for linguistically diverse education, secure and submit the appropriate paperwork from the Colorado Department of Education, and pay fees required for the PLACE and for the endorsement paperwork. Information about PLACE is online at [www.place.nesinc.com](http://www.place.nesinc.com).

## **Course Scheduling**

During the fall and spring semesters, most university courses are offered in the late afternoon and evening and meet for three hours once a week over a 16-week semester. Some alternative course schedules are available, such as meeting on five Friday-evening/all-day Saturday

combinations. In the summer semester, three-to eight-week sessions are offered, and courses may be in the morning, afternoon or evening. A current schedule of courses is available online at <http://courses.ucdenver.edu>.

## **Planning**

For practicing full-time teachers, we recommend taking one course each fall and spring semester and up to two courses each summer. Students may simultaneously complete requirements for the MA and the endorsement for linguistically diverse education. Support for course planning is available in LDE advising sessions—usually held once in fall and once in spring. These sessions help students build their programs around course sequences and availability (some courses are offered only once per year).

## **Active Status in the Graduate School**

Students must complete their programs within seven years, maintaining a GPA of 3.0. Students typically take four courses each calendar year. Failure to enroll over three contiguous semesters will result in a requirement to resubmit part I of the application for admission and a letter of intent.

# **Teaching English to Speakers of Other Languages (TESOL) Graduate Certificate**

## **Linguistically Diverse Education**

## **Requirements for LDE Program**

## **(Degree/Endorsement or Certificates - TESOL, CIEL, CRUE)**

**Office:** Lawrence Street Center, 701

**Telephone:** 303-315-6300

**Fax:** 303-315-6311

**E-mail:** [education@ucdenver.edu](mailto:education@ucdenver.edu)

**Web site:** [www.ucdenver.edu/education/lde](http://www.ucdenver.edu/education/lde)

## **Faculty**

Information about faculty in this program is available at [www.ucdenver.edu/education/lde](http://www.ucdenver.edu/education/lde). The faculty of linguistically diverse education (LDE) believe that effective teaching requires an

awareness of and the ability to respond to individual differences. LDE faculty also emphasize the importance of teachers as scholars and reflective practitioners. In particular, teachers must understand how linguistic and cultural diversity affect their teaching. Two themes run throughout all program offerings. The first concerns the importance of recognizing a variety of literacies—“home” literacies, school literacy, “mainstream” literacy, first and second language literacies—and to develop teaching practices that utilize an understanding of the complexity of literacy development across language contexts. The second theme involves the meaningful use of language and literacy to improve the quality of one’s life. As an approach to teaching, this theme emphasizes the creation of diverse, rich environments in which learners experience oral and written language as part of authentic tasks, and where concern for the cultural and linguistic heritage of the students is evident.

## Program Options

The LDE program offers options leading to the following:

- a master of arts in curriculum and instruction
- the Colorado Endorsement for Linguistically Diverse Education
- a Teaching English to Speakers of Other Languages (TESOL) certificate
- a Content Instruction for English Learners (CIEL) certificate
- a Culturally Responsive Urban Education (CRUE) certificate

The program is intended for:

- novice teachers who have completed their Colorado teaching credentials in UC Denver’s graduate teacher education licensure program and are enrolled in the MA in curriculum and instruction with an emphasis in LDE (see 27 semester-hour option)
- veteran elementary and secondary teachers returning to graduate studies for the master’s degree (36 semester hours)
- veteran elementary and secondary teachers returning to acquire Colorado endorsement credentials (24 semester hours)
- individuals interested in teaching English abroad (TESOL: 15 semester hours)
- veteran elementary and secondary teachers returning to graduate studies for a certificate to aid them in helping their English language learners succeed (CIEL: 9 semester hours)
- elementary and secondary teachers who desire preparation in better meeting the needs of culturally diverse learners (CRUE: 9 semester hours)
- individuals interested in teaching adults (MA: 36 semester hours)

The MA is a field-based professional development program involving university faculty and practicing LDE instructors in public school and intensive English settings. Courses, laboratories and practica emphasize scholarly approaches to complex problems of practice and feature interactive, collaborative and practical approaches to working with English language learners.

We advocate a sociocultural approach to issues of language and learning, acknowledging the legitimacy of linguistic and cultural differences and recognizing that academic settings represent important socializing forces in students’ lives. Because of this, we emphasize the “whole learner” in our teaching and in teacher education and teacher development, understanding that

individuals do not merely add a language to their repertoire of communication but make fundamental identity adjustments as they progress in their studies. For this reason, all our course work, laboratories and practica experiences are field-based, putting our program participants in contact with veteran teachers and English language learners. We draw heavily on recent scholarship in collaborative approaches to school-university partnerships and systemic school change in developing classroom methods and materials, curricula and teacher development experiences.

The MA program also provides a foundation in teaching English in a variety of contexts in the United States and abroad. Teachers who work in LDE programs or in other content areas (such as art, language arts, math, music, science, social studies or technology), but who wish to integrate LDE principles and strategies into their instruction for their English language learners, will find the MA program relevant to their interests and goals.

Course work includes language teaching methodology, language acquisition, linguistic analysis of English, multicultural foundations, assessment, literacy and other areas. This program has been developed as an advanced course of study for practicing teachers or individuals with some teaching experience.

Applicants who are new to teaching, and who wish to teach in U.S. K–12 public school settings, should inquire about the teacher education licensure program. Applicants who are new to teaching, but who do not need a teaching license (certification) because they do not wish to teach in U.S. public schools, may consider the TESOL certificate to gain initial teaching experiences before applying for the MA.

## Program Requirements and Courses

To complete the LDE program and earn a master’s degree and/or endorsement, or to earn a TESOL certificate, students must complete the appropriate course work as outlined in the table below.

<b>Requirements for LDE Program (Degree/Endorsement or TESOL Certificate)</b>					
<b>Course</b>	<b>MA without CDE Endorsement in LDE</b>	<b>MA and CDE Endorsement in LDE</b>	<b>CDE Endorsement in LDE Only</b>	<b>MA and CDE Endorsement in LDE (when added to UC Denver's graduate teacher education licensure</b>	<b>TESOL Certificate</b>

				program)	
LLC 5910 - Foundations of Language, Literacy and Culture.	Required	Required	Required	Required	
<i>One course from culture options:</i> LLC 5140 - Multicultural Education. LLC 5150 - Culture of the Classroom. LLC 5160 - Historical and Legal Foundations of Bilingual Education.	Select One	Select One	Select One	Select One	
LLC 5070 - Linguistic Analysis of English: Implications for Teaching.	Required	Required	Required	Required	Required
LLC 5030 - Language/Literacy Acquisition Part I.	Required	Required	Required	Required	Required
LLC 5820 - Techniques in Teaching English as a Second Language.	Required	Required	Required	Required	Required
LLC 5050 - Linguistic and Cultural Issues in Linking Assessment and Instruction.	Required	Required	Required	Required	Required
<i>One course from field-based teaching options:</i> LLC 5020 - Workshop in Literacy and Language Teaching.	5826 preferred	Elem: 5825 preferred  Sec: 5826 preferred	Elem: 5825 preferred  Sec: 5826 preferred	Elem: 5825 preferred  Sec: 5826 preferred	5826

LLC 5825 - Methods and Materials of Language Teaching. LLC 5826 - Language Teaching Lab. LLC 5730 - Language and Literacy Across the Curriculum. LLC 5770 - Effective Literacy Instruction for Second Language Learners.					
LLC 5035 - Language and Literacy: Acquisition, Processes, and Cognition, Part II.	Required	Required			
LLC 6912 - Seminar and Practicum in Literacy and Language, ESL and Bilingual Education.	Required	Required	Required	Required	
<i>One course from research and evaluation methodology:</i> REM 5050 - Assessment for Teachers. REM 5080 - Research for Teachers.	Select One	Select One		Select One	
<i>One course from educational psychology:</i> EPSY 5110 - Human Learning. EPSY 5220 - Adult Learning and Education.	Select One	Select One			

Graduate-level University of Colorado elective	Select One	Select One			
Cumulative online portfolio	Required	Required	Required	Required	
LDE PLACE Exam		Required	Required	Required	
Total Semester Hours	36	36	24	27	15

## CRUE or CIEL Certificate Requirements

Those considering the CRUE certificate will find course requirements at [www.cruecenter.org/certificate.php](http://www.cruecenter.org/certificate.php). Students interested in the CIEL certificate must complete the following:

LLC 5030 – Language and Literacy Acquisition I. Semester Hours: 3

-OR-

LLC 5070 – Linguistic Analysis of English. Semester Hours: 3

LLC 5050 – Linguistic and Cultural Issues in Linking Assessment and Instruction. Semester Hours: 3

-OR-

LLC 5820 – Techniques in Teaching ESL. Semester Hours: 3

-OR-

LLC 5825 – Methods and Materials of Language Teaching. Semester Hours: 3

-OR-

LLC 5826 – Language Teaching Laboratory. Semester Hours: 3

LLC 6912 - Seminar and Practicum in Literacy and Language, ESL and Bilingual Education  
Semester Hours: 3

**Total: 9 Hours**

## Cumulative Portfolio of Performance Based Assessments (PBAS)

The portfolio is required for the CDE endorsement, counts as the comprehensive exam for the master's degree and permits you to document your development over the course of your program. Portfolios are reviewed by LDE faculty members. At least two faculty members must

agree that the portfolio is acceptable in order to pass. The portfolio process is reviewed in every class as each of the PBAs is completed in the classes, helping students to update their portfolios throughout the program. For more portfolio guidelines, visit the Web site at [www.ucdenver.edu/education/lde](http://www.ucdenver.edu/education/lde).

## **PLACE Exam for Linguistically Diverse Education Endorsement**

To add the endorsement to their teaching license, students must pass the PLACE (Program for Licensing Assessments for Colorado Educators) exam for linguistically diverse education, secure and submit the appropriate paperwork from the Colorado Department of Education, and pay fees required for the PLACE and for the endorsement paperwork. Information about PLACE is online at [www.place.nesinc.com](http://www.place.nesinc.com).

## **Course Scheduling**

During the fall and spring semesters, most university courses are offered in the late afternoon and evening and meet for three hours once a week over a 16-week semester. Some alternative course schedules are available, such as meeting on five Friday-evening/all-day Saturday combinations. In the summer semester, three-to eight-week sessions are offered, and courses may be in the morning, afternoon or evening. A current schedule of courses is available online at <http://courses.cudenver.edu>.

## **Planning**

For practicing full-time teachers, we recommend taking one course each fall and spring semester and up to two courses each summer. Students may simultaneously complete requirements for the MA and the endorsement for linguistically diverse education. Support for course planning is available in LDE advising sessions—usually held once in fall and once in spring. These sessions help students build their programs around course sequences and availability (some courses are offered only once per year).

## **Active Status in the Graduate School**

Students must complete their programs within seven years, maintaining a GPA of 3.0. Students typically take four courses each calendar year. Failure to enroll over three contiguous semesters will result in a requirement to resubmit part I of the application for admission and a letter of intent.

## **Endorsement**

# Linguistically Diverse Education Endorsement

## Linguistically Diverse Education

### Requirements for LDE Program

#### (Degree/Endorsement or Certificates - TESOL, CIEL, CRUE)

**Office:** Lawrence Street Center, 701

**Telephone:** 303-315-6300

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**E-mail:** [education@ucdenver.edu](mailto:education@ucdenver.edu)

**Web site:** [www.ucdenver.edu/education/lde](http://www.ucdenver.edu/education/lde)

## Faculty

Information about faculty in this program is available at [www.ucdenver.edu/education/lde](http://www.ucdenver.edu/education/lde). The faculty of linguistically diverse education (LDE) believe that effective teaching requires an awareness of and the ability to respond to individual differences. LDE faculty also emphasize the importance of teachers as scholars and reflective practitioners. In particular, teachers must understand how linguistic and cultural diversity affect their teaching. Two themes run throughout all program offerings. The first concerns the importance of recognizing a variety of literacies—“home” literacies, school literacy, “mainstream” literacy, first and second language literacies—and to develop teaching practices that utilize an understanding of the complexity of literacy development across language contexts. The second theme involves the meaningful use of language and literacy to improve the quality of one’s life. As an approach to teaching, this theme emphasizes the creation of diverse, rich environments in which learners experience oral and written language as part of authentic tasks, and where concern for the cultural and linguistic heritage of the students is evident.

## Program Options

The LDE program offers options leading to the following:

- a master of arts in curriculum and instruction
- the Colorado Endorsement for Linguistically Diverse Education
- a Teaching English to Speakers of Other Languages (TESOL) certificate
- a Content Instruction for English Learners (CIEL) certificate
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- individuals interested in teaching English abroad (TESOL: 15 semester hours)
- veteran elementary and secondary teachers returning to graduate studies for a certificate to aid them in helping their English language learners succeed (CIEL: 9 semester hours)
- elementary and secondary teachers who desire preparation in better meeting the needs of culturally diverse learners (CRUE: 9 semester hours)
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Course work includes language teaching methodology, language acquisition, linguistic analysis of English, multicultural foundations, assessment, literacy and other areas. This program has been developed as an advanced course of study for practicing teachers or individuals with some teaching experience.

Applicants who are new to teaching, and who wish to teach in U.S. K–12 public school settings, should inquire about the teacher education licensure program. Applicants who are new to teaching, but who do not need a teaching license (certification) because they do not wish to

teach in U.S. public schools, may consider the TESOL certificate to gain initial teaching experiences before applying for the MA.

## Program Requirements and Courses

To complete the LDE program and earn a master's degree and/or endorsement, or to earn a TESOL certificate, students must complete the appropriate course work as outlined in the table below.

<b>Requirements for LDE Program (Degree/Endorsement or TESOL Certificate)</b>					
<b>Course</b>	<b>MA without CDE Endorsement in LDE</b>	<b>MA and CDE Endorsement in LDE</b>	<b>CDE Endorsement in LDE Only</b>	<b>MA and CDE Endorsement in LDE (when added to UC Denver's graduate teacher education licensure program)</b>	<b>TESOL Certificate</b>
LLC 5910 - Foundations of Language, Literacy and Culture.	Required	Required	Required	Required	
<i>One course from culture options:</i> LLC 5140 - Multicultural Education. LLC 5150 - Culture of the Classroom. LLC 5160 - Historical and Legal Foundations of Bilingual Education.	Select One	Select One	Select One	Select One	
LLC 5070 - Linguistic Analysis of English:	Required	Required	Required	Required	Required

Implications for Teaching.					
LLC 5030 - Language/Literacy Acquisition Part I.	Required	Required	Required	Required	Required
LLC 5820 - Techniques in Teaching English as a Second Language.	Required	Required	Required	Required	Required
LLC 5050 - Linguistic and Cultural Issues in Linking Assessment and Instruction.	Required	Required	Required	Required	Required
<i>One course from field-based teaching options:</i> LLC 5020 - Workshop in Literacy and Language Teaching. LLC 5825 - Methods and Materials of Language Teaching. LLC 5826 - Language Teaching Lab. LLC 5730 - Language and Literacy Across the Curriculum. LLC 5770 - Effective Literacy Instruction for Second Language Learners.	5826 preferred	Elem: 5825 preferred  Sec: 5826 preferred	Elem: 5825 preferred  Sec: 5826 preferred	Elem: 5825 preferred  Sec: 5826 preferred	5826
LLC 5035 - Language and Literacy: Acquisition, Processes, and Cognition, Part II.	Required	Required			

LLC 6912 - Seminar and Practicum in Literacy and Language, ESL and Bilingual Education.	Required	Required	Required	Required	
<i>One course from research and evaluation methodology:</i> REM 5050 - Assessment for Teachers. REM 5080 - Research for Teachers.	Select One	Select One		Select One	
<i>One course from educational psychology:</i> EPSY 5110 - Human Learning. EPSY 5220 - Adult Learning and Education.	Select One	Select One			
Graduate-level University of Colorado elective	Select One	Select One			
Cumulative online portfolio	Required	Required	Required	Required	
LDE PLACE Exam		Required	Required	Required	
Total Semester Hours	36	36	24	27	15

## CRUE or CIEL Certificate Requirements

Those considering the CRUE certificate will find course requirements at [www.cruecenter.org/certificate.php](http://www.cruecenter.org/certificate.php). Students interested in the CIEL certificate must complete the following:

LLC 5030 – Language and Literacy Acquisition I. Semester Hours: 3

-OR-

LLC 5070 – Linguistic Analysis of English. Semester Hours: 3

LLC 5050 – Linguistic and Cultural Issues in Linking Assessment and Instruction. Semester Hours: 3

-OR-

LLC 5820 – Techniques in Teaching ESL. Semester Hours: 3

-OR-

LLC 5825 – Methods and Materials of Language Teaching. Semester Hours: 3

-OR-

LLC 5826 – Language Teaching Laboratory. Semester Hours: 3

LLC 6912 - Seminar and Practicum in Literacy and Language, ESL and Bilingual Education  
Semester Hours: 3

**Total: 9 Hours**

## **Cumulative Portfolio of Performance Based Assessments (PBAS)**

The portfolio is required for the CDE endorsement, counts as the comprehensive exam for the master's degree and permits you to document your development over the course of your program. Portfolios are reviewed by LDE faculty members. At least two faculty members must agree that the portfolio is acceptable in order to pass. The portfolio process is reviewed in every class as each of the PBAs is completed in the classes, helping students to update their portfolios throughout the program. For more portfolio guidelines, visit the Web site at [www.ucdenver.edu/education/lde](http://www.ucdenver.edu/education/lde).

## **PLACE Exam for Linguistically Diverse Education Endorsement**

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## **Course Scheduling**

During the fall and spring semesters, most university courses are offered in the late afternoon and evening and meet for three hours once a week over a 16-week semester. Some alternative course schedules are available, such as meeting on five Friday-evening/all-day Saturday

combinations. In the summer semester, three-to eight-week sessions are offered, and courses may be in the morning, afternoon or evening. A current schedule of courses is available online at <http://courses.ucdenver.edu>.

## **Planning**

For practicing full-time teachers, we recommend taking one course each fall and spring semester and up to two courses each summer. Students may simultaneously complete requirements for the MA and the endorsement for linguistically diverse education. Support for course planning is available in LDE advising sessions—usually held once in fall and once in spring. These sessions help students build their programs around course sequences and availability (some courses are offered only once per year).

## **Active Status in the Graduate School**

Students must complete their programs within seven years, maintaining a GPA of 3.0. Students typically take four courses each calendar year. Failure to enroll over three contiguous semesters will result in a requirement to resubmit part I of the application for admission and a letter of intent.

## **Master of Arts**

# **Linguistically Diverse Education, MA curriculum and instruction**

## **Linguistically Diverse Education**

## **Requirements for LDE Program**

## **(Degree/Endorsement or Certificates - TESOL, CIEL, CRUE)**

**Office:** Lawrence Street Center, 701

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**Web site:** [www.ucdenver.edu/education/lde](http://www.ucdenver.edu/education/lde)

## **Faculty**

Information about faculty in this program is available at [www.ucdenver.edu/education/lde](http://www.ucdenver.edu/education/lde). The faculty of linguistically diverse education (LDE) believe that effective teaching requires an awareness of and the ability to respond to individual differences. LDE faculty also emphasize the importance of teachers as scholars and reflective practitioners. In particular, teachers must understand how linguistic and cultural diversity affect their teaching. Two themes run throughout all program offerings. The first concerns the importance of recognizing a variety of literacies—“home” literacies, school literacy, “mainstream” literacy, first and second language literacies—and to develop teaching practices that utilize an understanding of the complexity of literacy development across language contexts. The second theme involves the meaningful use of language and literacy to improve the quality of one’s life. As an approach to teaching, this theme emphasizes the creation of diverse, rich environments in which learners experience oral and written language as part of authentic tasks, and where concern for the cultural and linguistic heritage of the students is evident.

## Program Options

The LDE program offers options leading to the following:

- a master of arts in curriculum and instruction
- the Colorado Endorsement for Linguistically Diverse Education
- a Teaching English to Speakers of Other Languages (TESOL) certificate
- a Content Instruction for English Learners (CIEL) certificate
- a Culturally Responsive Urban Education (CRUE) certificate

The program is intended for:

- novice teachers who have completed their Colorado teaching credentials in UC Denver’s graduate teacher education licensure program and are enrolled in the MA in curriculum and instruction with an emphasis in LDE (see 27 semester-hour option)
- veteran elementary and secondary teachers returning to graduate studies for the master’s degree (36 semester hours)
- veteran elementary and secondary teachers returning to acquire Colorado endorsement credentials (24 semester hours)
- individuals interested in teaching English abroad (TESOL: 15 semester hours)
- veteran elementary and secondary teachers returning to graduate studies for a certificate to aid them in helping their English language learners succeed (CIEL: 9 semester hours)
- elementary and secondary teachers who desire preparation in better meeting the needs of culturally diverse learners (CRUE: 9 semester hours)
- individuals interested in teaching adults (MA: 36 semester hours)

The MA is a field-based professional development program involving university faculty and practicing LDE instructors in public school and intensive English settings. Courses, laboratories and practica emphasize scholarly approaches to complex problems of practice and feature interactive, collaborative and practical approaches to working with English language learners.

We advocate a sociocultural approach to issues of language and learning, acknowledging the legitimacy of linguistic and cultural differences and recognizing that academic settings represent

important socializing forces in students' lives. Because of this, we emphasize the “whole learner” in our teaching and in teacher education and teacher development, understanding that individuals do not merely add a language to their repertoire of communication but make fundamental identity adjustments as they progress in their studies. For this reason, all our course work, laboratories and practica experiences are field-based, putting our program participants in contact with veteran teachers and English language learners. We draw heavily on recent scholarship in collaborative approaches to school-university partnerships and systemic school change in developing classroom methods and materials, curricula and teacher development experiences.

The MA program also provides a foundation in teaching English in a variety of contexts in the United States and abroad. Teachers who work in LDE programs or in other content areas (such as art, language arts, math, music, science, social studies or technology), but who wish to integrate LDE principles and strategies into their instruction for their English language learners, will find the MA program relevant to their interests and goals.

Course work includes language teaching methodology, language acquisition, linguistic analysis of English, multicultural foundations, assessment, literacy and other areas. This program has been developed as an advanced course of study for practicing teachers or individuals with some teaching experience.

Applicants who are new to teaching, and who wish to teach in U.S. K–12 public school settings, should inquire about the teacher education licensure program. Applicants who are new to teaching, but who do not need a teaching license (certification) because they do not wish to teach in U.S. public schools, may consider the TESOL certificate to gain initial teaching experiences before applying for the MA.

## Program Requirements and Courses

To complete the LDE program and earn a master’s degree and/or endorsement, or to earn a TESOL certificate, students must complete the appropriate course work as outlined in the table below.

<b>Requirements for LDE Program (Degree/Endorsement or TESOL Certificate)</b>					
<b>Course</b>	<b>MA without CDE Endorsement in LDE</b>	<b>MA and CDE Endorsement in LDE</b>	<b>CDE Endorsement in LDE Only</b>	<b>MA and CDE Endorsement in LDE <i>(when added to UC Denver's graduate teacher education)</i></b>	<b>TESOL Certificate</b>

				<i>licensure program)</i>	
LLC 5910 - Foundations of Language, Literacy and Culture.	Required	Required	Required	Required	
<i>One course from culture options:</i> LLC 5140 - Multicultural Education. LLC 5150 - Culture of the Classroom. LLC 5160 - Historical and Legal Foundations of Bilingual Education.	Select One	Select One	Select One	Select One	
LLC 5070 - Linguistic Analysis of English: Implications for Teaching.	Required	Required	Required	Required	Required
LLC 5030 - Language/Literacy Acquisition Part I.	Required	Required	Required	Required	Required
LLC 5820 - Techniques in Teaching English as a Second Language.	Required	Required	Required	Required	Required
LLC 5050 - Linguistic and Cultural Issues in Linking Assessment and Instruction.	Required	Required	Required	Required	Required
<i>One course from field-based teaching options:</i> LLC 5020 - Workshop in Literacy and Language	5826 preferred	Elem: 5825 preferred  Sec:	Elem: 5825 preferred  Sec:	Elem: 5825 preferred  Sec:	5826

Teaching. LLC 5825 - Methods and Materials of Language Teaching. LLC 5826 - Language Teaching Lab. LLC 5730 - Language and Literacy Across the Curriculum. LLC 5770 - Effective Literacy Instruction for Second Language Learners.		5826 preferred	5826 preferred	5826 preferred	
LLC 5035 - Language and Literacy: Acquisition, Processes, and Cognition, Part II.	Required	Required			
LLC 6912 - Seminar and Practicum in Literacy and Language, ESL and Bilingual Education.	Required	Required	Required	Required	
<i>One course from research and evaluation methodology:</i> REM 5050 - Assessment for Teachers. REM 5080 - Research for Teachers.	Select One	Select One		Select One	
<i>One course from educational psychology:</i> EPSY 5110 - Human Learning. EPSY 5220 - Adult	Select One	Select One			

Learning and Education.					
Graduate-level University of Colorado elective	Select One	Select One			
Cumulative online portfolio	Required	Required	Required	Required	
LDE PLACE Exam		Required	Required	Required	
Total Semester Hours	36	36	24	27	15

## CRUE or CIEL Certificate Requirements

Those considering the CRUE certificate will find course requirements at [www.cruecenter.org/certificate.php](http://www.cruecenter.org/certificate.php). Students interested in the CIEL certificate must complete the following:

LLC 5030 – Language and Literacy Acquisition I. Semester Hours: 3

-OR-

LLC 5070 – Linguistic Analysis of English. Semester Hours: 3

LLC 5050 – Linguistic and Cultural Issues in Linking Assessment and Instruction. Semester Hours: 3

-OR-

LLC 5820 – Techniques in Teaching ESL. Semester Hours: 3

-OR-

LLC 5825 – Methods and Materials of Language Teaching. Semester Hours: 3

-OR-

LLC 5826 – Language Teaching Laboratory. Semester Hours: 3

LLC 6912 - Seminar and Practicum in Literacy and Language, ESL and Bilingual Education  
Semester Hours: 3

**Total: 9 Hours**

## Cumulative Portfolio of Performance Based Assessments (PBAS)

The portfolio is required for the CDE endorsement, counts as the comprehensive exam for the master's degree and permits you to document your development over the course of your program. Portfolios are reviewed by LDE faculty members. At least two faculty members must agree that the portfolio is acceptable in order to pass. The portfolio process is reviewed in every class as each of the PBAs is completed in the classes, helping students to update their portfolios throughout the program. For more portfolio guidelines, visit the Web site at [www.ucdenver.edu/education/lde](http://www.ucdenver.edu/education/lde).

## **PLACE Exam for Linguistically Diverse Education Endorsement**

To add the endorsement to their teaching license, students must pass the PLACE (Program for Licensing Assessments for Colorado Educators) exam for linguistically diverse education, secure and submit the appropriate paperwork from the Colorado Department of Education, and pay fees required for the PLACE and for the endorsement paperwork. Information about PLACE is online at [www.place.nesinc.com](http://www.place.nesinc.com).

## **Course Scheduling**

During the fall and spring semesters, most university courses are offered in the late afternoon and evening and meet for three hours once a week over a 16-week semester. Some alternative course schedules are available, such as meeting on five Friday-evening/all-day Saturday combinations. In the summer semester, three-to eight-week sessions are offered, and courses may be in the morning, afternoon or evening. A current schedule of courses is available online at <http://courses.cudenver.edu>.

## **Planning**

For practicing full-time teachers, we recommend taking one course each fall and spring semester and up to two courses each summer. Students may simultaneously complete requirements for the MA and the endorsement for linguistically diverse education. Support for course planning is available in LDE advising sessions—usually held once in fall and once in spring. These sessions help students build their programs around course sequences and availability (some courses are offered only once per year).

## **Active Status in the Graduate School**

Students must complete their programs within seven years, maintaining a GPA of 3.0. Students typically take four courses each calendar year. Failure to enroll over three contiguous semesters will result in a requirement to resubmit part I of the application for admission and a letter of intent.

## **Literacy, Language and Culturally Responsive Teaching**

# **MA Requirements for the Reading and Writing Option and Secondary English Education Option, plus Reading Teacher Endorsement and Certificate Programs**

**Office:** Lawrence Street Center, 701

**Telephone:** 303-315-6300

**Fax:** 303-315-6311

**E-mail:** [education@ucdenver.edu](mailto:education@ucdenver.edu)

**Web sites:** [www.ucdenver.edu/education/literacy](http://www.ucdenver.edu/education/literacy) and [www.ucdenver.edu/education/englished](http://www.ucdenver.edu/education/englished)

**Reading and Writing**

**Secondary English**

**Early and Adolescent Literacy Certificates**

## **Faculty**

Information about faculty in this program is available online at [www.ucdenver.edu/education/literacy](http://www.ucdenver.edu/education/literacy).

The faculty of literacy, language and culturally responsive teaching (L2CRT) believe that effective teaching requires an awareness of and the ability to respond to individual differences. L2CRT faculty also emphasize the importance of teachers as scholars and reflective practitioners. In particular, teachers must understand how linguistic and cultural diversity affect their teaching. Two themes run throughout all program offerings. The first concerns the importance of recognizing a variety of literacies—"home" literacies, school literacy, "mainstream" literacy, first and second language literacies—and to develop teaching practices that utilize an understanding of the complexity of literacy development across language contexts. The second theme involves the meaningful use of language and literacy to improve the quality of one's life. As an approach to teaching, this theme emphasizes the creation of diverse, rich environments in which learners experience oral and written language as part of authentic tasks, and where concern for the cultural and linguistic heritage of the students is evident.

## **Reading and Writing Option and Reading Teacher Endorsement**

This master's program is designed for K-6 and 7-12 teachers. Those interested in elementary reading and writing should communicate with Professors Espinoza, Nathenson-Mejia or Taylor.

Those interested in secondary and adult reading and writing should communicate with Professor Shanklin (see Web site for faculty contact information).

Reading is a credentialed program meeting the Colorado Department of Education requirements for reading teacher endorsement. Therefore, students who obtain a master's degree emphasizing reading education from UC Denver are certified to hold positions in public and private schools as special developmental and remedial reading teachers in K–6 or 7–12. This program is also valuable for elementary and secondary teachers who wish to enhance reading and writing instruction in their classrooms.

By placing emphasis on the reading, writing and oral and visual language development of culturally, linguistically and academically diverse student populations, this master's program is at the forefront of the field. Language is approached from a socio-psycholinguistic perspective that emphasizes the learner's construction of meaning rather than the learning of isolated skills. Importance is placed on using theory, inquiry and personal reflection to inform classroom practice. The program prepares teachers to become decision makers capable of developing learner-centered curricula where each student's reading and writing abilities are assessed to address developmental or special needs.

## Curriculum

Course offerings lead to an MA degree in curriculum and instruction with an emphasis in reading and writing, as well as a reading teacher endorsement, at one of two levels: K–6 or 7–12.

Those who have completed UC Denver's graduate teacher education licensure program must earn an additional 27 semester hours to obtain the MA and endorsement. Those who completed licensure through other means must earn an additional 36 semester hours to obtain the MA and endorsement.

Teachers may add a reading teacher endorsement to an already-earned master's degree in education by taking those courses listed under the chosen endorsement level. (In the state of Colorado, the reading teacher endorsement cannot simply be added to a bachelor's degree.) Electives and core courses are not required. Two additional courses must be taken in other areas specified by the Colorado Department of Education. In many cases, previous master's degree courses will satisfy this requirement.

<b>Requirements for Reading and Writing Program (Degree/Endorsement Options)</b>						
	<b>ELEMENTARY (K-6)</b>			<b>SECONDARY (7-12)</b>		
<b>Course</b>	<b>MA &amp; CDE Endorsement</b>	<b>MA &amp; CDE Endorsement (when added to UC Denver's</b>	<b>CDE Endorsement Only</b>	<b>MA &amp; CDE Endorsement</b>	<b>MA &amp; CDE Endorsement (when added to UC Denver's</b>	<b>CDE Endorsement Only</b>

		<i>graduate teacher education licensure program)</i>			<i>graduate teacher education licensure program)</i>	
LLC 5020 - Workshop in Literacy and Language Teaching.	Required		Required	Required	Required	Required
LLC 5810 - Workshop in Language Acquisition and Development.	Required	Required	Required	Required	Required	Required
LLC 5910 - Foundations of Language, Literacy and Culture.	Required	Required	Required	Required	Required	Required
LLC 5710 - Primary Literacy: Pre-3rd Grade.	Required	Required	Required			
LLC 5720 - Writing: Process, Development, and Teaching Grades 3-12.	Required	Required	Required	Required	Required	Required
LLC 5730 - Language and Literacy Across the Curriculum.	Required		Required	Required		Required
Children's literature course, per advisor approval	Select one	Select one	Select one			

LLC 5740 - Adolescent Literature.				Required	Required <i>(waived if taken as part of English Licensure)</i>	Required
LLC 6910 - Seminar and Practicum in Literacy and Language, K-6.	Required	Required	Required			
LLC 6911 - Seminar and Practicum in Literacy and Language, 7-12+.				Required	Required	Required
LLC 5055 - Linking Assessment and Instruction in Language and Literacy, Part I.	Required	Required	Required	Required	Required	Required
LLC 6915 - Seminar and Practicum in Literacy Professional Development.	Required	Required		Required	Required	Required
Core course in Research and Evaluation Methodology (REM) - see list below	Select one	5080		Select one	5080	
Interdisciplinary core course - see list below	Select one			Select one		
Graduate-level School of Education and Human Development elective				Select one		

Portfolio	Required	Required		Required	Required	
PLACE Exam	Required	Required	Required	Required	Required	Required
Total Semester Hours	36	27	27	36	27	27

## Secondary English Education Option

The master's program in secondary English education is designed to enhance the preparation of middle and high school English/language arts teachers. Students complete course work in language development, assessment and field experiences. With the help of their advisor, they also select specific courses from the English Department or within the School of Education and Human Development that provide a well-rounded repertoire of knowledge and skills to fulfill the needs of an English educator. Special consideration is given to working with diverse ethnic populations. Students interested in English education should see Professor Shanklin (see Web site for faculty contact information).

## Program Requirements

To earn a master of arts degree in curriculum and instruction with an emphasis in secondary English education, students must complete the following:

- 30 graduate semester hours in English education
- 6 graduate semester hours of core courses
- performance-based assessments that culminate in a portfolio finalized in the last semester of the program as fulfillment of the MA comprehensive exam requirement

Each student's course plan is developed in conjunction with his/her advisor. Please review [www.ucdenver.edu/education/englished](http://www.ucdenver.edu/education/englished) for recommended course sequence.

LLC 5055 – Linking Assessment and Instruction in Language and Literacy. Part I. Semester Hours: 3

LLC 5740 – Adolescent Literature. Semester Hours: 3

LLC 5760 – Theory and Methods of English Education. Semester Hours: 3

-OR-

LLC 5835 – Special Topics: Advanced Theories and Methods of English Education. Semester Hours: 3

LLC 5810 – Workshop in Language Acquisition and Development. Semester Hours: 3

LLC 5910 – Foundations of Language, Literacy and Culture. Semester Hours: 3

LLC 6911. Seminar and Practicum in Literacy and Language, Grades 7-12+. Semester Hours: 3  
Research and Evaluation Methodology core course (see list below).

Interdisciplinary core course (see list below).

Four electives, per advisor approval, from the English department and/or the School of Education & Human Development. The following are recommended:

LLC 5720 – Writing: Process, Development and Teaching, Grades 3-12. Semester Hours: 3  
-OR-

ENGL 5110 – Denver Writing Project. Semester Hours: 3

Courses in working with English language learners and in instructional technology may also be helpful. For a technology course, please contact the professor about prerequisite knowledge.

**Total: 36 semester hours**

Program Requirements--When Added to UC Denver's Graduate Teacher Education Licensure Program

MA in curriculum and instruction with emphasis in secondary content leadership (English), when added to UC Denver's graduate teacher education licensure program:

- 18 graduate semester hours
- performance-based assessments that culminate in a portfolio finalized in the last semester of the program as fulfillment of the MA comprehensive exam requirement

Each student's course plan is developed in conjunction with his/her advisor. Please review [www.ucdenver.edu/education/englished](http://www.ucdenver.edu/education/englished) for recommended course sequence.

FNDS 5050 – Critical Issues in American Education. Semester Hours: 3

-OR-

IPTe 5080 – Principals and Practice of Change. Semester Hours: 3

-OR-

SPED 5300 – Collaborating in Schools and Communities. Semester Hours: 3

REM 5080 – Research for Teachers. Semester Hours: 3

Four electives, per advisor approval, from the English Department and/or the School of Education and Human Development. The following are recommended:

LLC 5720 – Writing: Process, Development and Teaching, Grades 3-12. Semester Hours: 3

-OR-

ENGL 5110 – Denver Writing Project. Semester Hours: 3

Courses in working with English language learners and in instructional technology may also be helpful. For a technology course, please contact the professor about prerequisite knowledge.

**Total: 18 semester hours**

## Core Courses

### Research and Evaluation Methodology

REM 5000 - Orientation to Research and Measurement in Education. Semester Hours: 3

REM 5050 - Assessment for Teachers. Semester Hours: 3

REM 5080 - Research for Teachers. Semester Hours: 3

REM 5100 - Basic Statistics. Semester Hours: 3

REM 5200 - Introduction to Research Methods. Semester Hours: 3

REM 5300 - Introduction to Measurement. Semester Hours: 3

## **Interdisciplinary**

EPSY 5100 - Advanced Child Growth and Development Semester Hours: 3  
EPSY 5140 - Advanced Adolescent Growth and Development. Semester Hours: 3  
EPSY 5220 - Adult Learning and Education. Semester Hours: 3  
EPSY 6200 - Human Development Over the Life Span. Semester Hours: 3  
FNDS 5050 - Critical Issues in American Education. Semester Hours: 3  
FNDS 5420 - History and Philosophy of Education: Twentieth Century America. Semester Hours: 3  
LLC 5140 - Multicultural Education. Semester Hours: 3  
LLC 5150 - Culture of the Classroom. Semester Hours: 3  
LLC 5160 - Historical and Legal Foundations of Bilingual Education. Semester Hours: 3  
LLC 5820 - Techniques in Teaching English as a Second Language. Semester Hours: 3

## **Cumulative Portfolio**

The MA portfolio counts as the comprehensive exam for the master's degree. The portfolio is an accumulation of the performance based assessments completed during program courses and reflects on the student's development over the course of the degree program. Reading and writing students must include confirmation of Reading Teacher PLACE exam registration in their portfolios. Information about the PLACE is online at [www.place.nesinc.com](http://www.place.nesinc.com).

## **Course Scheduling**

During the fall and spring semesters, most university courses are offered in the late afternoon and evening and meet for three hours once a week over a 16-week semester. Some alternative course schedules are available, such as meeting on five Friday-evening/all-day Saturday combinations. In the summer semester, three- to eight-week sessions are offered, and courses may be in the morning, afternoon or evening. A current schedule of courses is available online at <http://courses.cudenver.edu>.

## **Planning**

For practicing full-time teachers, we recommend taking one course each fall and spring semester, and up to two courses each summer. Plan carefully because courses are intended to build upon each other, and some courses are only offered once a year.

## **Active Status in the Graduate School**

Students must complete their programs within seven years, maintaining a GPA of 3.0. Students typically take four courses each calendar year. Failure to enroll over three contiguous semesters will result in a requirement to resubmit part I of the application for admission and a letter of intent.

## **Early and Adolescent Literacy Certificates**

The early literacy certificate and adolescent literacy certificate each include three graduate-level courses (for a total of 9 semester hours) and are conveniently offered entirely online. They are specifically designed to help licensed teachers develop the skills necessary to reach student readers. To find out more, please visit [www.ucdenver.edu/education](http://www.ucdenver.edu/education) or email [cpe@ucdenver.edu](mailto:cpe@ucdenver.edu).

To learn about how these certificate credits may apply toward one of the above programs in reading and writing, contact [education@ucdenver.edu](mailto:education@ucdenver.edu).

### **Certificate**

## **Early and Adolescent Literacy Certificates**

### **Literacy, Language and Culturally Responsive Teaching**

### **MA Requirements for the Reading and Writing Option and Secondary English Education Option, plus Reading Teacher Endorsement and Certificate Programs**

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**Reading and Writing**

**Secondary English**

**Early and Adolescent Literacy Certificates**

### **Faculty**

Information about faculty in this program is available online at [www.ucdenver.edu/education/literacy](http://www.ucdenver.edu/education/literacy).

The faculty of literacy, language and culturally responsive teaching (L2CRT) believe that effective teaching requires an awareness of and the ability to respond to individual differences. L2CRT faculty also emphasize the importance of teachers as scholars and reflective practitioners. In particular, teachers must understand how linguistic and cultural diversity affect their teaching. Two themes run throughout all program offerings. The first concerns the importance of recognizing a variety of literacies—"home" literacies, school literacy, "mainstream" literacy, first and second language literacies—and to develop teaching practices that utilize an understanding of the complexity of literacy development across language contexts. The second theme involves the meaningful use of language and literacy to improve the quality of one's life. As an approach to teaching, this theme emphasizes the creation of diverse, rich environments in which learners experience oral and written language as part of authentic tasks, and where concern for the cultural and linguistic heritage of the students is evident.

## **Reading and Writing Option and Reading Teacher Endorsement**

This master's program is designed for K-6 and 7-12 teachers. Those interested in elementary reading and writing should communicate with Professors Espinoza, Nathenson-Mejia or Taylor. Those interested in secondary and adult reading and writing should communicate with Professor Shanklin (see Web site for faculty contact information).

Reading is a credentialed program meeting the Colorado Department of Education requirements for reading teacher endorsement. Therefore, students who obtain a master's degree emphasizing reading education from UC Denver are certified to hold positions in public and private schools as special developmental and remedial reading teachers in K-6 or 7-12. This program is also valuable for elementary and secondary teachers who wish to enhance reading and writing instruction in their classrooms.

By placing emphasis on the reading, writing and oral and visual language development of culturally, linguistically and academically diverse student populations, this master's program is at the forefront of the field. Language is approached from a socio-psycholinguistic perspective that emphasizes the learner's construction of meaning rather than the learning of isolated skills. Importance is placed on using theory, inquiry and personal reflection to inform classroom practice. The program prepares teachers to become decision makers capable of developing learner-centered curricula where each student's reading and writing abilities are assessed to address developmental or special needs.

## **Curriculum**

Course offerings lead to an MA degree in curriculum and instruction with an emphasis in reading and writing, as well as a reading teacher endorsement, at one of two levels: K-6 or 7-12.

Those who have completed UC Denver's graduate teacher education licensure program must earn an additional 27 semester hours to obtain the MA and endorsement. Those who completed



LLC 5710 - Primary Literacy: Pre-3rd Grade.	Required	Required	Required			
LLC 5720 - Writing: Process, Development, and Teaching Grades 3-12.	Required	Required	Required	Required	Required	Required
LLC 5730 - Language and Literacy Across the Curriculum.	Required		Required	Required		Required
Children's literature course, per advisor approval	Select one	Select one	Select one			
LLC 5740 - Adolescent Literature.				Required	Required <i>(waived if taken as part of English Licensure)</i>	Required
LLC 6910 - Seminar and Practicum in Literacy and Language, K-6.	Required	Required	Required			
LLC 6911 - Seminar and Practicum in Literacy and Language, 7-12+.				Required	Required	Required
LLC 5055 - Linking Assessment and	Required	Required	Required	Required	Required	Required

Instruction in Language and Literacy, Part I.						
LLC 6915 - Seminar and Practicum in Literacy Professional Development	Required	Required		Required	Required	Required
Core course in Research and Evaluation Methodology (REM) - see list below	Select one	5080		Select one	5080	
Interdisciplinary core course - see list below	Select one			Select one		
Graduate-level School of Education and Human Development elective				Select one		
Portfolio	Required	Required		Required	Required	
PLACE Exam	Required	Required	Required	Required	Required	Required
Total Semester Hours	36	27	27	36	27	27

## Secondary English Education Option

The master's program in secondary English education is designed to enhance the preparation of middle and high school English/language arts teachers. Students complete course work in language development, assessment and field experiences. With the help of their advisor, they also select specific courses from the English Department or within the School of Education and Human Development that provide a well-rounded repertoire of knowledge and skills to fulfill the needs of an English educator. Special consideration is given to working with diverse ethnic

populations. Students interested in English education should see Professor Shanklin (see Web site for faculty contact information).

## Program Requirements

To earn a master of arts degree in curriculum and instruction with an emphasis in secondary English education, students must complete the following:

- 30 graduate semester hours in English education
- 6 graduate semester hours of core courses
- performance-based assessments that culminate in a portfolio finalized in the last semester of the program as fulfillment of the MA comprehensive exam requirement

Each student's course plan is developed in conjunction with his/her advisor. Please review [www.ucdenver.edu/education/englished](http://www.ucdenver.edu/education/englished) for recommended course sequence.

LLC 5055 – Linking Assessment and Instruction in Language and Literacy. Part I. Semester Hours: 3

LLC 5740 – Adolescent Literature. Semester Hours: 3

LLC 5760 – Theory and Methods of English Education. Semester Hours: 3  
-OR-

LLC 5835 – Special Topics: Advanced Theories and Methods of English Education. Semester Hours: 3

LLC 5810 – Workshop in Language Acquisition and Development. Semester Hours: 3

LLC 5910 – Foundations of Language, Literacy and Culture. Semester Hours: 3

LLC 6911. Seminar and Practicum in Literacy and Language, Grades 7-12+. Semester Hours: 3

Research and Evaluation Methodology core course (see list below).

Interdisciplinary core course (see list below).

Four electives, per advisor approval, from the English department and/or the School of Education & Human Development. The following are recommended:

LLC 5720 – Writing: Process, Development and Teaching, Grades 3-12. Semester Hours: 3

-OR-

ENGL 5110 – Denver Writing Project. Semester Hours: 3

Courses in working with English language learners and in instructional technology may also be helpful. For a technology course, please contact the professor about prerequisite knowledge.

**Total: 36 semester hours**

Program Requirements--When Added to UC Denver's Graduate Teacher Education Licensure Program

MA in curriculum and instruction with emphasis in secondary content leadership (English), when added to UC Denver's graduate teacher education licensure program:

- 18 graduate semester hours
- performance-based assessments that culminate in a portfolio finalized in the last semester of the program as fulfillment of the MA comprehensive exam requirement

Each student's course plan is developed in conjunction with his/her advisor. Please review [www.ucdenver.edu/education/englished](http://www.ucdenver.edu/education/englished) for recommended course sequence.

FNDS 5050 – Critical Issues in American Education. Semester Hours: 3

-OR-

IPTE 5080 – Principals and Practice of Change. Semester Hours: 3

-OR-

SPED 5300 – Collaborating in Schools and Communities. Semester Hours: 3

REM 5080 – Research for Teachers. Semester Hours: 3

Four electives, per advisor approval, from the English Department and/or the School of Education and Human Development. The following are recommended:

LLC 5720 – Writing: Process, Development and Teaching, Grades 3-12. Semester Hours: 3

-OR-

ENGL 5110 – Denver Writing Project. Semester Hours: 3

Courses in working with English language learners and in instructional technology may also be helpful. For a technology course, please contact the professor about prerequisite knowledge.

**Total: 18 semester hours**

## Core Courses

### Research and Evaluation Methodology

REM 5000 - Orientation to Research and Measurement in Education. Semester Hours: 3

REM 5050 - Assessment for Teachers. Semester Hours: 3

REM 5080 - Research for Teachers. Semester Hours: 3

REM 5100 - Basic Statistics. Semester Hours: 3

REM 5200 - Introduction to Research Methods. Semester Hours: 3

REM 5300 - Introduction to Measurement. Semester Hours: 3

### Interdisciplinary

EPSY 5100 - Advanced Child Growth and Development Semester Hours: 3

EPSY 5140 - Advanced Adolescent Growth and Development. Semester Hours: 3

EPSY 5220 - Adult Learning and Education. Semester Hours: 3

EPSY 6200 - Human Development Over the Life Span. Semester Hours: 3

FNDS 5050 - Critical Issues in American Education. Semester Hours: 3

FNDS 5420 - History and Philosophy of Education: Twentieth Century America. Semester Hours: 3

LLC 5140 - Multicultural Education. Semester Hours: 3

LLC 5150 - Culture of the Classroom. Semester Hours: 3

LLC 5160 - Historical and Legal Foundations of Bilingual Education. Semester Hours: 3

LLC 5820 - Techniques in Teaching English as a Second Language. Semester Hours: 3

### Cumulative Portfolio

The MA portfolio counts as the comprehensive exam for the master's degree. The portfolio is an accumulation of the performance based assessments completed during program courses and reflects on the student's development over the course of the degree program. Reading and writing students must include confirmation of Reading Teacher PLACE exam registration in their portfolios. Information about the PLACE is online at [www.place.nesinc.com](http://www.place.nesinc.com).

## **Course Scheduling**

During the fall and spring semesters, most university courses are offered in the late afternoon and evening and meet for three hours once a week over a 16-week semester. Some alternative course schedules are available, such as meeting on five Friday-evening/all-day Saturday combinations. In the summer semester, three- to eight-week sessions are offered, and courses may be in the morning, afternoon or evening. A current schedule of courses is available online at <http://courses.cudenver.edu>.

## **Planning**

For practicing full-time teachers, we recommend taking one course each fall and spring semester, and up to two courses each summer. Plan carefully because courses are intended to build upon each other, and some courses are only offered once a year.

## **Active Status in the Graduate School**

Students must complete their programs within seven years, maintaining a GPA of 3.0. Students typically take four courses each calendar year. Failure to enroll over three contiguous semesters will result in a requirement to resubmit part I of the application for admission and a letter of intent.

## **Early and Adolescent Literacy Certificates**

The early literacy certificate and adolescent literacy certificate each include three graduate-level courses (for a total of 9 semester hours) and are conveniently offered entirely online. They are specifically designed to help licensed teachers develop the skills necessary to reach student readers. To find out more, please visit [www.ucdenver.edu/education](http://www.ucdenver.edu/education) or email [cpe@ucdenver.edu](mailto:cpe@ucdenver.edu).

To learn about how these certificate credits may apply toward one of the above programs in reading and writing, contact [education@ucdenver.edu](mailto:education@ucdenver.edu).

## **Endorsement**

# **Reading Teaching Endorsement**

# **Literacy, Language and Culturally Responsive Teaching**

## **MA Requirements for the Reading and Writing Option and Secondary English Education Option, plus Reading Teacher Endorsement and Certificate Programs**

**Office:** Lawrence Street Center, 701

**Telephone:** 303-315-6300

**Fax:** 303-315-6311

**E-mail:** [education@ucdenver.edu](mailto:education@ucdenver.edu)

**Web sites:** [www.ucdenver.edu/education/literacy](http://www.ucdenver.edu/education/literacy) and [www.ucdenver.edu/education/englished](http://www.ucdenver.edu/education/englished)

### **Reading and Writing**

#### **Secondary English**

#### **Early and Adolescent Literacy Certificates**

## **Faculty**

Information about faculty in this program is available online at [www.ucdenver.edu/education/literacy](http://www.ucdenver.edu/education/literacy).

The faculty of literacy, language and culturally responsive teaching (L2CRT) believe that effective teaching requires an awareness of and the ability to respond to individual differences. L2CRT faculty also emphasize the importance of teachers as scholars and reflective practitioners. In particular, teachers must understand how linguistic and cultural diversity affect their teaching. Two themes run throughout all program offerings. The first concerns the importance of recognizing a variety of literacies—“home” literacies, school literacy, “mainstream” literacy, first and second language literacies—and to develop teaching practices that utilize an understanding of the complexity of literacy development across language contexts. The second theme involves the meaningful use of language and literacy to improve the quality of one’s life. As an approach to teaching, this theme emphasizes the creation of diverse, rich environments in which learners experience oral and written language as part of authentic tasks, and where concern for the cultural and linguistic heritage of the students is evident.

## **Reading and Writing Option and Reading Teacher Endorsement**

This master's program is designed for K-6 and 7-12 teachers. Those interested in elementary reading and writing should communicate with Professors Espinoza, Nathenson-Mejia or Taylor. Those interested in secondary and adult reading and writing should communicate with Professor Shanklin (see Web site for faculty contact information).

Reading is a credentialed program meeting the Colorado Department of Education requirements for reading teacher endorsement. Therefore, students who obtain a master's degree emphasizing reading education from UC Denver are certified to hold positions in public and private schools as special developmental and remedial reading teachers in K-6 or 7-12. This program is also valuable for elementary and secondary teachers who wish to enhance reading and writing instruction in their classrooms.

By placing emphasis on the reading, writing and oral and visual language development of culturally, linguistically and academically diverse student populations, this master's program is at the forefront of the field. Language is approached from a socio-psycholinguistic perspective that emphasizes the learner's construction of meaning rather than the learning of isolated skills. Importance is placed on using theory, inquiry and personal reflection to inform classroom practice. The program prepares teachers to become decision makers capable of developing learner-centered curricula where each student's reading and writing abilities are assessed to address developmental or special needs.

## Curriculum

Course offerings lead to an MA degree in curriculum and instruction with an emphasis in reading and writing, as well as a reading teacher endorsement, at one of two levels: K-6 or 7-12.

Those who have completed UC Denver's graduate teacher education licensure program must earn an additional 27 semester hours to obtain the MA and endorsement. Those who completed licensure through other means must earn an additional 36 semester hours to obtain the MA and endorsement.

Teachers may add a reading teacher endorsement to an already-earned master's degree in education by taking those courses listed under the chosen endorsement level. (In the state of Colorado, the reading teacher endorsement cannot simply be added to a bachelor's degree.) Electives and core courses are not required. Two additional courses must be taken in other areas specified by the Colorado Department of Education. In many cases, previous master's degree courses will satisfy this requirement.

<b>Requirements for Reading and Writing Program (Degree/Endorsement Options)</b>		
	<b>ELEMENTARY (K-6)</b>	<b>SECONDARY (7-12)</b>

<b>Course</b>	<b>MA &amp; CDE Endorsement</b>	<b>MA &amp; CDE Endorsement</b> <i>(when added to UC Denver's graduate teacher education licensure program)</i>	<b>CDE Endorsement Only</b>	<b>MA &amp; CDE Endorsement</b>	<b>MA &amp; CDE Endorsement</b> <i>(when added to UC Denver's graduate teacher education licensure program)</i>	<b>CDE Endorsement Only</b>
LLC 5020 - Workshop in Literacy and Language Teaching.	Required		Required	Required	Required	Required
LLC 5810 - Workshop in Language Acquisition and Development .	Required	Required	Required	Required	Required	Required
LLC 5910 - Foundations of Language, Literacy and Culture.	Required	Required	Required	Required	Required	Required
LLC 5710 - Primary Literacy: Pre-3rd Grade.	Required	Required	Required			
LLC 5720 - Writing: Process, Development , and Teaching Grades 3-12.	Required	Required	Required	Required	Required	Required
LLC 5730 - Language and Literacy Across the	Required		Required	Required		Required

Curriculum.						
Children's literature course, per advisor approval	Select one	Select one	Select one			
LLC 5740 - Adolescent Literature.				Required	Required <i>(waived if taken as part of English Licensure)</i>	Required
LLC 6910 - Seminar and Practicum in Literacy and Language, K-6.	Required	Required	Required			
LLC 6911 - Seminar and Practicum in Literacy and Language, 7-12+.				Required	Required	Required
LLC 5055 - Linking Assessment and Instruction in Language and Literacy, Part I.	Required	Required	Required	Required	Required	Required
LLC 6915 - Seminar and Practicum in Literacy Professional Development .	Required	Required		Required	Required	Required
Core course in Research and Evaluation Methodology	Select one	5080		Select one	5080	

(REM) - see list below						
Interdisciplinary core course - see list below	Select one			Select one		
Graduate-level School of Education and Human Development elective				Select one		
Portfolio	Required	Required		Required	Required	
PLACE Exam	Required	Required	Required	Required	Required	Required
Total Semester Hours	36	27	27	36	27	27

## Secondary English Education Option

The master's program in secondary English education is designed to enhance the preparation of middle and high school English/language arts teachers. Students complete course work in language development, assessment and field experiences. With the help of their advisor, they also select specific courses from the English Department or within the School of Education and Human Development that provide a well-rounded repertoire of knowledge and skills to fulfill the needs of an English educator. Special consideration is given to working with diverse ethnic populations. Students interested in English education should see Professor Shanklin (see Web site for faculty contact information).

## Program Requirements

To earn a master of arts degree in curriculum and instruction with an emphasis in secondary English education, students must complete the following:

- 30 graduate semester hours in English education
- 6 graduate semester hours of core courses
- performance-based assessments that culminate in a portfolio finalized in the last semester of the program as fulfillment of the MA comprehensive exam requirement

Each student's course plan is developed in conjunction with his/her advisor. Please review [www.ucdenver.edu/education/englished](http://www.ucdenver.edu/education/englished) for recommended course sequence.

LLC 5055 – Linking Assessment and Instruction in Language and Literacy. Part I. Semester

Hours: 3

LLC 5740 – Adolescent Literature. Semester Hours: 3

LLC 5760 – Theory and Methods of English Education. Semester Hours: 3

-OR-

LLC 5835 – Special Topics: Advanced Theories and Methods of English Education. Semester Hours: 3

LLC 5810 – Workshop in Language Acquisition and Development. Semester Hours: 3

LLC 5910 – Foundations of Language, Literacy and Culture. Semester Hours: 3

LLC 6911. Seminar and Practicum in Literacy and Language, Grades 7-12+. Semester Hours: 3  
Research and Evaluation Methodology core course (see list below).

Interdisciplinary core course (see list below).

Four electives, per advisor approval, from the English department and/or the School of Education & Human Development. The following are recommended:

LLC 5720 – Writing: Process, Development and Teaching, Grades 3-12. Semester Hours: 3

-OR-

ENGL 5110 – Denver Writing Project. Semester Hours: 3

Courses in working with English language learners and in instructional technology may also be helpful. For a technology course, please contact the professor about prerequisite knowledge.

**Total: 36 semester hours**

Program Requirements--When Added to UC Denver's Graduate Teacher Education Licensure Program

MA in curriculum and instruction with emphasis in secondary content leadership (English), when added to UC Denver's graduate teacher education licensure program:

- 18 graduate semester hours
- performance-based assessments that culminate in a portfolio finalized in the last semester of the program as fulfillment of the MA comprehensive exam requirement

Each student's course plan is developed in conjunction with his/her advisor. Please review [www.ucdenver.edu/education/englished](http://www.ucdenver.edu/education/englished) for recommended course sequence.

FNDS 5050 – Critical Issues in American Education. Semester Hours: 3

-OR-

IPTE 5080 – Principals and Practice of Change. Semester Hours: 3

-OR-

SPED 5300 – Collaborating in Schools and Communities. Semester Hours: 3

REM 5080 – Research for Teachers. Semester Hours: 3

Four electives, per advisor approval, from the English Department and/or the School of Education and Human Development. The following are recommended:

LLC 5720 – Writing: Process, Development and Teaching, Grades 3-12. Semester Hours: 3

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ENGL 5110 – Denver Writing Project. Semester Hours: 3

Courses in working with English language learners and in instructional technology may also

be helpful. For a technology course, please contact the professor about prerequisite knowledge.  
**Total: 18 semester hours**

## **Core Courses**

### **Research and Evaluation Methodology**

REM 5000 - Orientation to Research and Measurement in Education. Semester Hours: 3  
REM 5050 - Assessment for Teachers. Semester Hours: 3  
REM 5080 - Research for Teachers. Semester Hours: 3  
REM 5100 - Basic Statistics. Semester Hours: 3  
REM 5200 - Introduction to Research Methods. Semester Hours: 3  
REM 5300 - Introduction to Measurement. Semester Hours: 3

### **Interdisciplinary**

EPSY 5100 - Advanced Child Growth and Development Semester Hours: 3  
EPSY 5140 - Advanced Adolescent Growth and Development. Semester Hours: 3  
EPSY 5220 - Adult Learning and Education. Semester Hours: 3  
EPSY 6200 - Human Development Over the Life Span. Semester Hours: 3  
FNDS 5050 - Critical Issues in American Education. Semester Hours: 3  
FNDS 5420 - History and Philosophy of Education: Twentieth Century America. Semester Hours: 3  
LLC 5140 - Multicultural Education. Semester Hours: 3  
LLC 5150 - Culture of the Classroom. Semester Hours: 3  
LLC 5160 - Historical and Legal Foundations of Bilingual Education. Semester Hours: 3  
LLC 5820 - Techniques in Teaching English as a Second Language. Semester Hours: 3

### **Cumulative Portfolio**

The MA portfolio counts as the comprehensive exam for the master's degree. The portfolio is an accumulation of the performance based assessments completed during program courses and reflects on the student's development over the course of the degree program. Reading and writing students must include confirmation of Reading Teacher PLACE exam registration in their portfolios. Information about the PLACE is online at [www.place.nesinc.com](http://www.place.nesinc.com).

### **Course Scheduling**

During the fall and spring semesters, most university courses are offered in the late afternoon and evening and meet for three hours once a week over a 16-week semester. Some alternative course schedules are available, such as meeting on five Friday-evening/all-day Saturday combinations. In the summer semester, three- to eight-week sessions are offered, and courses may be in the morning, afternoon or evening. A current schedule of courses is available online at <http://courses.cudenver.edu>.

## **Planning**

For practicing full-time teachers, we recommend taking one course each fall and spring semester, and up to two courses each summer. Plan carefully because courses are intended to build upon each other, and some courses are only offered once a year.

## **Active Status in the Graduate School**

Students must complete their programs within seven years, maintaining a GPA of 3.0. Students typically take four courses each calendar year. Failure to enroll over three contiguous semesters will result in a requirement to resubmit part I of the application for admission and a letter of intent.

## **Early and Adolescent Literacy Certificates**

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## **Master of Arts**

# **Reading and Writing Option, MA curriculum and instruction**

## **Literacy, Language and Culturally Responsive Teaching**

## **MA Requirements for the Reading and Writing Option and Secondary English Education Option, plus Reading Teacher Endorsement and Certificate Programs**

**Office:** Lawrence Street Center, 701

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## **Reading and Writing**

### **Secondary English**

#### **Early and Adolescent Literacy Certificates**

## **Faculty**

Information about faculty in this program is available online at [www.ucdenver.edu/education/literacy](http://www.ucdenver.edu/education/literacy).

The faculty of literacy, language and culturally responsive teaching (L2CRT) believe that effective teaching requires an awareness of and the ability to respond to individual differences. L2CRT faculty also emphasize the importance of teachers as scholars and reflective practitioners. In particular, teachers must understand how linguistic and cultural diversity affect their teaching. Two themes run throughout all program offerings. The first concerns the importance of recognizing a variety of literacies—"home" literacies, school literacy, "mainstream" literacy, first and second language literacies—and to develop teaching practices that utilize an understanding of the complexity of literacy development across language contexts. The second theme involves the meaningful use of language and literacy to improve the quality of one's life. As an approach to teaching, this theme emphasizes the creation of diverse, rich environments in which learners experience oral and written language as part of authentic tasks, and where concern for the cultural and linguistic heritage of the students is evident.

## **Reading and Writing Option and Reading Teacher Endorsement**

This master's program is designed for K-6 and 7-12 teachers. Those interested in elementary reading and writing should communicate with Professors Espinoza, Nathenson-Mejia or Taylor. Those interested in secondary and adult reading and writing should communicate with Professor Shanklin (see Web site for faculty contact information).

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that emphasizes the learner's construction of meaning rather than the learning of isolated skills. Importance is placed on using theory, inquiry and personal reflection to inform classroom practice. The program prepares teachers to become decision makers capable of developing learner-centered curricula where each student's reading and writing abilities are assessed to address developmental or special needs.

## Curriculum

Course offerings lead to an MA degree in curriculum and instruction with an emphasis in reading and writing, as well as a reading teacher endorsement, at one of two levels: K–6 or 7–12.

Those who have completed UC Denver's graduate teacher education licensure program must earn an additional 27 semester hours to obtain the MA and endorsement. Those who completed licensure through other means must earn an additional 36 semester hours to obtain the MA and endorsement.

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<b>Requirements for Reading and Writing Program (Degree/Endorsement Options)</b>						
	<b>ELEMENTARY (K-6)</b>			<b>SECONDARY (7-12)</b>		
<b>Course</b>	<b>MA &amp; CDE Endorsement</b>	<b>MA &amp; CDE Endorsement (when added to UC Denver's graduate teacher education licensure program)</b>	<b>CDE Endorsement Only</b>	<b>MA &amp; CDE Endorsement</b>	<b>MA &amp; CDE Endorsement (when added to UC Denver's graduate teacher education licensure program)</b>	<b>CDE Endorsement Only</b>
LLC 5020 - Workshop in Literacy and	Required		Required	Required	Required	Required

Language Teaching.						
LLC 5810 - Workshop in Language Acquisition and Development .	Required	Required	Required	Required	Required	Required
LLC 5910 - Foundations of Language, Literacy and Culture.	Required	Required	Required	Required	Required	Required
LLC 5710 - Primary Literacy: Pre-3rd Grade.	Required	Required	Required			
LLC 5720 - Writing: Process, Development , and Teaching Grades 3-12.	Required	Required	Required	Required	Required	Required
LLC 5730 - Language and Literacy Across the Curriculum.	Required		Required	Required		Required
Children's literature course, per advisor approval	Select one	Select one	Select one			
LLC 5740 - Adolescent Literature.				Required	Required <i>(waived if taken as part of English Licensure)</i>	Required

LLC 6910 - Seminar and Practicum in Literacy and Language, K-6.	Required	Required	Required			
LLC 6911 - Seminar and Practicum in Literacy and Language, 7-12+.				Required	Required	Required
LLC 5055 - Linking Assessment and Instruction in Language and Literacy, Part I.	Required	Required	Required	Required	Required	Required
LLC 6915 - Seminar and Practicum in Literacy Professional Development .	Required	Required		Required	Required	Required
Core course in Research and Evaluation Methodology (REM) - see list below	Select one	5080		Select one	5080	
Interdisciplinary core course - see list below	Select one			Select one		
Graduate-level School of Education and Human Development elective				Select one		

Portfolio	Required	Required		Required	Required	
PLACE Exam	Required	Required	Required	Required	Required	Required
Total Semester Hours	36	27	27	36	27	27

## Secondary English Education Option

The master's program in secondary English education is designed to enhance the preparation of middle and high school English/language arts teachers. Students complete course work in language development, assessment and field experiences. With the help of their advisor, they also select specific courses from the English Department or within the School of Education and Human Development that provide a well-rounded repertoire of knowledge and skills to fulfill the needs of an English educator. Special consideration is given to working with diverse ethnic populations. Students interested in English education should see Professor Shanklin (see Web site for faculty contact information).

## Program Requirements

To earn a master of arts degree in curriculum and instruction with an emphasis in secondary English education, students must complete the following:

- 30 graduate semester hours in English education
- 6 graduate semester hours of core courses
- performance-based assessments that culminate in a portfolio finalized in the last semester of the program as fulfillment of the MA comprehensive exam requirement

Each student's course plan is developed in conjunction with his/her advisor. Please review [www.ucdenver.edu/education/englished](http://www.ucdenver.edu/education/englished) for recommended course sequence.

LLC 5055 – Linking Assessment and Instruction in Language and Literacy. Part I. Semester Hours: 3

LLC 5740 – Adolescent Literature. Semester Hours: 3

LLC 5760 – Theory and Methods of English Education. Semester Hours: 3

-OR-

LLC 5835 – Special Topics: Advanced Theories and Methods of English Education. Semester Hours: 3

LLC 5810 – Workshop in Language Acquisition and Development. Semester Hours: 3

LLC 5910 – Foundations of Language, Literacy and Culture. Semester Hours: 3

LLC 6911. Seminar and Practicum in Literacy and Language, Grades 7-12+. Semester Hours: 3

Research and Evaluation Methodology core course (see list below).

Interdisciplinary core course (see list below).

Four electives, per advisor approval, from the English department and/or the School of Education & Human Development. The following are recommended:

LLC 5720 – Writing: Process, Development and Teaching, Grades 3-12. Semester Hours: 3

-OR-

ENGL 5110 – Denver Writing Project. Semester Hours: 3

Courses in working with English language learners and in instructional technology may also be helpful. For a technology course, please contact the professor about prerequisite knowledge.

**Total: 36 semester hours**

Program Requirements--When Added to UC Denver's Graduate Teacher Education Licensure Program

MA in curriculum and instruction with emphasis in secondary content leadership (English), when added to UC Denver's graduate teacher education licensure program:

- 18 graduate semester hours
- performance-based assessments that culminate in a portfolio finalized in the last semester of the program as fulfillment of the MA comprehensive exam requirement

Each student's course plan is developed in conjunction with his/her advisor. Please review [www.ucdenver.edu/education/englished](http://www.ucdenver.edu/education/englished) for recommended course sequence.

FNDS 5050 – Critical Issues in American Education. Semester Hours: 3

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IPTe 5080 – Principals and Practice of Change. Semester Hours: 3

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SPED 5300 – Collaborating in Schools and Communities. Semester Hours: 3

REM 5080 – Research for Teachers. Semester Hours: 3

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Courses in working with English language learners and in instructional technology may also be helpful. For a technology course, please contact the professor about prerequisite knowledge.

**Total: 18 semester hours**

## Core Courses

### Research and Evaluation Methodology

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REM 5080 - Research for Teachers. Semester Hours: 3

REM 5100 - Basic Statistics. Semester Hours: 3

REM 5200 - Introduction to Research Methods. Semester Hours: 3

REM 5300 - Introduction to Measurement. Semester Hours: 3

## **Interdisciplinary**

EPSY 5100 - Advanced Child Growth and Development Semester Hours: 3  
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## **Cumulative Portfolio**

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## **Planning**

For practicing full-time teachers, we recommend taking one course each fall and spring semester, and up to two courses each summer. Plan carefully because courses are intended to build upon each other, and some courses are only offered once a year.

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## **Secondary English Education Option, MA curriculum and instruction**

### **Literacy, Language and Culturally Responsive Teaching**

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**Reading and Writing**

**Secondary English**

**Early and Adolescent Literacy Certificates**

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Course offerings lead to an MA degree in curriculum and instruction with an emphasis in reading and writing, as well as a reading teacher endorsement, at one of two levels: K–6 or 7–12.

Those who have completed UC Denver’s graduate teacher education licensure program must earn an additional 27 semester hours to obtain the MA and endorsement. Those who completed licensure through other means must earn an additional 36 semester hours to obtain the MA and endorsement.

Teachers may add a reading teacher endorsement to an already-earned master's degree in education by taking those courses listed under the chosen endorsement level. (In the state of Colorado, the reading teacher endorsement cannot simply be added to a bachelor's degree.) Electives and core courses are not required. Two additional courses must be taken in other areas specified by the Colorado Department of Education. In many cases, previous master's degree courses will satisfy this requirement.

<b>Requirements for Reading and Writing Program (Degree/Endorsement Options)</b>						
	<b>ELEMENTARY (K-6)</b>			<b>SECONDARY (7-12)</b>		
<b>Course</b>	<b>MA &amp; CDE Endorsement</b>	<b>MA &amp; CDE Endorsement</b> <i>(when added to UC Denver's graduate teacher education licensure program)</i>	<b>CDE Endorsement Only</b>	<b>MA &amp; CDE Endorsement</b>	<b>MA &amp; CDE Endorsement</b> <i>(when added to UC Denver's graduate teacher education licensure program)</i>	<b>CDE Endorsement Only</b>
LLC 5020 - Workshop in Literacy and Language Teaching.	Required		Required	Required	Required	Required
LLC 5810 - Workshop in Language Acquisition and Development .	Required	Required	Required	Required	Required	Required
LLC 5910 - Foundations of Language, Literacy and Culture.	Required	Required	Required	Required	Required	Required
LLC 5710 - Primary	Required	Required	Required			

Literacy: Pre-3rd Grade.						
LLC 5720 - Writing: Process, Development, and Teaching Grades 3-12.	Required	Required	Required	Required	Required	Required
LLC 5730 - Language and Literacy Across the Curriculum.	Required		Required	Required		Required
Children's literature course, per advisor approval	Select one	Select one	Select one			
LLC 5740 - Adolescent Literature.				Required	Required <i>(waived if taken as part of English Licensure)</i>	Required
LLC 6910 - Seminar and Practicum in Literacy and Language, K-6.	Required	Required	Required			
LLC 6911 - Seminar and Practicum in Literacy and Language, 7-12+.				Required	Required	Required
LLC 5055 - Linking Assessment and Instruction in Language	Required	Required	Required	Required	Required	Required

and Literacy, Part I.						
LLC 6915 - Seminar and Practicum in Literacy Professional Development .	Required	Required		Required	Required	Required
Core course in Research and Evaluation Methodology (REM) - see list below	Select one	5080		Select one	5080	
Interdisciplinary core course - see list below	Select one			Select one		
Graduate-level School of Education and Human Development elective				Select one		
Portfolio	Required	Required		Required	Required	
PLACE Exam	Required	Required	Required	Required	Required	Required
Total Semester Hours	36	27	27	36	27	27

## Secondary English Education Option

The master's program in secondary English education is designed to enhance the preparation of middle and high school English/language arts teachers. Students complete course work in language development, assessment and field experiences. With the help of their advisor, they also select specific courses from the English Department or within the School of Education and Human Development that provide a well-rounded repertoire of knowledge and skills to fulfill the needs of an English educator. Special consideration is given to working with diverse ethnic populations. Students interested in English education should see Professor Shanklin (see Web site for faculty contact information).

## Program Requirements

To earn a master of arts degree in curriculum and instruction with an emphasis in secondary English education, students must complete the following:

- 30 graduate semester hours in English education
- 6 graduate semester hours of core courses
- performance-based assessments that culminate in a portfolio finalized in the last semester of the program as fulfillment of the MA comprehensive exam requirement

Each student's course plan is developed in conjunction with his/her advisor. Please review [www.ucdenver.edu/education/englished](http://www.ucdenver.edu/education/englished) for recommended course sequence.

LLC 5055 – Linking Assessment and Instruction in Language and Literacy. Part I. Semester Hours: 3

LLC 5740 – Adolescent Literature. Semester Hours: 3

LLC 5760 – Theory and Methods of English Education. Semester Hours: 3

-OR-

LLC 5835 – Special Topics: Advanced Theories and Methods of English Education. Semester Hours: 3

LLC 5810 – Workshop in Language Acquisition and Development. Semester Hours: 3

LLC 5910 – Foundations of Language, Literacy and Culture. Semester Hours: 3

LLC 6911. Seminar and Practicum in Literacy and Language, Grades 7-12+. Semester Hours: 3  
Research and Evaluation Methodology core course (see list below).

Interdisciplinary core course (see list below).

Four electives, per advisor approval, from the English department and/or the School of Education & Human Development. The following are recommended:

LLC 5720 – Writing: Process, Development and Teaching, Grades 3-12. Semester Hours: 3

-OR-

ENGL 5110 – Denver Writing Project. Semester Hours: 3

Courses in working with English language learners and in instructional technology may also be helpful. For a technology course, please contact the professor about prerequisite knowledge.

**Total: 36 semester hours**

Program Requirements--When Added to UC Denver's Graduate Teacher Education Licensure Program

MA in curriculum and instruction with emphasis in secondary content leadership (English), when added to UC Denver's graduate teacher education licensure program:

- 18 graduate semester hours
- performance-based assessments that culminate in a portfolio finalized in the last semester of the program as fulfillment of the MA comprehensive exam requirement

Each student's course plan is developed in conjunction with his/her advisor. Please review [www.ucdenver.edu/education/englished](http://www.ucdenver.edu/education/englished) for recommended course sequence.

FNDS 5050 – Critical Issues in American Education. Semester Hours: 3

-OR-

IPTE 5080 – Principals and Practice of Change. Semester Hours: 3

-OR-

SPED 5300 – Collaborating in Schools and Communities. Semester Hours: 3

REM 5080 – Research for Teachers. Semester Hours: 3

Four electives, per advisor approval, from the English Department and/or the School of Education and Human Development. The following are recommended:

LLC 5720 – Writing: Process, Development and Teaching, Grades 3-12. Semester Hours: 3

-OR-

ENGL 5110 – Denver Writing Project. Semester Hours: 3

Courses in working with English language learners and in instructional technology may also be helpful. For a technology course, please contact the professor about prerequisite knowledge.

**Total: 18 semester hours**

## **Core Courses**

### **Research and Evaluation Methodology**

REM 5000 - Orientation to Research and Measurement in Education. Semester Hours: 3

REM 5050 - Assessment for Teachers. Semester Hours: 3

REM 5080 - Research for Teachers. Semester Hours: 3

REM 5100 - Basic Statistics. Semester Hours: 3

REM 5200 - Introduction to Research Methods. Semester Hours: 3

REM 5300 - Introduction to Measurement. Semester Hours: 3

### **Interdisciplinary**

EPSY 5100 - Advanced Child Growth and Development Semester Hours: 3

EPSY 5140 - Advanced Adolescent Growth and Development. Semester Hours: 3

EPSY 5220 - Adult Learning and Education. Semester Hours: 3

EPSY 6200 - Human Development Over the Life Span. Semester Hours: 3

FNDS 5050 - Critical Issues in American Education. Semester Hours: 3

FNDS 5420 - History and Philosophy of Education: Twentieth Century America. Semester Hours: 3

LLC 5140 - Multicultural Education. Semester Hours: 3

LLC 5150 - Culture of the Classroom. Semester Hours: 3

LLC 5160 - Historical and Legal Foundations of Bilingual Education. Semester Hours: 3

LLC 5820 - Techniques in Teaching English as a Second Language. Semester Hours: 3

### **Cumulative Portfolio**

The MA portfolio counts as the comprehensive exam for the master's degree. The portfolio is an accumulation of the performance based assessments completed during program courses and

reflects on the student's development over the course of the degree program. Reading and writing students must include confirmation of Reading Teacher PLACE exam registration in their portfolios. Information about the PLACE is online at [www.place.nesinc.com](http://www.place.nesinc.com).

## **Course Scheduling**

During the fall and spring semesters, most university courses are offered in the late afternoon and evening and meet for three hours once a week over a 16-week semester. Some alternative course schedules are available, such as meeting on five Friday-evening/all-day Saturday combinations. In the summer semester, three- to eight-week sessions are offered, and courses may be in the morning, afternoon or evening. A current schedule of courses is available online at <http://courses.cudenver.edu>.

## **Planning**

For practicing full-time teachers, we recommend taking one course each fall and spring semester, and up to two courses each summer. Plan carefully because courses are intended to build upon each other, and some courses are only offered once a year.

## **Active Status in the Graduate School**

Students must complete their programs within seven years, maintaining a GPA of 3.0. Students typically take four courses each calendar year. Failure to enroll over three contiguous semesters will result in a requirement to resubmit part I of the application for admission and a letter of intent.

## **Early and Adolescent Literacy Certificates**

The early literacy certificate and adolescent literacy certificate each include three graduate-level courses (for a total of 9 semester hours) and are conveniently offered entirely online. They are specifically designed to help licensed teachers develop the skills necessary to reach student readers. To find out more, please visit [www.ucdenver.edu/education](http://www.ucdenver.edu/education) or email [cpe@ucdenver.edu](mailto:cpe@ucdenver.edu).

To learn about how these certificate credits may apply toward one of the above programs in reading and writing, contact [education@ucdenver.edu](mailto:education@ucdenver.edu).

## **Administrative Leadership and Policy Studies**

## **Requirements for Principal Licensure, the MA and EdS degrees, and Executive Leadership Administrator Licensure Program**

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**Note:** Those already holding a principal license and master's degree should see the Executive Leadership Program (below) for pursuing administrator licensure.

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Denver metro-area cohorts are delivered in **four 8-semester-hour courses** over four consecutive semesters. Cohorts start at one or more locations each semester and involve a combination of regular in-person meetings (up to 15 times per semester) and online work.

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EDUC 5754 - Principal or Administrator Licensing IV. Semester Hours: 5 to 9

**Total: 32 Hours**

## Distance-Learning Cohorts

Distance-learning cohorts start each summer in June with a weeklong boot camp in Denver, meet over several intensive weekends during the subsequent fall and spring semesters and end with a weekend the following summer. Online work is completed in between the in-person sessions. Distance-learning cohorts are delivered in **three 9-semester-hour courses and one 5-semester-hour course:**

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**Total: 32 Hours**

## **MA Program**

The MA is designed for those who do not already hold a graduate degree. Usually master's students will complete 9 semester hours beyond the 32 required in the licensure program, for a total of 41 semester hours of course work after the bachelor's degree.

For the MA degree, students must select at least one course in each of the following three areas:

### **Section A: Educational Research**

REM 5100 - Basic Statistics. Semester Hours: 3

REM 5200 - Introduction to Research Methods. Semester Hours: 3

REM 5300 - Introduction to Measurement. Semester Hours: 3

### **Section B: Educational Foundations/Multicultural Education**

FNDS 5050 - Critical Issues in American Education. Semester Hours: 3

FNDS 5500 - Contemporary Philosophies of Education. Semester Hours: 3

FNDS 5410 - History and Philosophy of Modern Education. Semester Hours: 3

LLC 5140 - Multicultural Education. Semester Hours: 3

LLC 5150 - Culture of the Classroom. Semester Hours: 3

LLC 5160 - Foundations of Bilingual Education. Semester Hours: 3

### **Section C: Educational Psychology/Special Education**

EDUC 5400 - Special Education Seminar for Principals. Semester Hours: 3

EPSY 5100 - Advanced Child Growth and Development. Semester Hours: 3

EPSY 5110 - Human Learning. Semester Hours: 3

EPSY 5140 - Advanced Adolescent Growth and Development. Semester Hours: 3

EPSY 5160 - Behavior Disorders in Exceptional Children. Semester Hours: 3

EPSY 5200 - Social Psychology of Learning. Semester Hours: 3

SPED 5140 - Advanced Assessment in Special Education. Semester Hours: 3

SPED 5180 - Curriculum Planning for Students with Special Needs. Semester Hours: 3

SPED 5400 - Advanced Seminar in Special Education. Semester Hours: 3  
SPED 5600 - Special Education for School Professionals. Semester Hours: 3

Candidates must also successfully complete a comprehensive exam paper, reflecting on how the three MA classes will help them in the role of principal or administrator.

## **EdS Program**

The EdS degree program affords the opportunity for advanced graduate study and is available to those who already hold a master's degree. Generally for the specialist degree students will complete 9 semester hours that constitute an area of focus, in addition to the 32 required in the licensure program. Candidates must also successfully complete a comprehensive exam paper, reflecting on how the three EdS classes will help them in the role of principal or administrator.

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## **Additional Program Information**

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## **Education Specialist**

# **Administrative Leadership and Policy Studies EdS**

## **Administrative Leadership and Policy Studies**

## **Requirements for Principal Licensure, the MA and EdS degrees, and Executive Leadership Administrator Licensure Program**

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## **Principal Licensure**

### **Master of Arts Degree**

### **Education Specialist Degree**

### **Executive Leadership Administrator Licensure Program**

## **Faculty**

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**Total: 32 Hours**

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LLC 5140 - Multicultural Education. Semester Hours: 3  
LLC 5150 - Culture of the Classroom. Semester Hours: 3  
LLC 5160 - Foundations of Bilingual Education. Semester Hours: 3

### **Section C: Educational Psychology/Special Education**

EDUC 5400 - Special Education Seminar for Principals. Semester Hours: 3  
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## **License**

# **Administrator License - Executive Leadership Program**

## Administrative Leadership and Policy Studies

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REM 5200 - Introduction to Research Methods. Semester Hours: 3

REM 5300 - Introduction to Measurement. Semester Hours: 3

### **Section B: Educational Foundations/Multicultural Education**

FNDS 5050 - Critical Issues in American Education. Semester Hours: 3

FNDS 5500 - Contemporary Philosophies of Education. Semester Hours: 3

FNDS 5410 - History and Philosophy of Modern Education. Semester Hours: 3

LLC 5140 - Multicultural Education. Semester Hours: 3

LLC 5150 - Culture of the Classroom. Semester Hours: 3

LLC 5160 - Foundations of Bilingual Education. Semester Hours: 3

### **Section C: Educational Psychology/Special Education**

EDUC 5400 - Special Education Seminar for Principals. Semester Hours: 3  
EPSY 5100 - Advanced Child Growth and Development. Semester Hours: 3  
EPSY 5110 - Human Learning. Semester Hours: 3  
EPSY 5140 - Advanced Adolescent Growth and Development. Semester Hours: 3  
EPSY 5160 - Behavior Disorders in Exceptional Children. Semester Hours: 3  
EPSY 5200 - Social Psychology of Learning. Semester Hours: 3  
SPED 5140 - Advanced Assessment in Special Education. Semester Hours: 3  
SPED 5180 - Curriculum Planning for Students with Special Needs. Semester Hours: 3  
SPED 5400 - Advanced Seminar in Special Education. Semester Hours: 3  
SPED 5600 - Special Education for School Professionals. Semester Hours: 3

Candidates must also successfully complete a comprehensive exam paper, reflecting on how the three MA classes will help them in the role of principal or administrator.

## **EdS Program**

The EdS degree program affords the opportunity for advanced graduate study and is available to those who already hold a master's degree. Generally for the specialist degree students will complete 9 semester hours that constitute an area of focus, in addition to the 32 required in the licensure program. Candidates must also successfully complete a comprehensive exam paper, reflecting on how the three EdS classes will help them in the role of principal or administrator.

## **Administrator Licensure - Executive Leadership Program**

Designed for the professional educator who, already holding a principal license and master's degree, wishes to obtain an initial administrator license in Colorado and prepare for a career as a superintendent or other district leader. This one-year, 12-semester-hour certificate program combines weekend meetings with online work and hands-on clinical practice—usually completed in participants' home districts. Learn more at [www.ucdenver.edu/education/elp](http://www.ucdenver.edu/education/elp).

## **Additional Program Information**

Individuals interested in any of these programs are encouraged to contact ALPS faculty. Conferences prior to application are encouraged and welcomed. Following admission, students are expected to maintain frequent contact with assigned advisors to plan, develop and complete their programs of study.

## **Master of Arts**

# **Administrative Leadership and Policy Studies MA**

## Administrative Leadership and Policy Studies

### Requirements for Principal Licensure, the MA and EdS degrees, and Executive Leadership Administrator Licensure Program

**Office:** Lawrence Street Center, 701

**Telephone:** 303-315-6300

**Fax:** 303-315-6311

**E-mail:** [education@ucdenver.edu](mailto:education@ucdenver.edu)

**Web site:** [www.ucdenver.edu/education/alps](http://www.ucdenver.edu/education/alps)

### Faculty

For information about faculty in this area, visit [www.ucdenver.edu/education/alps](http://www.ucdenver.edu/education/alps).

The primary responsibility of the administrative leadership and policy studies (ALPS) faculty is to prepare leaders for public education in Colorado and the nation. Currently, the principal license is required for people seeking building-level administrative positions in Colorado.

### Principal Licensure Program

ALPS offers course work that leads to the initial license for principal. Having earned an initial license, those who have obtained a master's degree and who go on to complete a district sponsored induction program may then be awarded a professional license by the Colorado Department of Education.

ALPS's 32 semester-hour principal licensure program is project-based, requiring students to present evidence of meeting both state and national standards through performance based assessments. A 400-hour clinical-practice experience is integrated throughout the four-semester program.

Students develop a portfolio during the principal licensure program. Portfolios not finalized by the end of the fourth semester must be completed within the two subsequent semesters (not including summer).

**Note:** Those already holding a principal license and master's degree should see the Executive Leadership Program (below) for pursuing administrator licensure.

### Denver Metro-Area Cohorts

Denver metro-area cohorts are delivered in **four 8-semester-hour courses** over four consecutive semesters. Cohorts start at one or more locations each semester and involve a combination of regular in-person meetings (up to 15 times per semester) and online work. EDUC 5751 - Principal/Administrator Licensing I. Semester Hours: 5 to 9

EDUC 5752 - Principal Administrator Licensing II. Semester Hours: 5 to 9  
EDUC 5753 - Principal/Administrator Licensing III. Semester Hours: 5 to 9  
EDUC 5754 - Principal or Administrator Licensing IV. Semester Hours: 5 to 9

**Total: 32 Hours**

## **Distance-Learning Cohorts**

Distance-learning cohorts start each summer in June with a weeklong boot camp in Denver, meet over several intensive weekends during the subsequent fall and spring semesters and end with a weekend the following summer. Online work is completed in between the in-person sessions. Distance-learning cohorts are delivered in **three 9-semester-hour courses and one 5-semester-hour course:**

EDUC 5751 - Principal/Administrator Licensing I. Semester Hours: 5 to 9  
EDUC 5752 - Principal Administrator Licensing II. Semester Hours: 5 to 9  
EDUC 5753 - Principal/Administrator Licensing III. Semester Hours: 5 to 9  
EDUC 5754 - Principal or Administrator Licensing IV. Semester Hours: 5 to 9

**Total: 32 Hours**

## **MA Program**

The MA is designed for those who do not already hold a graduate degree. Usually master's students will complete 9 semester hours beyond the 32 required in the licensure program, for a total of 41 semester hours of course work after the bachelor's degree.

For the MA degree, students must select at least one course in each of the following three areas:

### **Section A: Educational Research**

REM 5100 - Basic Statistics. Semester Hours: 3  
REM 5200 - Introduction to Research Methods. Semester Hours: 3  
REM 5300 - Introduction to Measurement. Semester Hours: 3

### **Section B: Educational Foundations/Multicultural Education**

FNDS 5050 - Critical Issues in American Education. Semester Hours: 3  
FNDS 5500 - Contemporary Philosophies of Education. Semester Hours: 3  
FNDS 5410 - History and Philosophy of Modern Education. Semester Hours: 3  
LLC 5140 - Multicultural Education. Semester Hours: 3  
LLC 5150 - Culture of the Classroom. Semester Hours: 3  
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### **Section C: Educational Psychology/Special Education**

EDUC 5400 - Special Education Seminar for Principals. Semester Hours: 3  
EPSY 5100 - Advanced Child Growth and Development. Semester Hours: 3  
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EPSY 5200 - Social Psychology of Learning. Semester Hours: 3  
SPED 5140 - Advanced Assessment in Special Education. Semester Hours: 3  
SPED 5180 - Curriculum Planning for Students with Special Needs. Semester Hours: 3  
SPED 5400 - Advanced Seminar in Special Education. Semester Hours: 3  
SPED 5600 - Special Education for School Professionals. Semester Hours: 3

Candidates must also successfully complete a comprehensive exam paper, reflecting on how the three MA classes will help them in the role of principal or administrator.

## **EdS Program**

The EdS degree program affords the opportunity for advanced graduate study and is available to those who already hold a master's degree. Generally for the specialist degree students will complete 9 semester hours that constitute an area of focus, in addition to the 32 required in the licensure program. Candidates must also successfully complete a comprehensive exam paper, reflecting on how the three EdS classes will help them in the role of principal or administrator.

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## **Additional Program Information**

Individuals interested in any of these programs are encouraged to contact ALPS faculty. Conferences prior to application are encouraged and welcomed. Following admission, students are expected to maintain frequent contact with assigned advisors to plan, develop and complete their programs of study.

## **Early Childhood Education**

**Office:** Lawrence Street Center, 701

**Telephone:** 303-315-6300

**Fax:** 303-315-6311

**E-mail:** [education@ucdenver.edu](mailto:education@ucdenver.edu)

**Web site:** [www.ucdenver.edu/education](http://www.ucdenver.edu/education)

## Faculty

More information about faculty in this division is available online at [www.ucdenver.edu/education](http://www.ucdenver.edu/education).

## Early Childhood Education Program

The early childhood education (ECE) program leads to a master's degree in early childhood education (early childhood accomplished teacher focus) and/or licensure in early childhood special education (early childhood special education specialist). The program prepares leaders who will enrich the life experience of young children (birth to 8) and their families through a variety of professional roles.

ECE Program students may select from three program options:

1. MA in early childhood education
2. ECSE specialist license (initial or added endorsement)
3. MA plus ECSE specialist license (initial or added endorsement)

The ECE program is interdisciplinary in focus, drawing on university resources and the clinical expertise of various community professionals. There is a strong emphasis on fieldwork and practicum experiences in both regular and special education concentrations. Field experiences are a part of each course and provide an opportunity for each student to gain knowledge, abilities and dispositions while interacting with children, families, program staff and community agencies. Practicum experiences are designed to allow students to apply knowledge and practice skills in a closely supervised environment.

The early childhood accomplished teacher focus and the early childhood special education focus share course content in:

- literacy development and disorders
- child growth and development, differences and disorders
- learning approaches with young children
- measurement and evaluation
- basic statistics/research methods
- multicultural education
- research and current issues
- early childhood curriculum and program development for inclusive classrooms
- working collaboratively with parents and families
- program administration/leadership

The early childhood special education program provides specialized preparation in:

- screening and assessment of young children
- intervention strategies with infants and preschoolers
- behavior management
- working as a member of the transdisciplinary team
- cognitive and socio-emotional development and disorders
- treatment of children who have neurological impairment and chronic illness



				or ECE License	or ECE License	Education License	Education license
Course							
EPSY 5100 - Advanced Child Growth and Development.	Required	Required	Required				
REM 5100 - Basic Statistics.	Required		Required		Required		Required
ECE 5000 - The Early Childhood Profession.	Required	Required	Required	Required	Required	Required	Required
ECE 6100 - Medical and Physiological Aspects of Developmental Disabilities.	Required	Required	Required	Required	Required	Required	Required
ECE 5020 - Approaches to Young Children's Learning.	Required	Required	Required		Required **	Required *	Required **
ECE 5070 - Cognitive, Social, Emotional Development and Disorders in Young Children. <b>or</b> ECE 5202 - Stress, Violence, and		Required	Required	Required	Required	Required *	Required *

Behavior Challenges in Young Children's Lives.							
ECE 5080 - Language and Literacy in Young Children.	Required	Required	Required	Required	Required	Required *	Required*
ECE 5010 - Curriculum and Program Development in Early Childhood Education.	Required	Required	Required	Required *	Required *	Required	Required
ECE 5060 - Working with Parents and Families.	Required	Required	Required		Required **		Required **
ECE 5040 - Administrative Seminar.	Required	Required	Required		Required **		Required **
ECE 5202 - Stress, Violence, and Behavior Challenges in Young Children's Lives.	Required				Required **		Required **
ECE 6690 - Seminar: Research and Current Issues in Early Childhood Education.	Required		Required		Required		Required

ECE 5140 - Measurement and Evaluation in Early Childhood Education.	Required		Required		Required		Required
ECE 6010 - Literacy and Mathematics K-2.	Required	Required	Required	Required*	Required*		
ECE 5200 - Screening and Assessment of Young Children.		Required	Required	Required	Required	Required	Required
ECE 6200 - Early Intervention Strategies.		Required	Required	Required	Required	Required	Required
ECE 6911 - Practicum in Early Childhood Education.	Required						
ECE 6910 - Practicum in Infancy.		Required	Required	Required	Required	Required	Required
ECE 6912 - Practicum: Early Childhood Special Education. Preschool Practicum		Required	Required	Required	Required	Required	Required
ECE 6914 - Primary Practicum in Early		Required	Required	Required	Required	Required	Required

Childhood Special Education.							
<b>Total Semester Hours</b>	<b>40</b>	<b>40</b>	<b>49</b>	<b>25</b>	<b>40</b>	<b>25</b>	<b>40</b>
<b>Comprehensive Exam</b>	Required		Required		Required		Required
<b>PLACE Exam #27</b>		Required	Required	Required	Required	Required	Required
				* choose one	* choose one	* choose two	* choose two
					** choose two		** choose two

## Endorsement

# Early Childhood Special Education Specialist Endorsement

## Early Childhood Education

**Office:** Lawrence Street Center, 701

**Telephone:** 303-315-6300

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**Web site:** [www.ucdenver.edu/education](http://www.ucdenver.edu/education)

## Faculty

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- learning approaches with young children
- measurement and evaluation
- basic statistics/research methods
- multicultural education
- research and current issues
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- working collaboratively with parents and families
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- intervention strategies with infants and preschoolers
- behavior management
- working as a member of the transdisciplinary team
- cognitive and socio-emotional development and disorders
- treatment of children who have neurological impairment and chronic illness
- challenging behaviors and autism

## **Program Requirements**

Semester Hour Requirements

Master's degree in ECE: 40 semester hours

ECSE specialist license: 40 semester hours

Master's degree plus ECSE specialist license: 49 semester hours

Master's degree plus ECSE specialist added endorsement: 40 semester hours

ECSE specialist added endorsement: 25 semester hours

## Fieldwork and Practicum Requirements

The master's degree in early childhood education includes a total of 425 hours of required fieldwork/practica. Approximately 200 hours of fieldwork are associated with course assignments; 225 hours of intense, culminating practica occur toward the end of the second year of study. Students completing the MA program take a written comprehensive exam (take home) during the final semester of their program (concurrently with courses at the end of the program sequence).

For the master's degree in early childhood education plus the ECSE specialist initial license, a total of 800 hours of fieldwork/practica is required. Approximately 290 hours of fieldwork are associated with course assignments; 510 hours of intense, culminating practica occur toward the end of the second year of study. Students seeking an added endorsement in ECSE specialist also complete 510 hours of practicum experiences.

Nine semester hours can be transferred for the master's degree; 15 semester hours can be transferred for the ECSE specialist license. These credits include courses taken through continuing education, from other institutions or as a nondegree student at the University of Colorado Denver before the term officially admitted.

## Plans of Study

The following table delineates course work and program completion requirements for the MA degree and ECSE specialist license through various program options.

<b>ECE Program Options Plans of Study</b>	MA in ECE	ECSE Specialist License	MA in ECE and ECSE Specialist License	ECSE Specialist Endorsement for those holding Elementary or ECE License	MA in ECE and ECSE Specialist Endorsement for those holding Elementary or ECE License	ECSE Specialist Endorsement for those holding Special Education License	MA in ECE and ECSE Specialist Endorsement for those holding Special Education license
<b>Course</b>							
EPSY 5100 - Advanced Child Growth	Required	Required	Required				



Young Children.							
ECE 5010 - Curriculum and Program Development in Early Childhood Education.	Required	Required	Required	Required *	Required *	Required	Required
ECE 5060 - Working with Parents and Families.	Required	Required	Required		Required **		Required **
ECE 5040 - Administrative Seminar.	Required	Required	Required		Required **		Required **
ECE 5202 - Stress, Violence, and Behavior Challenges in Young Children's Lives.	Required				Required **		Required **
ECE 6690 - Seminar: Research and Current Issues in Early Childhood Education.	Required		Required		Required		Required
ECE 5140 - Measurement and Evaluation in Early Childhood Education.	Required		Required		Required		Required

ECE 6010 - Literacy and Mathematics K-2.	Required	Required	Required	Required*	Required*		
ECE 5200 - Screening and Assessment of Young Children.		Required	Required	Required	Required	Required	Required
ECE 6200 - Early Intervention Strategies.		Required	Required	Required	Required	Required	Required
ECE 6911 - Practicum in Early Childhood Education.	Required						
ECE 6910 - Practicum in Infancy.		Required	Required	Required	Required	Required	Required
ECE 6912 - Practicum: Early Childhood Special Education. Preschool Practicum		Required	Required	Required	Required	Required	Required
ECE 6914 - Primary Practicum in Early Childhood Special Education.		Required	Required	Required	Required	Required	Required
<b>Total Semester Hours</b>	<b>40</b>	<b>40</b>	<b>49</b>	<b>25</b>	<b>40</b>	<b>25</b>	<b>40</b>

<b>Comprehensive Exam</b>	Required		Required		Required		Required
<b>PLACE Exam #27</b>		Required	Required	Required	Required	Required	Required
				* choose one	* choose one	* choose two	* choose two
					** choose two		** choose two

## License

# Early Childhood Special Education Specialist Licensure

## Early Childhood Education

**Office:** Lawrence Street Center, 701

**Telephone:** 303-315-6300

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**E-mail:** [education@ucdenver.edu](mailto:education@ucdenver.edu)

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The early childhood accomplished teacher focus and the early childhood special education focus share course content in:

- literacy development and disorders
- child growth and development, differences and disorders
- learning approaches with young children
- measurement and evaluation
- basic statistics/research methods
- multicultural education
- research and current issues
- early childhood curriculum and program development for inclusive classrooms
- working collaboratively with parents and families
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The early childhood special education program provides specialized preparation in:

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- intervention strategies with infants and preschoolers
- behavior management
- working as a member of the transdisciplinary team
- cognitive and socio-emotional development and disorders
- treatment of children who have neurological impairment and chronic illness
- challenging behaviors and autism

## **Program Requirements**

### Semester Hour Requirements

Master's degree in ECE: 40 semester hours

ECSE specialist license: 40 semester hours

Master's degree plus ECSE specialist license: 49 semester hours

Master's degree plus ECSE specialist added endorsement: 40 semester hours

ECSE specialist added endorsement: 25 semester hours

## **Fieldwork and Practicum Requirements**

The master's degree in early childhood education includes a total of 425 hours of required fieldwork/practica. Approximately 200 hours of fieldwork are associated with course assignments; 225 hours of intense, culminating practica occur toward the end of the second year of study. Students completing the MA program take a written comprehensive exam (take home) during the final semester of their program (concurrently with courses at the end of the program sequence).

For the master's degree in early childhood education plus the ECSE specialist initial license, a total of 800 hours of fieldwork/practica is required. Approximately 290 hours of fieldwork are associated with course assignments; 510 hours of intense, culminating practica occur toward the end of the second year of study. Students seeking an added endorsement in ECSE specialist also complete 510 hours of practicum experiences.

Nine semester hours can be transferred for the master's degree; 15 semester hours can be transferred for the ECSE specialist license. These credits include courses taken through continuing education, from other institutions or as a nondegree student at the University of Colorado Denver before the term officially admitted.

## Plans of Study

The following table delineates course work and program completion requirements for the MA degree and ECSE specialist license through various program options.

<b>ECE Program Options Plans of Study</b>	<b>MA in ECE</b>	<b>ECSE Specialist License</b>	<b>MA in ECE and ECSE Specialist License</b>	<b>ECSE Specialist Endorsement for those holding Elementary or ECE License</b>	<b>MA in ECE and ECSE Specialist Endorsement for those holding Elementary or ECE License</b>	<b>ECSE Specialist Endorsement for those holding Special Education License</b>	<b>MA in ECE and ECSE Specialist Endorsement for those holding Special Education license</b>
<b>Course</b>							
EPSY 5100 - Advanced Child Growth and Development.	Required	Required	Required				
REM 5100 - Basic Statistics.	Required		Required		Required		Required

ECE 5000 - The Early Childhood Profession.	Require d	Require d	Required	Required	Required	Required	Required
ECE 6100 - Medical and Physiological Aspects of Developmenta l Disabilities.	Require d	Require d	Required	Required	Required	Required	Required
ECE 5020 - Approaches to Young Children's Learning.	Require d	Require d	Required		Required **	Required *	Required **
ECE 5070 - Cognitive, Social, Emotional Development and Disorders in Young Children. <b>or</b> ECE 5202 - Stress, Violence, and Behavior Challenges in Young Children's Lives.		Require d	Required	Required	Required	Required *	Required *
ECE 5080 - Language and Literacy in Young Children.	Require d	Require d	Required	Required	Required	Required *	Required*
ECE 5010 - Curriculum and Program Development in Early	Require d	Require d	Required	Required *	Required *	Required	Required

Childhood Education.							
ECE 5060 - Working with Parents and Families.	Required	Required	Required		Required **		Required **
ECE 5040 - Administrative Seminar.	Required	Required	Required		Required **		Required **
ECE 5202 - Stress, Violence, and Behavior Challenges in Young Children's Lives.	Required				Required **		Required **
ECE 6690 - Seminar: Research and Current Issues in Early Childhood Education.	Required		Required		Required		Required
ECE 5140 - Measurement and Evaluation in Early Childhood Education.	Required		Required		Required		Required
ECE 6010 - Literacy and Mathematics K-2.	Required	Required	Required	Required*	Required*		
ECE 5200 - Screening and Assessment of		Required	Required	Required	Required	Required	Required

Young Children.							
ECE 6200 - Early Intervention Strategies.		Required	Required	Required	Required	Required	Required
ECE 6911 - Practicum in Early Childhood Education.	Required						
ECE 6910 - Practicum in Infancy.		Required	Required	Required	Required	Required	Required
ECE 6912 - Practicum: Early Childhood Special Education. Preschool Practicum		Required	Required	Required	Required	Required	Required
ECE 6914 - Primary Practicum in Early Childhood Special Education.		Required	Required	Required	Required	Required	Required
<b>Total Semester Hours</b>	<b>40</b>	<b>40</b>	<b>49</b>	<b>25</b>	<b>40</b>	<b>25</b>	<b>40</b>
<b>Comprehensive Exam</b>	Required		Required		Required		Required
<b>PLACE Exam #27</b>		Required	Required	Required	Required	Required	Required
				* choose one	* choose one	* choose two	* choose two

					** choose two		** choose two
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## Master of Arts

# Early Childhood Education MA

## Early Childhood Education

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- learning approaches with young children
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- cognitive and socio-emotional development and disorders
- treatment of children who have neurological impairment and chronic illness
- challenging behaviors and autism

## **Program Requirements**

### Semester Hour Requirements

Master's degree in ECE: 40 semester hours

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Master's degree plus ECSE specialist license: 49 semester hours

Master's degree plus ECSE specialist added endorsement: 40 semester hours

ECSE specialist added endorsement: 25 semester hours

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Developmental Disabilities.							
ECE 5020 - Approaches to Young Children's Learning.	Required	Required	Required		Required **	Required *	Required **
ECE 5070 - Cognitive, Social, Emotional Development and Disorders in Young Children. <b>or</b> ECE 5202 - Stress, Violence, and Behavior Challenges in Young Children's Lives.		Required	Required	Required	Required	Required *	Required *
ECE 5080 - Language and Literacy in Young Children.	Required	Required	Required	Required	Required	Required *	Required*
ECE 5010 - Curriculum and Program Development in Early Childhood Education.	Required	Required	Required	Required *	Required *	Required	Required
ECE 5060 - Working with Parents and Families.	Required	Required	Required		Required **		Required **

ECE 5040 - Administrative Seminar.	Require d	Require d	Required		Required **		Required **
ECE 5202 - Stress, Violence, and Behavior Challenges in Young Children's Lives.	Require d				Required **		Required **
ECE 6690 - Seminar: Research and Current Issues in Early Childhood Education.	Require d		Required		Required		Required
ECE 5140 - Measurement and Evaluation in Early Childhood Education.	Require d		Required		Required		Required
ECE 6010 - Literacy and Mathematics K-2.	Require d	Require d	Required	Required*	Required*		
ECE 5200 - Screening and Assessment of Young Children.		Require d	Required	Required	Required	Required	Required
ECE 6200 - Early Intervention Strategies.		Require d	Required	Required	Required	Required	Required

ECE 6911 - Practicum in Early Childhood Education.	Required						
ECE 6910 - Practicum in Infancy.		Required	Required	Required	Required	Required	Required
ECE 6912 - Practicum: Early Childhood Special Education. Preschool Practicum		Required	Required	Required	Required	Required	Required
ECE 6914 - Primary Practicum in Early Childhood Special Education.		Required	Required	Required	Required	Required	Required
<b>Total Semester Hours</b>	<b>40</b>	<b>40</b>	<b>49</b>	<b>25</b>	<b>40</b>	<b>25</b>	<b>40</b>
<b>Comprehensive Exam</b>	Required		Required		Required		Required
<b>PLACE Exam #27</b>		Required	Required	Required	Required	Required	Required
				* choose one	* choose one	* choose two	* choose two
					** choose two		** choose two

## Educational Psychology

# Educational Psychology MA

**Office:** Lawrence Street Center, 701

**Telephone:** 303-315-6300

**Fax:** 303-315-6311

**E-mail:** [education@ucdenver.edu](mailto:education@ucdenver.edu)

**Web site:** [www.ucdenver.edu/education](http://www.ucdenver.edu/education)

## Faculty

Information about educational psychology faculty is available online at [www.ucdenver.edu/education](http://www.ucdenver.edu/education).

## Master's Degree

The MA program in educational psychology prepares students to facilitate the teaching/learning process. Thus, many students pursue the degree to enhance their skills as professional classroom teachers. The degree also provides skills necessary for a variety of roles where knowledge of learning, development, motivation, and research is essential; examples would include teaching at the community college level, teaching adults and conducting program evaluation. Other students seek the MA as preparation for advanced study in educational psychology.

Note, too, that many students in the school's initial professional teacher education program—as well as interns in the alternative teacher licensure programs conducted by the Stanley British Primary School, the Boulder Journey School and Friends' School—also seek the MA degree in the Division of Educational Psychology.

## Areas of Study

Four major areas of concentration are available—human learning, child growth and development, research and evaluation and individualized programs (such as adult learning). Regardless of the concentration area selected, all students must:

- take 9 semester hours of core courses required by the School of Education & Human Development
- demonstrate competence in educational psychology by successfully completing a minimum of 36 semester hours of relevant course work (9 of which are the core)
- complete either a master's thesis (4 semester hours, MA Plan I) or an independent study project (3 to 4 semester hours, MA Plan II), the latter involving the collection of data bearing on a given problem and its analysis and interpretation in writing
- perform satisfactorily on a written comprehensive examination (typically during the last term enrolled in regular courses)
- complete the degree on a timely basis, usually within three years

To stay current with the needs of a changing industry, faculty in the educational psychology program may choose to change curriculum requirements at semester for incoming students to the program. For the 2009-2010 term, please refer to the most current version of the handbook for academic requirements for this program.

EPSY Student Handbook

## **Research and Evaluation Methodology**

**Office:** Lawrence Street Center, 701

**Telephone:** 303-315-6300

**Fax:** 303-315-6311

**E-mail:** [education@ucdenver.edu](mailto:education@ucdenver.edu)

**Web site:** [www.ucdenver.edu/education](http://www.ucdenver.edu/education)

## **Faculty**

To find information about faculty in this program visit [www.ucdenver.edu/education](http://www.ucdenver.edu/education).

## **Emphasis Track**

There is a REM emphasis track within the educational psychology master's degree program; students can select either an evaluation/data analysis focus or an assessment focus. This area also provides classes to all education graduate programs, offering courses in research methods, evaluation, statistics, analysis, assessment and measurement.

To stay current with the needs of a changing industry, faculty in the educational psychology program may choose to change curriculum requirements at semester for incoming students to the program. For the 2009-2010 term, please refer to the most current version of the handbook for academic requirements for this program.

EPSY Student Handbook

## **Master of Arts**

# **Educational Psychology MA**

**Office:** Lawrence Street Center, 701

**Telephone:** 303-315-6300

**Fax:** 303-315-6311

**E-mail:** [education@ucdenver.edu](mailto:education@ucdenver.edu)

**Web site:** [www.ucdenver.edu/education](http://www.ucdenver.edu/education)

## **Faculty**

Information about educational psychology faculty is available online at [www.ucdenver.edu/education](http://www.ucdenver.edu/education).

## Master's Degree

The MA program in educational psychology prepares students to facilitate the teaching/learning process. Thus, many students pursue the degree to enhance their skills as professional classroom teachers. The degree also provides skills necessary for a variety of roles where knowledge of learning, development, motivation, and research is essential; examples would include teaching at the community college level, teaching adults and conducting program evaluation. Other students seek the MA as preparation for advanced study in educational psychology.

Note, too, that many students in the school's initial professional teacher education program—as well as interns in the alternative teacher licensure programs conducted by the Stanley British Primary School, the Boulder Journey School and Friends' School—also seek the MA degree in the Division of Educational Psychology.

## Areas of Study

Four major areas of concentration are available—human learning, child growth and development, research and evaluation and individualized programs (such as adult learning). Regardless of the concentration area selected, all students must:

- take 9 semester hours of core courses required by the School of Education & Human Development
- demonstrate competence in educational psychology by successfully completing a minimum of 36 semester hours of relevant course work (9 of which are the core)
- complete either a master's thesis (4 semester hours, MA Plan I) or an independent study project (3 to 4 semester hours, MA Plan II), the latter involving the collection of data bearing on a given problem and its analysis and interpretation in writing
- perform satisfactorily on a written comprehensive examination (typically during the last term enrolled in regular courses)
- complete the degree on a timely basis, usually within three years

To stay current with the needs of a changing industry, faculty in the educational psychology program may choose to change curriculum requirements at semester for incoming students to the program. For the 2009-2010 term, please refer to the most current version of the handbook for academic requirements for this program.

EPSY Student Handbook

## Research and Evaluation Methodology

**Office:** Lawrence Street Center, 701

**Telephone:** 303-315-6300

**Fax:** 303-315-6311

**E-mail:** [education@ucdenver.edu](mailto:education@ucdenver.edu)

**Web site:** [www.ucdenver.edu/education](http://www.ucdenver.edu/education)

## Faculty

To find information about faculty in this program visit [www.ucdenver.edu/education](http://www.ucdenver.edu/education).

## Emphasis Track

There is a REM emphasis track within the educational psychology master's degree program; students can select either an evaluation/data analysis focus or an assessment focus. This area also provides classes to all education graduate programs, offering courses in research methods, evaluation, statistics, analysis, assessment and measurement.

To stay current with the needs of a changing industry, faculty in the educational psychology program may choose to change curriculum requirements at semester for incoming students to the program. For the 2009-2010 term, please refer to the most current version of the handbook for academic requirements for this program.

EPSY Student Handbook

## Doctoral Studies in Education

Two doctoral programs within the School of Education & Human Development are currently in development: an EdD in leadership for educational equity and a PhD in educational studies and research. Please visit the Web site at [www.ucdenver.edu/education/doctorate](http://www.ucdenver.edu/education/doctorate) for more information.

## Doctor of Philosophy

# Educational Studies and Research PhD

► Graduate School Rules apply to this program

**Office:**

Lawrence Street Center, 701

**Telephone:**

303-315-6300

**Fax:**

303-315-6311

**E-mail:**

[education@ucdenver.edu](mailto:education@ucdenver.edu)

**Web site:**

[www.ucdenver.edu/education/doctorate](http://www.ucdenver.edu/education/doctorate)

At catalog publication time, the doctor of philosophy (PhD) in educational studies and research was in development and under review for approval at the university system level. The program is designed for those interested in pursuing a career as a researcher or faculty member in a university or other research-based organization. Please find updated information and details at the above Web site.

## Doctor of Education

# Leadership for Educational Equity EdD

► Graduate School Rules apply to this program

**Office:** Lawrence Street Center, 701

**Telephone:** 303-315-6300

**Fax:** 303-315-6311

**E-mail:** [education@ucdenver.edu](mailto:education@ucdenver.edu)

**Web site:** [www.ucdenver.edu/education/doctorate](http://www.ucdenver.edu/education/doctorate)

At catalog publication time, the doctor of education (EdD) in leadership for educational equity was in development and under review for approval. The program is primarily designed for the professional educator with an interest in being a leader in P-12 schools or community-based educational organizations. Please find updated information and details at the above Web site.

# College of Engineering and Applied Science

**Dean**

Nien-Yin Chang

**Assistant Dean**

Paul Rakowski

**Director of Community Relations**

Marilee DeGoede

## Contact

**Office**

**Mailing Address**

**Engineering Student Services/**

North Classroom, 3024	College of Engineering and Applied	<b>Academic Advising</b>
1200 Larimer Street, 3rd Floor	Science	303-556-4768
Telephone: 303-556-2870	Campus Box 104	
Fax: 303-556-2511	P.O. Box 173364	
www.cudenver.edu/engineer	Denver, CO 80217-3364	

## Application Deadlines

### Undergraduate

*Fall*—August 1

*Spring*—December 1

*Summer*—May 1

### Graduate Programs

#### Civil Engineering

##### Domestic

*Fall*: master's—July 15

doctoral—May 15

*Spring*: master's—  
December 1

doctoral—October 1

*Summer*: master's—  
March 15

doctoral—January 15

##### International

*Fall*: master's—June 15

doctoral—April 15

*Spring*: master's—November  
1

doctoral—September 1

*Summer*: master's—February  
15

doctoral—December 15

#### Computer Science and Engineering

Rolling Admissions

#### Electrical Engineering

Rolling Admissions

#### Mechanical Engineering

*Fall*—April 1

*Spring*—October 1

## Overview

*Continuing an 80-year tradition, the College of Engineering and Applied Science on the Downtown Campus of the University of Colorado Denver (UC Denver) meets the needs of the Denver metropolitan area by providing nationally accredited engineering education in a flexible format that suits both students and employers. UC Denver is the only institution in the area*

*where the working individual can earn both undergraduate and graduate degrees in engineering entirely through evening studies. Recognizing the importance for students to pursue professional studies and related employment simultaneously, the college offers undergraduate and graduate degree programs in civil engineering, mechanical engineering, electrical engineering and computer science and engineering through evening studies or through a more traditional schedule of day classes. As a practicing engineer, you can improve and update your professional capabilities and earn a graduate degree. Or, through our interdisciplinary master of engineering degree, you can obtain graduate education in management, computer science, behavioral science or other areas together with new engineering skills in your field. We also participate in an interdisciplinary master of science in environmental science.*

A listing of the fields in which engineers work would have hundreds of entries. The following list gives only a brief summary of the fields available at UC Denver.

**Civil engineering** offers an interesting and challenging career in the design and construction of buildings, bridges, dams, aqueducts and other structures; in transportation systems including highways, canals, pipelines, airports, rapid transit lines, railroads and harbor facilities; in the distribution of water and the regulation of rivers; in the development of water resources for urban use, industry and land reclamation; in the control of water quality through water purification and proper waste treatment; in the construction and contracting industry; and in the problems concerned with our physical environment and the growth of cities.

**Computer science and engineering** offers graduates the solid foundation needed for jobs in computing and information technologies. Career paths in computer science involve designing and implementing software, devising new applications of computers and developing effective ways to solve computing problems. Computer engineers design and develop computer hardware and supervise its manufacture and installation.

**Electrical engineering** offers professional careers that include research in development of new electrical or electronic devices, instruments or products; design of equipment or systems; production and quality control of electrical products; and sales or management for private industry or government. There are numerous specialties within electrical engineering. Among them are the design and application of computer systems and digital engineering; electromagnetic fields and microwave devices; control systems; communication theory and signal processing; electrical integrated circuits and electron devices; and energy and power systems.

**Mechanical engineering** offers a wide range of interesting and challenging career opportunities in research, design, development, manufacturing, testing and marketing for either private industry or government. Mechanical engineers help develop a wide range of products such as engines, transmissions, compressors, pumps, computer disk drives, oil field drilling rigs, missiles, space satellites, earth-moving equipment, container-manufacturing machines, medical equipment and many other products encountered in daily life.

## **College of Engineering and Applied Science Educational Goals**

The College of Engineering and Applied Science has established the following goals and objectives for undergraduate education:

- successful completion of the fundamental core courses, primarily lower division, in mathematics and the physical sciences
- successful completion of the required upper-division courses in engineering science, analysis and design
- successful completion of real-world engineering design projects that require integration of engineering, economic and social skills
- successful completion of a series of humanities and social science courses that introduce the student to societal problems and historical perspectives
- evidence, through close student/faculty contact, of development of professionalism, ethics and concern for the multifaceted human element of engineering
- evidence, from successful completion of a full engineering curriculum, of the ability to maintain professional competency through lifelong learning
- evidence, through successful completion of a series of communications oriented courses and project presentations, of an ability to communicate effectively with professionals and lay persons alike

## **Accreditation**

The undergraduate degree programs in civil, computer science and engineering, electrical and mechanical engineering programs are accredited by the Engineering Accreditation Commission (EAC) of the Accreditation Board for Engineering and Technology (ABET).

## **Availability of Degree Programs**

UC Denver will accept for matriculation only those prospective engineering students who designate a degree program awarded by the UC Denver College of Engineering and Applied Science. Students desiring degree programs other than those named above must apply to the campus awarding the degree. In some cases, the university campus accepting the student may grant permission to take courses on another University of Colorado campus, subject to enrollment limitations. In such cases, the engineering department of the admitting campus will counsel the student in the preparation of course schedules.

## **Nondegree Students**

Nondegree students may apply 12 semester hours of course work (or up to 18 if taken in one semester) toward a bachelor's degree in engineering from UC Denver. Nondegree graduate students may apply 9 semester hours of graduate-level course work toward a master's degree in engineering from UC Denver.

## **Summer Courses**

Summer session courses are offered for regular students and those who have academic deficiencies. Courses are also offered for high school graduates who wish to enter as freshmen and need some additional preparatory work. For some students, there are advantages in starting their college careers during the summer session. Some required freshman and sophomore courses and many elective courses are offered at UC Denver during the summer. The summer session gives students a head start and enables them to take a lighter load during the fall semester or take additional courses to enrich their programs.

## **Computing**

The College of Engineering and Applied Science encourages all students to develop their skills in using the computer as a tool, not only for solving technical problems but for use in all other facets of their careers. Students are encouraged to explore computer courses other than the fundamental programming course required in their curriculum.

## **Internships and Cooperative Education**

Internships and cooperative education are a way for students to gain professional experience while studying at UC Denver. Many internship and co-op positions lead to permanent employment opportunities upon graduation. Please see the "Career Center" section of the Campus Life chapter in this catalog or contact the Career Center at 303-556-2250 for information on the specific eligibility requirements. Information can also be obtained by contacting the Engineering Office of the Dean at 303-556-4768.

## **Scholarships**

The college receives an annual allocation of state funds for Dean's Scholarships; these funds are awarded to students who apply and meet scholarship and community service criteria. Additional funds for scholarships and loans are obtained through contributions from alumni and friends. Enrollment in the College of Engineering and Applied Science makes the student eligible for these scholarships. Scholarship application forms are available in the college. Students must apply by April 1 for summer or fall semester and by October 1 for spring semester of each year for consideration. Students can apply for all industry scholarships and Dean's Scholarships using the general application form. Scholarship application forms require information about the applicant's participation in school related activities, community activities and work. Dean's Scholarship applicants must qualify for in-state tuition and have at least a 3.0 GPA, but do not need to show unmet financial need. All recipients must be registered for six or more hours in the semester for which the awards are made.

The College of Engineering and Applied Science also offers scholarships to new, financially eligible students who are enrolled full time as an engineering major through its Recruiting Engineers to ACHieve (REACH) program. Through this National Science Foundation program, scholarship recipients can receive up to \$7,600 their first year (depending on need) and up to \$3,800 the second year. Detailed program information is online at [www.cudenver.edu/REACH](http://www.cudenver.edu/REACH). For more scholarship information, go to [www.cudenver.edu/engineer](http://www.cudenver.edu/engineer) under "Scholarships."

For additional information on other types of financial aid, consult the Tuition, Fees and Financial Aid chapter of this catalog.

## Research Centers

### Transportation Research Center

**Director:** Bruce Janson

**Telephone:** 303-556-2831

The Transportation Research Center (TRC) involves both students and faculty on the Downtown Campus in a range of education and research activities. The TRC works on projects in collaboration with other departments and colleges such as business, urban planning and public affairs. TRC projects address local, state, national and international concerns with funding from federal, state, local or private sources.

Some focuses of the Transportation Research Center are transportation modeling; traffic monitoring technologies and data analysis techniques; transportation planning and travel demand forecasting for both person and freight movements; traffic engineering and control; facility design and management; use of geographic information systems in transportation; environmental impact assessment; transportation investment decision analysis, including cost-benefit analyses and cross-subsidization issues; and accident studies. Several studies on advanced system development involve partnerships with Colorado's high-tech industry.

### Facility for Advanced Spatial Technology

**GIS Lab Coordinator:** M. Sue Hawkins

**Affiliated Faculty:** Deborah Thomas, College of Liberal Arts and Sciences; Lynn E. Johnson, College of Engineering and Applied Science; Brian Muller, College of Architecture and Planning

**Telephone:** 303-556-4172

**Web site:** <http://fast.cudenver.edu/>

The Facility for Advanced Spatial Technology (FAST) is a coordinated facility of the Colleges of Architecture and Planning, Engineering and Applied Science and Liberal Arts and Sciences. The FAST is comprised of computer clients and servers, GIS and related software and classroom and research space. It is the campus interdisciplinary center of GIS related activities that is used by students, faculty and outside community groups seeking to develop GIS techniques for various applications.

The FAST provides GIS courses and degree programs for students of varying backgrounds, learning styles and locations. The programs give students modern proficiencies in applying GIS techniques to analyze, plan and design natural and built environments. Students can complete these programs entirely online.

### Colorado Advanced Photonics Technology Laboratory

**Director:** Larry Scherrer  
**Telephone:** 303-556-4175  
**Web site:** [www.captcenter.org](http://www.captcenter.org)

The Colorado Advanced Photonics Technology (CAPT) Laboratory is a state-of-the-art measurement and fabrication research center. The four major areas of concentration are optical characterization and metrology, photonics, prototype packaging and photolithography and environmental testing and evaluation.

The CAPT Laboratory provides cutting-edge technical services to corporate and educational partners. It is the only photonics resource in Colorado that can deliver surface roughness measurements, optical testing, contract measurement services, prototyping, precision metrology, environmental testing, use of photonics equipment and facilities and training. The CAPT Laboratory provides access to advanced facilities and equipment, including \$5 million in equipment for material characterization, prototype packaging, measuring, inspection and environmental testing.

## **Center for Geotechnical Engineering Science**

**Director:** N. Y. Chang  
**Associate Director:** Brian Brady  
**Telephone:** 303-556-2362

The Center for Geotechnical Engineering Science was formed to advance the understanding of the safety, reliability, performance and environmental impact of engineered geotechnical structures. Resolution of geotechnical and environmental remediation problems are addressed through research that is sponsored by public funding agencies and private industry, both national and international. The center serves as a vehicle for technology transfer. Cooperative research with other universities in Colorado, the United States and around the world is welcomed. The center includes research on geotechnical stability, rock engineering, geoenvironmental engineering and expansive soils.

The Expansive Soil Research Laboratory provides leadership in the advancement of technology needed to mitigate damage from expansive soils in Colorado. Studies cover national and international problems, as expansive soils underlie more than one-third of the earth's land surface. In the United States, these materials are prevalent in the southern, western and Rocky Mountain states. As development takes place in these areas, structures may experience damaging effects of expansive soil resulting in the loss of millions of dollars annually. The current frequency and severity of damage clearly demonstrate that important deficiencies persist in our understanding and application of the current technology in engineering designs. The Expansive Soil Research Laboratory identifies and conducts research aimed at better understanding of the mechanisms and processes that characterize expansive soil; promotes education and training for engineering students and professionals, the construction industry and the public; assists consulting industries and governments with realistic guidelines on design, construction and operation of facilities built on expansive soils; and provides a database and clearinghouse for information and technology transfer.

## **Continuing Engineering Education Program**

**Program Manager:** Heidi Utt

**Telephone:** 303-556-4907

**Web site:** [www.cudenver.edu/ceep](http://www.cudenver.edu/ceep)

Continuing Engineering Education Program (CEEP) courses are offered at convenient times and locations, are taught by academic and industry professionals, and are responsive to changing technologies. By addressing topics for both engineers and non-engineers, the curriculum supplies the knowledge, skills, and competitive edge required in many professional fields. Moreover, CEEP students finish with ready-to-apply expertise. Program disciplines encompass civil, electrical, mechanical, environmental, systems, information technology, project management and more, with a focus on key industry certifications, such as the FE, PE, CAPM, PMP, CCNA, SCJP and others. Most CEEP offerings are non-credit Continuing Education Unit earning courses, although some courses are available for graduate credit.

## **Other University Campuses**

### **University of Colorado at Boulder**

Six engineering departments are located on the campus of the University of Colorado at Boulder. Complete BS, MS and PhD degree programs are offered by the Department of Aerospace Engineering Sciences; the Department of Chemical Engineering; the Department of Civil, Environmental and Architectural Engineering; the Department of Computer Science; the Department of Electrical and Computer Engineering; and the Department of Mechanical Engineering. Undergraduate and graduate degrees also are offered in applied mathematics and engineering physics. The programs at the Boulder campus are primarily oriented to the full-time student who can attend day classes.

### **University of Colorado at Colorado Springs**

Three engineering departments—computer science; electrical and computer engineering; and mechanical and computer engineering—are located on the campus of the University of Colorado at Colorado Springs (UCCS). Complete BS degree programs are offered in computer engineering, computer science, electrical engineering and mechanical engineering; bachelor of innovation programs are offered in computer science, computer science security, electrical engineering and game design and development. Master of engineering programs are offered in information assurance, software engineering and space operations; and MS and PhD programs are awarded in computer science, electrical engineering and mechanical engineering.

## **General Requirements for Undergraduate Admission**

The student must meet the admission requirements described in the Information for Undergraduate Students and Information for Graduate Students chapters of this catalog and of the College of Engineering and Applied Science in which the degree program selected by the student is offered.

Beginning undergraduate students in engineering should be prepared to start analytic geometry-calculus. No credit toward any degree in engineering will be given for algebra, trigonometry or

precalculus mathematics (MATH 1110, 1120 and 1130). (These courses are offered to allow a student to make up deficiencies.) Students who question the adequacy of their precollege background in mathematics should contact the Department of Mathematics office in the College of Liberal Arts and Sciences. Placement tests covering precalculus mathematics are required of new freshmen to select the appropriate beginning mathematics course.

To be prepared for the type of mathematics courses that will be taught, the student must be competent in the basic ideas and skills of ordinary algebra, geometry and plane trigonometry. These include such topics as the fundamental operations with algebraic expressions, exponents and radicals, fractions, simple factoring, solution of linear and quadratic equations, graphical representation, simple systems of equations, complex numbers, the binomial theorem, arithmetic and geometric progressions, logarithms, the trigonometric functions and their use in triangle solving and simple applications, and the standard theorems of geometry, including some solid geometry. It usually takes eight semesters to cover this material adequately in high school.

Refer to the “Minimum Academic Preparation Standards (MAPS)” and “Admission Requirements for Freshmen” sections in the Information for Undergraduate Students chapter of this catalog for a list of high school subjects required for admission to the College of Engineering and Applied Science.

## **Former Students**

Former students must meet the readmission requirements outlined in the Information for Undergraduate Students and Information for Graduate Students chapters of this catalog. Students who interrupt their degree program for more than one academic year will be required to follow the degree program in effect at the time of their readmission to the college. Repetition of course work may be necessary because of the interruption; readmitted applicants will be evaluated on an individual basis. Repeated courses must be taken for no credit (NC). See the “Repetition of Courses” policy under “Academic Policies” in this chapter of the catalog.

## **Intercampus Transfer**

Transfers between campuses of the University of Colorado should be carefully planned to avoid loss of academic credit. Courses and credits required for engineering degrees vary from campus to campus; therefore, students should plan as far ahead as possible. The campus advisor can help choose the right courses. Such planning should also include contacting the engineering department to which the student plans to transfer at least one semester before the transfer is planned. The transfer student must have at least a 2.0 GPA for 30 hours of credit toward an engineering degree to be eligible to transfer. A higher GPA may be required to transfer directly into the College of Engineering and Applied Science. In general, calculus, physics and chemistry courses will transfer for full credit. In addition, 12 semester hours of humanities and social sciences electives will usually transfer for full credit. Fundamental computing courses may be unique by campus and should be checked with the campus to which the student is transferring. Any minimum academic preparation standards (MAPS) deficiencies should be eliminated before transferring.

## Transfer Agreements

The College of Engineering and Applied Science has formal transfer agreements with the following Denver metro-area community colleges:

Arapahoe Community College (Littleton)—303-794-1550

Community College of Aurora—303-360-4790

Community College of Denver—303-556-2600

Front Range Community College (Westminster)—303-466-8811

Red Rocks Community College (Lakewood)—303-988-6160

These transfer agreements provide an opportunity for potential engineering students to complete courses applicable to an engineering program offered at UC Denver. Students interested in a transfer should contact Engineering Student Services at 303-556-4768 and the respective community college counseling office at the phone number indicated above.

## Transfer Students

Students applying for transfer from other accredited collegiate institutions will be considered for admission on an individual basis if they meet the requirements outlined in the Information for Undergraduate Students chapter of this catalog and have successfully completed a year each of calculus and physics (calculus-based).

Applications to transfer from another college on the Downtown Campus to the College of Engineering and Applied Science will be considered on an individual basis by the Office of the Dean, if the student's prior academic record includes successful completion of a year each of calculus and calculus-based physics and the student's cumulative GPA is 2.75 or higher.

## Transfer Credit

Refer to the Information for Undergraduate Students and Information for Graduate Students chapters of this catalog for descriptions of universitywide policies on transfer credit.

After a prospective transfer student has made application and submitted official transcripts to the University of Colorado Office of Admissions, that office issues an applicant transfer credit evaluation listing those courses that are acceptable by university standards for transfer. A copy of this evaluation is sent to the student and to the Office of the Dean by Office of Admissions processing and is made a part of the permanent record. An advisor will use this form to indicate which courses and credit hours listed are acceptable toward the graduation requirements for the student's degree program. The decisions will be recorded on both the applicant transfer credit evaluation form and the department's study program for BS form, and signed and dated. Both forms are reviewed by the Office of the Dean, and signed and dated. Any modification to the initial evaluation must be by petition, have the recommendation of the transfer advisor and department chair and have approval of the Office of the Dean. All documents will become a part of the student's master file in the Office of the Dean. All transfer credit must be validated by satisfactory achievement in subsequent courses.

*Note:* All requests for consideration of transfer credit and its application toward a degree in engineering must be submitted prior to the student's last two semesters at the Downtown Campus of UC Denver.

## **Nontransferable Credits**

Courses on basic subjects such as mathematics or physics may be acceptable for direct transfer of credit if they were taught as part of an accredited program for all students and were not specifically designated for engineering technology students. Engineering technology courses (courses with technology designations) will not be considered for transfer into an engineering degree program.

Students may seek credit for course work by examination (see "Transfer of College-Level Credit" section of the Information for Undergraduate Students chapter of this catalog).

# **Undergraduate Core Curriculum in Engineering**

The faculty of the College of Arts & Media, the Business School, the College of Engineering and Applied Science and the College of Liberal Arts and Sciences have established a core curriculum for undergraduate students. See the General Information section of this catalog for an overview of the common core concept.

Students graduating from the College of Engineering and Applied Science are required to satisfy the humanities and social sciences and writing portions of their engineering program by taking courses from the UC Denver Core Curriculum.

The intent of the humanities and social sciences component of an engineering program is to provide the student with a coherent and well-structured exploration of a substantive issue or theme appropriate to the engineering profession and/or of interest to the student. The required humanities and social sciences electives must include both breadth and depth, must include advanced-level course work and should be planned in consultation with the advisor. A random selection of lower-division courses will not satisfy the humanities and social sciences elective requirement.

Courses such as accounting, contracts, management, elementary foreign languages, public speaking and technical writing are not acceptable as humanities and social sciences electives.

## **Program Requirements**

### **Social Sciences**

(3 semester hours) Choose one course from any of the following courses: ECON, ENVS, ETST, GEOG, HBSC, P SC, SOC.

- ECON 2012 - Principles of Economics: Macroeconomics: SS1. **Semester Hours: 3**
- ECON 2022 - Principles of Economics: Microeconomics: SS1. **Semester Hours: 3**
- ENVS 1342 - Introduction to Environment and Society: SS2. **Semester Hours: 3**
- ETST 2000 - Introduction to Ethnic Studies: SS3. **Semester Hours: 3**
- GEOG 1102 - World Regional Geography: SS2. **Semester Hours: 3**
- GEOG 1602 - Introduction to Urban Studies: SS2. **Semester Hours: 3**
- GEOG 2202 - Natural Hazards: SS2. **Semester Hours: 3**
- HBSC 2001 - Introduction to Community and Population Health Science: SS3.  
**Semester Hours: 3**
- P SC 1001 - Introduction to Political Science: The Quest for Freedom and Justice: SS1.  
**Semester Hours: 3**
- P SC 1101 - American Political System: SS1. **Semester Hours: 3**
- SOC 1001 - Introduction to Sociology: SS3. **Semester Hours: 3**
- SOC 2462 - Introduction to Social Psychology: SS3. **Semester Hours: 3**

## Humanities

(3 semester hours) Choose one course from any of the following courses: ENGL, ETST, FR, GER, HIST, PHIL, RLST.

- CNST 1000 - China and the Chinese: AH1. **Semester Hours: 3**
- ENGL 1601 - Telling Tales: Narrative Art in Literature and Film: AH2. **Semester Hours: 3**
- ENGL 2600 - Great Works in British and American Literature: AH2. **Semester Hours: 3**
- ETST 2155 - African American History: HI1. **Semester Hours: 3**
- FR 1000 - Introduction to Cultures of the French- Speaking World: AH1. **Semester Hours: 3**
- GER 1000 - Germany and the Germans: AH1. **Semester Hours: 3**
- HIST 1361 - U.S. History to 1876: HI1. **Semester Hours: 3**
- HIST 1362 - U.S. History Since 1876: HI1. **Semester Hours: 3**
- HIST 1381 - Paths to the Present I: HI1. **Semester Hours: 3**
- HIST 1382 - Getting Here: Paths to the Present II: HI1. **Semester Hours: 3**
- PHIL 1012 - Introduction to Philosophy: Relationship of the Individual to the World: AH3.  
**Semester Hours: 3**
- PHIL 1020 - Introduction to Ethics and Society: The Person and the Community: AH3.  
**Semester Hours: 3**
- PHIL 2441 - Logic and Language: AH3. **Semester Hours: 3**
- RLST 1610 - Introduction to Religious Studies: AH3. **Semester Hours: 3**
- RLST 2660 - World Religions: AH3. **Semester Hours: 3**
- SPAN 1000 - Introduction to Cultures of the Spanish Speaking World: AH4. **Semester Hours: 3**

## Arts

(3 semester hours) Choose one course from any of the following courses: FA, PMUS, THTR.

- F A 1001 - Introduction to Art: AH1. **Semester Hours: 3**
- PMUS 1001 - Music Appreciation: AH1. **Semester Hours: 3**
- THTR 1001 - Introduction to Theatre: AH1. **Semester Hours: 3**

## International Perspectives

(3 semester hours) Choose one course from any of the following courses: ENGR, HIST, P SC.

- ENGR 3600 - International Dimensions of Technology and Culture. **Semester Hours: 3**
- P SC 3022 - Introduction to Comparative Politics. **Semester Hours: 3**
- P SC 3042 - Introduction to International Relations. **Semester Hours: 3**

## Cultural Diversity

(3 semester hours) Choose one course from any of the following courses: ANTH, CMMU, ECON, ENGR, ETST, PHIL, PSY, SOC, THTR, HIST, MGMT, P SC, RLST.

- ANTH 3142 - Cultural Diversity in the Modern World. **Semester Hours: 3**
- CMMU 3271 - Communication and Diversity. **Semester Hours: 3**
- ECON 3100 - Economics of Race and Gender. **Semester Hours: 3**
- ENGR 3400 - Technology and Culture. **Semester Hours: 3**
- ETST 3704 - Culture, Racism and Alienation. **Semester Hours: 3**
- ETST 3794 - Ethnic Diversity in American Literature. **Semester Hours: 3**
- HIST 3345 - Immigration and Ethnicity in American History. **Semester Hours: 3**
- MGMT 4100 - Managing Cultural Diversity. **Semester Hours: 3**
- PHIL 3500 - Ideology and Culture: Racism and Sexism. **Semester Hours: 3**
- P SC 3034 - Race, Gender, Law and Public Policy. **Semester Hours: 3**
- P SC 3035 - Political Movements: Race and Gender. **Semester Hours: 3**
- PSY 4485 - Psychology of Cultural Diversity. **Semester Hours: 3**
- RLST 4000 - Religion and Cultural Diversity. **Semester Hours: 3**
- SOC 3020 - Race and Ethnicity in the U.S.. **Semester Hours: 3**
- THTR 3611 - Drama of Diversity. **Semester Hours: 3**

## Behavioral Sciences

(3 semester hours) Choose one course from any of the following courses: ANTH, CMMU, PSY.

- ANTH 1302 - Introduction to Archaeology: SS3. **Semester Hours: 4**
- ANTH 2102 - Culture and the Human Experience: SS3. **Semester Hours: 3**
- CMMU 1011 - Fundamentals of Communication: SS3. **Semester Hours: 3**
- CMMU 1021 - Fundamentals of Mass Communication: SS3. **Semester Hours: 3**

- PSY 1000 - Introduction to Psychology I: SS3. **Semester Hours: 3**
- PSY 1005 - Introduction to Psychology II: SS3. **Semester Hours: 3**

## **Intellectual Competencies\***

(6 semester hours)

- ENGL 1020 - Core Composition I: CO1. **Semester Hours: 3** \*\*
- ENGL 2030 - Core Composition II: CO2. **Semester Hours: 3**

## **Total: 24-25 Hours**

**Please note the above core list does not include mathematics or biological and physical sciences due to the extensive math and physics curricula required by the College of Engineering and Applied Science. Please see the Engineering Student Services advisor for questions.**

\*English 1020 and English 2030 are the only approved composition courses for the UC Denver Core Curriculum.

\*\*English 1020 should be taken the first semester a student is enrolled at UC Denver.

## **Academic Policies**

Refer to the Information for Undergraduate Students and University Policies chapters of this catalog for descriptions of universitywide policies. The following policies apply specifically to students in the College of Engineering and Applied Science.

## **Advanced Placement**

Advanced placement credit may be granted by special examination or by College Entrance Examination Board (CEEB) tests. If the applicant has scored four or five on the CEEB Advanced Placement Examination, credit toward graduation may be awarded. Students who have scored three may be considered for advanced placement by the department concerned. All advanced placement and transfer credit must be validated by satisfactory achievement in subsequent courses in accordance with standard transfer policies of the college.

## **College-Level Examination (CLEP) Credit**

Prospective students may earn college-level credit through the College-Level Examination Program (CLEP) subject examinations, provided that they score at the 50th percentile or above. The Engineering Student Services advisor will advise students of the credits accepted for such courses toward a degree program. CLEP general examinations are not acceptable. (See also "College-Level Examination Program" in the Information for Undergraduate Students chapter of this catalog.)

## **Attendance Regulations**

Successful work in the College of Engineering and Applied Science is dependent upon regular attendance in all classes. Students who are absent should make arrangements with instructors to make up the work missed. Students who for illness or other good reason miss a final examination must notify the instructor or the Office of the Dean no later than the end of the day on which the examination is given. Failure to do so may result in an *F* in the course.

## **Changing Departments**

Students who wish to change to another department within the College of Engineering and Applied Science must apply for transfer by submitting a change of major for undergraduate degree student's form, which must have the approval of the new department. (See also discussion of interdepartmental transfer requirements under "Transfer Students" in this chapter of the catalog.)

## **Advising**

Freshman students are advised by Engineering Student Services and by representatives from each academic department. These representatives are readily available to assist students with academic or vocational concerns. Contact Engineering Student Services at 303-556-4768. Students are assigned specific departmental advisors for academic planning and should contact the departmental office for advising appointments.

## **Counseling**

Personal counseling is available through the UC Denver Student and Community Counseling Center. Contact 303-556-4372 for questions or an appointment.

## **Course Load Policy**

*Full-time Students.* Undergraduate students employed less than 10 hours per week should consider registering for courses as outlined in the departmental curricula. Additional courses may be allowed when there is satisfactory evidence that the student has the capability to handle the added load. Permission to take more than 19 hours may be granted by written petition and approval of the department chair and the dean's office.

## **Freshman Year**

Fundamentals taught in the freshman year are of critical importance in the more advanced classes. Special attention should be given to taking courses in the proper sequence. (Course requirements for freshmen are detailed within the typical curriculum given under each

department.) All students are urged to consult their instructors whenever they are experiencing difficulties with course materials or for questions related to the class.

## **Repetition of Courses**

Students may not register for credit in a course in which they already have received a grade of C- or higher. An F grade in a required course necessitates subsequent satisfactory completion of the course. Students must repeat a prerequisite course in which a grade of D+ or lower was earned before moving on to the subsequent course, if that course is a prerequisite to another required course. If students do not successfully complete (C or higher) an engineering class on the second attempt, they must obtain written approval from their major department to enroll for the course for the third time. When a course is retaken because of a D or F grade, both grades will appear on the transcript and both will be averaged into the GPA. Any exceptions to these policies must be made by written petition through the Office of the Dean.

## **No Credit**

An engineering student must petition for approval before enrolling for no credit (NC) for any course. Required courses must be taken for credit. Once a course has been taken NC, the course cannot be repeated for credit.

## **Work Experience**

The College of Engineering and Applied Science does not award academic credit for work experience.

## **College Policy on Academic Progress**

All undergraduate students must declare a major by the time they have accumulated 60 semester hours. An undergraduate engineering student must maintain a cumulative GPA of 2.0 or better in all hours attempted at the University of Colorado, in those courses applied toward graduation requirements and in all courses taken from the student's major department in order to remain in good standing in the College of Engineering and Applied Science. Grades earned at another institution are not used in calculating the GPA at the University of Colorado. However, grades earned in another school or college of the University of Colorado will be used in determining the student's scholastic standing and progress or lack of progress toward the bachelor of science degree in the College of Engineering and Applied Science.

Students whose cumulative University of Colorado GPA falls below 2.0 will be placed on probation for the next semester in which they are enrolled in the college and will be so notified. If after two probationary semesters the student's cumulative GPA is still below 2.0, the student will be suspended from the college.

The following conditions apply:

1. During a probation semester, the student must complete a normal load, i.e., 12 semester hours or more (see employed student suggested course load) of courses counting toward graduation requirements.
2. Students are suspended indefinitely and may not enroll at any University of Colorado campus during any regular academic year, September through May, but may enroll in summer sessions and/or may take correspondence courses for credit through the Division of Continuing Education in Boulder.
3. Students who have been suspended may apply for readmission if they bring their University of Colorado cumulative GPA up to a 2.0 through summer session and/or correspondence work applying to engineering degree requirements.
4. Upon satisfactorily completing a minimum of 12 semester hours of acceptable work appropriate to an engineering curriculum at another college or university, subsequent to suspension, students may apply for readmission as a transfer student during the second semester following their suspension. Readmission to the University of Colorado is considered on a case by case basis and is not guaranteed.
5. Students who have been on probation or suspension at any time in the past will automatically be suspended again if their cumulative GPA falls below a 2.0. (No additional probationary semester is permitted.)

Details of the probationary and suspension status and of the conditions for return to good academic standing will be stipulated in the letters of probation and suspension. Information regarding these matters may be obtained in the Office of the Dean, North Classroom, 3024.

## **Academic Ethics (Dishonesty, Cheating)**

Students are expected to conduct themselves in accordance with the highest standards of honesty and integrity. Cheating, plagiarism, illegitimate possession and disposition of examinations, alteration, forgery or falsification of official records and similar acts or attempts to engage in such acts are grounds for suspension or expulsion from the university.

In particular, students are advised that plagiarism consists of any act involving the offering of the work of someone else as the student's own.

At the Downtown Campus of UC Denver, there is a student Academic Honor Code. The code is published in a brochure available from the Office of Student Life. Information regarding all student grievance procedures may be obtained in that office.

In addition, the college has a committee on discipline that hears cases of alleged violations of academic ethics and recommends disciplinary action. In a case of proven academic dishonesty/misconduct, the committee may invoke penalties that may include probation, suspension or expulsion. In a case of suspension or expulsion, a distinction may be placed on a student's academic record indicating the action was due to academic dishonesty/misconduct. Students who suspect or observe violations of academic ethics should report them to their instructor, the department chair or the Office of the Dean.

## **Grading System, Incompletes, Pass/Fail and Drop/Add Procedures**

See the Registration and Records chapter of this catalog for the University of Colorado uniform grading system and for additional pass/fail information and drop/add procedures.

Final grades, as reported by instructors, are to be considered permanent and final. Grade changes will be considered only in cases of documented clerical error and must be approved by the dean.

## **Incompletes**

An incomplete may be given by the instructor for circumstances beyond the student's control, such as a documented medical or personal emergency. When it is given, the student, the Office of the Dean and the departmental office must be informed in writing by the instructor, who states what the student is to do in order to remove the incomplete and the date the tasks are to be completed. The instructor will assign an "I" distinction. The student is expected to complete the course requirements (e.g., the final examination or term paper), within the established deadline and not to retake the entire course. The majority of course requirements (75%) must have been completed with a passing grade to be eligible for an incomplete. An "I" distinction will be converted automatically to a grade of "F" after one year if the specified work is not completed.

## **Pass/Fail**

The primary purpose for offering courses on a pass/fail grade basis is to encourage students, especially juniors and seniors, to broaden their educational experience by electing challenging upper-division humanities and social sciences elective courses without serious risk to their academic records. In general, pass/fail should be limited to 3000- or 4000-level humanities and social sciences courses. Students must process the pass/fail form during the first two weeks of the semester. Engineering students cannot take required courses pass/fail. Below are specific pass/fail regulations for the College of Engineering and Applied Science:

1. A maximum of 16 pass/fail semester hours may be included in a student's total program. A maximum of 6 semester hours may be taken in one semester, but it is recommended that not more than one course at a time be taken pass/fail.
2. Courses that a student may elect to take pass/fail shall be designated and approved in advance by the student's major department. If courses not so designated are taken, the earned grade will be recorded in place of the P. An engineering student who has not designated a major field will not be allowed the pass/fail option without approval through the Office of the Dean.
3. A transfer student may count toward graduation 1 semester hour of pass/fail for each 9 semester hours completed in the college; however, the maximum number of pass/fail semester hours counting toward graduation shall not exceed 16, including courses taken in the honors program under that program's pass/fail grading system.

## **Dropping a Course**

After the tenth week of the semester, dropping a course requires a petition signed by the department chair and the dean. Only under very extenuating circumstances, such as a documented medical or personal emergency, will petitions for dropping courses be approved after the tenth week of the semester.

## Sequence of Courses

Full-time students must generally complete the courses in the department in which they are registered, according to the typical curriculum shown under their major department in this catalog. Part-time students may modify the order of courses with their advisor's approval.

## Graduate-Level Courses Taken at Undergraduate Level

With faculty advisor approval, an undergraduate engineering student may be granted the opportunity to take graduate courses to be counted toward an undergraduate degree. A maximum of 6 semester hours of graduate-level course work taken as an undergraduate can be considered for credit toward a graduate degree. Only a grade of B (3.0) or above will be considered for graduate-level credit. All consideration of graduate work to be counted toward both an undergraduate and a graduate degree must be approved by a faculty advisor and the Office of the Dean.

## Graduation with Honors

In recognition of high scholarship and professional attainments, *Honors*, *Special Honors* or *With Distinction* may be awarded at graduation at the discretion of the student's major department. These honors are recorded on the diploma of the graduate and indicated in the commencement program. Grades earned during the semester of graduation will not be considered.

For *Special Honors*, a student must have a cumulative GPA of at least 3.80, and for *Honors*, a GPA between 3.60 and 3.79. *With Distinction* is awarded at the discretion of the College Executive Council.

Transfer students, to be considered for *honors*, will be expected to complete a minimum of one-half of their work within the University of Colorado System. Grades earned at other institutions will not be considered. Transfer students must have completed at least 54 semester hours at University of Colorado before their last semester and must have a minimum of 64 semester hours completed at graduation.

## Planning an Engineering Program

*It is the responsibility of all students to do the following:*

- meet with their department transfer credit advisor as necessary
- meet with their department academic advisor at least once each year
- meet with their department senior check-out advisor prior to their last 30 semester hours of course work to finalize a graduation program that will be reviewed by the dean's office

- complete a graduation contract and an application for diploma card before or during the first two weeks of their last semester
- keep their senior check-out advisor informed of any changes in the student's plans throughout their last year

## Graduation Requirements

In order to become eligible for one of the bachelor's degrees in the College of Engineering and Applied Science, a student, in addition to being in good standing in the university, must meet the following minimum requirements:

**Courses**—The prescribed and elective work in any curriculum as determined by the appropriate department must be completed satisfactorily.

**Hours**—A minimum of 130 semester hours is required for students seeking a civil engineering degree; a minimum of 128 semester hours for computer science and engineering, electrical engineering or mechanical engineering degrees.

**Hours in Residence**—At least 30 semester hours of course work applicable to a bachelor of science degree in engineering must be taken at the Downtown Campus while a declared student in good standing at the College of Engineering and Applied Science. Students must be enrolled in the college for at least the final two semesters prior to graduation.

**Transfer Credit**—All requests for consideration of transfer credit and its application toward a degree in Engineering and Applied Science must be submitted prior to the student's last two semesters at the Downtown Campus.

**Grade Point Average (GPA)**—A minimum GPA of 2.0 (C) is required for all courses attempted, for all required courses and for all courses taken from the student's major department.

**Faculty Recommendation**—The recommendation of the faculty of the department offering the degree and the approval of the faculty of the College of Engineering and Applied Science is required.

**Incompletes and Correspondence Courses**—It is the student's responsibility to ensure that all incompletes and correspondence courses are officially completed before the tenth week of the student's final semester in school.

**Simultaneous Conferring of Degrees**—For any double degree program, both bachelor's degrees must be conferred at the same commencement.

**Commencement Exercises**—Commencement exercises are held in December and May. A student finishing in August is encouraged to attend commencement the following December, but may request that the diploma be mailed.

## Undergraduate Degrees

In addition to the standard four-year degree programs previously listed, the college is involved in double degree programs.

## **Business and Engineering**

Undergraduates in the College of Engineering and Applied Science with career interests in management may complete all of the requirements for both a BS degree in engineering and a BS degree in business administration by extending their study programs to five years, including one or two summer terms. The business courses required by the Business School may be started in the second, third or fourth year, depending upon the curriculum plan for the particular field of engineering in which the student is enrolled.

Students interested in this undergraduate program are required to submit an application to the Business School. Students should contact a business advisor to obtain the application form and determine an acceptable degree program.

Requirements for the undergraduate business degree and engineering degree must be completed concurrently. At least a 2.0 GPA must be earned in all business courses undertaken in the Business School. No fewer than 30 semester credits in business courses from UC Denver must be earned after admission to business to establish residency credit. Courses offered or required by the Business School may be used in lieu of electives required for undergraduate engineering degrees, subject to the approval of the individual department.

## **Joint Engineering Degrees**

A student may obtain two engineering majors by meeting the requirements of both programs; however, the approval of both departments and the dean is required. Thirty hours of elective or required subjects must be completed in addition to the largest minimum number required by either of the two departments. A course taken for one completed master's degree may not be counted toward a second master's degree.

## **Premedicine Option**

A professional school in a field such as medicine requires a student to have a college education prior to pursuing its professional courses. In practically all cases, medical students are university graduates, although occasionally a student may enter medical school after three years of university training.

The desirability of obtaining an engineering education prior to undertaking a study of medicine is increasing continually as medicine itself is evolving. A great deal of new equipment, most of it electronic, is being developed to assist the medical practitioner in treatment of patients. Bioengineering, engineering systems analysis, probability and communication theory are highly applicable to medical problems. Improved communication techniques also are allowing the storage and retrieval of information not previously available to the medical doctor. An advanced knowledge of basic mathematics and computing techniques, along with increased understanding of physical chemistry, improves the scientific base upon which medical knowledge rests. It is therefore desirable that the future medical practitioner and researcher be well equipped with the tools engineering can offer.

To provide a minimum of the necessary knowledge, the additional courses listed below must be completed with superior grades. Students can meet these requirements by careful substitution of electives in the engineering curriculum. In some cases where additional hours may be required, interested students should consult with the engineering department chair.

	Semester Hours
<i>General Chemistry (two semesters)</i> (CHEM 2031, 2038, 2061, 2068)	9
<i>Organic Chemistry (two semesters)</i> (CHEM 3411, 3421, 3418, 3428)	10
<i>General Biology (two semesters)</i> (BIOL 2051, 2061, 2071, 2081)	8
<i>English Composition (one semester)</i>	3
<i>Literature (two semesters)</i>	6
Total	36

Students desiring to enter a premedical program should consult the representative of the department involved. On the Downtown Campus, premedical advising is available through the health careers advisor, North Classroom, 3014B, 303-556-4350.

## Graduate Study in Engineering

The College of Engineering and Applied Science at UC Denver offers graduate programs in civil engineering, computer science, electrical engineering, and mechanical engineering.

For information regarding courses and requirements leading to the master of science, master of engineering or the PhD degree, see the appropriate discipline heading in this section. For graduate admission information and policies, see the Information for Graduate Students chapter of this catalog.

## TOEFL/Language Requirements

International graduate students who take the TOEFL English proficiency exam must score at least 525 on the paper-based exam or 71 on the Internet-based exam (IBT). International students must score a 6.0 on the IELTS exam. International students who successfully complete study at Spring International with a grade of B or better are not required to submit TOEFL scores. Students must successfully complete studies through Level Six to be eligible for the waiver consideration. Contact Spring International for more information at [www.spring.edu](http://www.spring.edu).

## Education for Employed Professional Engineers

Continuing education for employed engineers grows more important each year. Therefore, the college puts great emphasis upon making graduate courses available through late afternoon and evening courses. The master of engineering degree permits graduate students more flexibility in defining specialized interdisciplinary fields that meet their professional needs. This degree has standards equivalent to those of the master of science degree.

In addition to credit course work, the college also offers courses of interest to practicing engineers through its Continuing Engineering Education Program, 303-556-4907. (See also information under “Continuing Engineering Education Program” in this chapter.)

## **Concurrent BS and MS Degree Program in Engineering**

A student who plans to continue on to graduate study after completing the requirements for the BS degree may be admitted to a graduate program through his/her major department in the senior year (after completion of at least 110 semester hours). Requirements are the same as for the two degrees taken separately: 128 or 130 semester hours, depending on the major, for the BS degree; and 30 semester hours for the MS degree. Humanities and social sciences requirements must be completed within the first 128 or 130 semester hours. A 3.0 GPA for all work attempted through the first six semesters (at least 96 semester hours) and written recommendations from at least two major-field faculty members are required.

The purpose of the concurrent degree program is to allow students who qualify for graduate study and expect to continue for an advanced degree to plan their graduate program from the beginning of the senior year rather than from the first year of graduate study. The student can then reach the degree of proficiency required to begin research at an earlier time and can make better and fuller use of courses offered only in alternate years.

Students will be assigned faculty advisors to help them develop the program best suited to their particular interests. The program selected must be planned so that the student may qualify for a BS degree after completing the semester-hour requirements for the degree, if the student so elects, or if the student's GPA falls below the 3.0 required to remain in the program. In this case, all hours completed with a passing grade while in the program will count toward fulfilling the normal requirements for the BS degree.

## **Graduate Work in Business**

Undergraduates in engineering who intend to pursue graduate study in business may complete some of the business background requirements as electives in their undergraduate programs. Seniors in engineering who have such intentions and appear likely to qualify for admission to graduate study in business may be permitted to register for graduate fundamentals courses, which are designed to provide qualified students with needed background preparation in business. Students must see an advisor from the Business School for approval.

## **Programs of Study**

Courses listed in the following curricula are typical illustrations. Changes in specific courses may be necessary to accommodate students' needs and/or changes in institution requirements; however, students should take courses in logical sequence, i.e., complete all freshman courses before taking sophomore courses.

## **Civil Engineering**

**Chair:** Kevin Rens  
**Office:** North Classroom, 3027  
**Telephone:** 303-556-2871  
**Fax:** 303-556-2368  
**Web site:** [www.cudenver.edu/civil](http://www.cudenver.edu/civil)

## **Faculty**

### **Professors:**

Nien-Yin Chang, PhD, Ohio State University, Professional Engineer (PE)—Ohio and Colorado  
James C.-Y. Guo, PhD, University of Illinois at Urbana-Champaign, PE—Colorado  
Bruce N. Janson, PhD, University of Illinois at Urbana-Champaign  
Lynn E. Johnson, PhD, Cornell, PE—Connecticut  
Anu Ramaswami, PhD, Carnegie Mellon  
Kevin L. Rens, PhD, Iowa State University, PE—Colorado  
Jonathan T.H. Wu, PhD, Purdue

### **Assistant Professors:**

Stephan A. Durham, PhD, University of Arkansas  
David C. Mays, PhD, University of California at Berkeley  
Arunprakash Karunanithi, PhD, University of Connecticut  
Zhiyong (Jason) Ren, PhD, The Pennsylvania State University

### **Assistant Research Professor:**

Saeed Baraghi, PhD, University of Colorado

### **Lecturer:**

Michael Tang, PhD, University of Wisconsin at Madison

### **Professors Emeriti:**

Paul E. Bartlett, MS, University of Colorado, PE—Colorado  
David W. Hubly, PhD, Iowa State, PE—Colorado

Orem G. Strom, PhD, University of Texas at Austin

## **Mission Statement**

The mission of the Department of Civil Engineering is to:

- deliver high-quality comprehensive degree programs (BS, MS, MEng, PhD) to all of our students at both the undergraduate and graduate levels
- matriculate students who excel in professional practice and leadership and who possess compassion and respect for people of all cultural backgrounds
- teach our classes with excellence, whether in a traditional classroom setting or online
- offer our students state-of-the-art laboratories, equipment and classrooms with the latest technology needed for a complete learning experience
- develop ambitious and innovative research programs involving both faculty and students through funding from federal, state and local sources
- provide supportive mentoring and guidance to our students through teaching, research and advising
- produce students who can work as leading professionals in civil engineering and in many other fields for which civil engineering knowledge can be a foundation

## **Undergraduate**

The UC Denver undergraduate civil engineering curriculum places balanced emphasis on four principal areas of civil engineering practice: structures, transportation, water and geotechnical engineering. In each of these areas, the student receives instruction in planning, design and analysis methods. Microcomputer skills are taught early in the program of study and used frequently in subsequent courses.

A minimum of 130 semester hours is required to earn the BS degree. The faculty provide advising to help students develop an efficient study plan. The student must satisfactorily complete all the course work in the curriculum shown below, satisfy all university graduation requirements and maintain at least a 2.0 GPA in the civil engineering courses.

## **Graduate**

### **Requirements for Admission**

Applicants to the master of science in civil engineering (MS) program must satisfy all requirements specified in the Information for Graduate Students chapter of this catalog, have an ABET accredited undergraduate degree in civil engineering and have an undergraduate GPA of 3.0 (on a 4-point scale) or better for regular admission. Students with lower GPAs may qualify for provisional admission and are strongly encouraged to submit GRE scores in such cases. International applicants are also encouraged to submit GRE scores to support their applications if needed. Applicants whose undergraduate degree is in a field other than civil engineering may also be admitted into the MS in civil engineering degree program, if they have or will complete

undergraduate prerequisite courses as required by the Department of Civil Engineering and the student's graduate advisor.

Applicants to the master of engineering (MEng) program must have a baccalaureate degree in engineering, math, science, economics or planning from an accredited college or university and satisfy all requirements specified by the Graduate School.

Prospective PhD students should contact the Department of Civil Engineering on the Downtown Campus to inquire about application requirements and to obtain the "Rules and Policies for the Coordinated PhD Program."

Requests for applications for graduate study in civil engineering should be addressed to UC Denver Department of Civil Engineering, Campus Box 113, P.O. Box 173364, Denver, CO 80217-3364.

Applicants who are not citizens or permanent residents of the United States should apply through the Office of International Admissions, Campus Box 185, P.O. Box 173364, Denver, CO 80217-3364. All applicants for admission must submit complete credentials as outlined in the instructions that accompany the application materials.

## **Bachelor of Science**

# **Civil Engineering BS**

## **Program Objectives**

The objectives of the bachelor of science in civil engineering program are to produce graduates who:

- are able to perform the technical analyses and design tasks of entry-level civil engineers
- can successfully work toward professional engineering licensure
- communicate effectively, both orally and in writing
- understand the importance of leadership skills, team building and ethical practice
- value lifelong learning and improvement through graduate degrees or professional study
- appreciate the importance of community involvement and social contribution civil engineers are dedicated to improving our living environment

Civil engineers are responsible for the planning, design and construction of buildings, bridges, highways, water distribution systems, wastewater collection and treatment systems, solid waste treatment and disposal systems, airports, railroads, pipelines, water treatment plants, dams, geographic information systems and other parts of our infrastructure systems. In preparing for work in such a broad field, the civil engineering student studies mathematics, basic science, communication, social science and humanities, engineering science and civil engineering design. UC Denver's civil engineering graduates usually find their first professional employment with consulting engineering firms, government agencies and various industries.

# Typical Curriculum for BS (Civil Engineering)

## Freshman Year

### First Semester

- CHEM 1130 - Engineering General Chemistry. **Semester Hours: 5** (*see note 1*)
- ENGL 1020 - Core Composition I: CO1. **Semester Hours: 3**
- MATH 1401 - Calculus I: MA1. **Semester Hours: 4**  
Core Curriculum Elective (*see note 2*) (3 semester hours)

**Total: 15 Hours**

### Second Semester

- C E 2212 - Plane Surveying. **Semester Hours: 3**
- ENGL 2030 - Core Composition II: CO2. **Semester Hours: 3**
- ENGR 1025 - Engineering Graphics and Computer-Aided Design. **Semester Hours: 3**
- MATH 2411 - Calculus II: MA1. **Semester Hours: 4**
- PHYS 2311 - General Physics I: Calculus-Based. **Semester Hours: 4**
- PHYS 2321 - General Physics Lab I. **Semester Hours: 1**

**Total: 18 Hours**

## Sophomore Year

### First Semester

- C E 2121 - Analytical Mechanics I. **Semester Hours: 3**
- C E 2200 - Computing Methods in Civil Engineering. **Semester Hours: 3**
- MATH 2421 - Calculus III: MA1. **Semester Hours: 4**
- PHYS 2331 - General Physics II: Calculus-Based. **Semester Hours: 4**  
Core Curriculum Elective (*see note 2*) (3 semester hours)

**Total: 17 Hours**

### Second Semester

- C E 3121 - Mechanics of Materials. **Semester Hours: 3**
- C E 3141 - Introduction to Structural Materials. **Semester Hours: 2**

- C E 3401 - Introduction to Environmental Engineering. **Semester Hours: 3**
- C E 4780 - Engineering Geology. **Semester Hours: 3** or
- GEOL 1072 - Physical Geology: Surface Processes: SC1. **Semester Hours: 4** or
- MATH 3800 - Probability and Statistics for Engineers. **Semester Hours: 3**
- MATH 3195 - Linear Algebra and Differential Equations. **Semester Hours: 4**

**Total: 15 Hours**

## Junior Year

### First Semester

- C E 3111 - Analytical Mechanics II. **Semester Hours: 3**
- C E 3313 - Theoretical Fluid Mechanics. **Semester Hours: 3**
- C E 3505 - Structural Analysis. **Semester Hours: 3**
- C E 3602 - Transportation Engineering. **Semester Hours: 3**
- Core Curriculum Elective (*see note 2*) (3 semester hours)

**Total: 15 Hours**

### Second Semester

- C E 3323 - Applied Fluid Mechanics. **Semester Hours: 3**
- C E 3414 - Design of Water and Wastewater Systems. **Semester Hours: 3**
- C E 3708 - Introduction to Geotechnical Engineering. **Semester Hours: 3**
- C E 4718 - Intermediate Soils Engineering. **Semester Hours: 2**
- ENGR 3012 - Thermodynamics. **Semester Hours: 3**
- Core Curriculum Elective (*see note 2*) (3 semester hours)

**Total: 17 Hours**

## Senior Year

### First Semester

- C E 4000 - Senior Seminar. **Semester Hours: 0**
- E E 3030 - Electric Circuits and Systems. **Semester Hours: 3**
- Civil Engineering Design Electives (*see note 3*) (6 semester hours)
- Science, Math or Engineering Electives (*see note 4*) (6 semester hours)
- Core Curriculum Elective (*see note 2*) (3 semester hours)

**Total: 18 Hours**

## **Second Semester**

- Civil Engineering Design Electives (*see note 3*) (6 semester hours)
- C E 4067 - Senior Design Project. **Semester Hours: 3**
- Core Curriculum Elective (*see note 2*) (3 semester hours)
- Science, Math or Engineering Electives (*see note 4*) (3 semester hours)

**Total: 15 Hours**

## **Program Total: 130 Hours**

1. Or CHEM 2031 and CHEM 2038, which are required for students wishing to take CHEM 2061 and CHEM 2068 as general electives.
2. The communication, humanities and social science electives selected by the student and approved by his/her advisor must satisfy the college core curriculum.
3. Students must satisfactorily complete four of the six civil engineering design courses listed below:

C E 4427 - Storm Water System Design (3 semester hours)

C E 4565 - Timber Structure Design (3 semester hours)

C E 4575 - Structural Steel Design (3 semester hours)

C E 4585 - Reinforced Concrete Design (3 semester hours)

C E 4602 - Highway Engineering (3 semester hours)

C E 4738 - Intermediate Foundation Engineering (3 semester hours)

4. Science, math or engineering electives. The purpose of the electives is to extend the student's knowledge beyond the basic civil engineering requirements. Electives chosen should come from the areas of engineering, mathematics, chemistry, biology, physics or geology. In the case of mathematics, chemistry, physics or geology, the elective must be of higher level than courses in this field required by the civil engineering program. At least one elective must be a civil engineering course. Suggested courses are C E 4077, C E 4087, C E design courses or any 5000-level C E course.

## **Master of Science**

# **Civil Engineering MS and MEng**

- ▶ Graduate School Rules apply to these programs

## **Graduate**

### **Degree Programs**

UC Denver offers the master of science degree in civil engineering (MS) with emphases in the following areas: environmental engineering, geotechnical/geo-environmental engineering, structural engineering, transportation engineering, hydrology and water resources, geographical information systems (GIS), and transportation engineering. The Department of Civil Engineering also offers the master of engineering (MEng) degree with an emphasis in either geographical information systems (GIS) or transportation. For the convenience of working students, all graduate-level courses are scheduled in the evenings or on Saturdays.

### **Degree Requirements**

Two MS degree programs are available. Plan I includes a master's thesis, while Plan II includes a master's report. Both plans require a minimum of 30 semester hours.

Plan I requires 24 or more semester hours of graduate-level courses plus at least 6 semester credits for a thesis. Plan II requires 27 or more semester hours of graduate-level courses plus at least 3 semester hours for a report.

The MEng degree requires 27 or more semester hours of graduate-level courses plus at least 3 semester hours for a master's report. The MEng degree requires at least 15 semester hours of civil engineering courses, which can include the master's report and up to 15 semester hours of graduate-level courses in other disciplines.

Both the MS and MEng degrees require satisfactory completion of a written comprehensive exam and an oral defense of the master's thesis or master's report to a committee of at least three graduate faculty. Every graduate student must also satisfy the degree requirements of the Graduate School on the Downtown Campus, specified in the Information for Graduate Students chapter of this catalog. Both the MS and the MEng degree programs must be completed within seven years of the date the student begins the degree program.

Courses for both the MS and MEng degree programs are selected by mutual agreement of the student and his/her graduate advisor after admission to the degree program. The advisor may also specify undergraduate courses that must be completed before starting graduate course work but will not count toward the semester hour requirements for the degree. The student's thesis or report topic must also be approved by the graduate advisor.

### **Doctor of Philosophy**

## **Civil Engineering PhD**

- ▶ Graduate School Rules apply to this program

The PhD degree in civil engineering is offered through a coordinated program with University of Colorado-Boulder.

Prospective PhD students should contact the Department of Civil Engineering on the Downtown Campus to inquire about application requirements and to obtain the “Rules and Policies for the Coordinated PhD Program.”

Requests for applications for graduate study in civil engineering should be addressed to UC Denver Department of Civil Engineering, Campus Box 113, P.O. Box 173364, Denver, CO 80217-3364.

## Computer Science and Engineering

**Chair:** Bogdan Chlebus

**Program Assistant:** Frances Moore

**Office:** North Classroom, 2605

**Telephone:** 303-556-4083

**Fax:** 303-556-8369

**Web site:** [www.cudenver.edu/cse](http://www.cudenver.edu/cse)

## Faculty

### Professors:

Gita Alaghband, PhD, University of Colorado

Tom Altman, PhD, University of Pittsburgh

John Clark, PhD, Massachusetts Institute of Technology

Boris Stilman, PhD, National Research Institute for Electrical Engineering, Moscow, Russia

### Associate Professors:

Bogdan Chlebus, PhD, Warsaw University, Poland

Min-Hyung Choi, PhD, University of Iowa

Ellen Gethner, PhD, University of British Columbia

Ilkyeun Ra, PhD, Syracuse University

### Senior Instructor and Undergraduate Advisor:

Richard Osborne, PhD, University of Colorado

Will Trobaugh, MS, University of Colorado

## **Mission Statement**

The mission of the Department of Computer Science and Engineering is to do the following:

- provide excellent education for undergraduate students in CSE, MS students in CS and PhD students in CSIS
- encourage and support scholarly research activities by both faculty and students
- form partnerships with industrial firms and agencies, both local and beyond, to address important computing and engineering problems
- offer a wide range of computing and information technology courses as a service to the university and professional community
- continue to exemplify leadership to students, businesses, professionals and the community at large

## **Undergraduate**

### **Computer Science and Engineering Program**

Computers as a combination of software and hardware have become significant to the whole of society. They affect the way in which business is conducted and the way people study and learn. Very important is the use of computers to develop new avenues of human communication, interaction and cooperation. Communication networks and the combination of text with audio and video are providing more people with fingertip access to a vast array of information and knowledge.

The computer scientist and engineer is a professional who must be prepared to apply his or her skills, knowledge and creativity in a rapidly changing field. The bachelor of science in computer science and engineering at UC Denver prepares students for such creative work. The emphasis is on fundamental concepts and basic principles with a long useful life. The program is composed of five major study areas: mathematics, basic or engineering science, required computer science courses, technical electives and the Downtown Campus core curriculum.

The computer science and engineering program has dual accreditation from the Computing Accreditation Commission (CAC) and the Engineering Accreditation Commission (EAC) of the Accreditation Board for Engineering and Technology (ABET).

## **Computer Science and Engineering Curriculum**

The mathematics, basic science and computer science core requirements give the student a broad exposure to the concepts, methods and practice of computer science and engineering; the student learns the fundamentals of producing solutions to problems.

Technical electives are chosen to add depth to a student's knowledge in an area of special interest.

The Downtown Campus core curriculum is designed to give the student an exposure to knowledge outside his or her major. For students in the College of Engineering and Applied Science, courses in the humanities, social sciences and human communications are required.

To be awarded the bachelor of science in computer science and engineering, a student must satisfactorily complete all course work shown in the curriculum below, satisfy all university graduation requirements and maintain at least a 2.0 GPA in all computer science courses attempted (see “Policy on Academic Progress” in the introductory section of this chapter). Students must meet with an undergraduate advisor each semester to assure that they are on track within the degree program and are aware of the current requirements of the program. An additional source of information is the “C SE Undergraduate Advising Handbook” or the department’s Web site, [www.cudenver.edu/cse](http://www.cudenver.edu/cse). Students are required to set up an appointment with the senior check-out advisor before registering for the last 30 semester hours of their program. Upon completion of the 30-hour checkout, all students are required to schedule an appointment with the CSE undergraduate advisor to complete the graduation agreement. Prerequisites will be strictly enforced. *Note:* Prerequisites must be taken before a course that requires them; co-requisites may be taken before or concurrent with a course that requires them.

## **Graduate**

The Department of Computer Science and Engineering (CSE) offers a master of science in computer science (MSCS). The CSE department, together with the Business School, also offers a joint program leading to a doctoral degree in computer science and information systems (CSIS).

Research areas of emphasis include algorithms, artificial intelligence, automata theory, communication networks, combinatorial geometry, computational geometry, computer graphics, distributed computing, graph theory, information theory, Internet, parallel processing, simulation and software engineering.

Requests for applications for graduate study in computer science and engineering should be addressed to UC Denver Department of Computer Science and Engineering, Campus Box 109, P.O. Box 173364, Denver, CO 80217-3364.

Applicants who are not citizens or permanent residents of the United States should make application through the Office of International Admissions, Campus Box 185, P.O. Box 173364, Denver, CO 80217-3364. All applicants for admission must submit complete credentials as outlined in the instructions that accompany the application materials.

## **Admission Requirements**

Applicants should hold a bachelor’s degree in engineering or science. They should have considerable programming experience and the mathematical maturity to understand advanced courses.

## **Prerequisites**

Applicants should have had the equivalent of the following University of Colorado courses:

C SC 1410 - Fundamentals of Computing  
C SC 2421 - Data Structures and Program Design  
C SC 2511 - Discrete Structures

In addition, applicants should have had at least three upper-division computer science courses, such as the following:

C SC 3412 - Algorithms  
C SC 3415 - Principles of Programming Languages  
C SC 3453 - Operating System Concepts  
C SC 4034 - Theoretical Foundations of Computer Science  
C SC 4508 - Introduction to Software Engineering  
C SC 4591 - Computer Architecture

Additional requirements include (1) 10 semester hours of university level calculus and (2) at least one math course beyond calculus, such as advanced calculus, differential equations, linear algebra, probability, statistics or combinatorial analysis.

Students lacking some of these courses must complete them after admission.

## Required GPA

**Regular admission:** Applicants should have an undergraduate GPA of at least 3.0.

**Provisional admission:** If the GPA is below 3.0 but above 2.75, and/or some prerequisites are lacking, applicants may be accepted as "provisional degree students." Provisional students must satisfy all the provisional conditions within the time frame indicated on their admission letter.

## GRE Exam

Applicants whose GPA is below 3.00 but above 2.75 must submit GRE results of 1000 or better verbal + math, and 3.0 or better written.

## Transfer Credit

A maximum of 9 semester hours of graduate course work may be transferred into the program based on department approval.

*Note:* A student applying for MS study will be evaluated by the department's graduate advisor using the above specified rules and requirements. The admission letter will be sent to the student by the CSE chair. A student in Plan I (see below) should immediately choose a full-time faculty member as permanent thesis advisor based on his or her area of interest. The permanent thesis advisor, in cooperation with the student, will form a thesis committee.

## Computer Science and Information Systems PhD

## **Admission**

Prospective students apply to either the Department of Computer Science and Engineering (CSE) or the Business School. Applicants who pass the initial screening are then reviewed by a joint committee (consisting of the two co-directors of the program) for the final admittance decision.

Admission criteria include GPA (undergraduate and graduate), standardized test scores (GMAT or GRE), letters of recommendation, prior achievements in academia and industry, an application portfolio essay describing an applicant's motivation and an initial plan for doctoral study. The application portfolio is important to gauge an applicant's motivation for research training.

Students without a master's degree in either computer science or information systems will need to take additional course work sufficient to complete the requirements of a master's degree in one of the two areas.

### **Supervision of the PhD Program**

The PhD program is supervised by the two program co-directors. The duties of the co-directors include scheduling of doctoral courses, setting program policies subject to approval of business and CSE faculty, working with advisors to ensure compliance with the program guidelines, resolving disputes, measuring performance of the program over time and providing the final decision on admittance of students.

### **Advisor**

Upon entering the program, each student chooses an advisor to provide mentoring and guidance throughout the program and work with the student to prepare a program of study. The advisor will also work with the student in the preparation of the first and second papers. Requests to change advisors must be approved by the program co-directors, and this happens in very rare circumstances.

### **Doctoral Committee**

The advisor and four other members form a doctoral committee. To foster interdisciplinary work, students can have their doctoral research co-supervised by two faculty members from CSE and the Business School. There is at least one faculty member from CSE and at least one from business. One of the committee members is a representative of industry. At least one faculty committee member is from outside CSE and business. If the student has difficulty finding an industry representative, the advisor and the program co-directors help identify an industry representative.

## **Bachelor of Science**

# **Computer Science and Engineering BS**

## **Program Objectives**

The objectives of the bachelor of science degree in the computer science and engineering program are to:

- produce graduates who are successful professionals in computer science and engineering
- prepare students for graduate or professional study
- develop team building and leadership skills
- involve students in software design and projects

## **Measurable Outcomes**

To attain the educational objectives of the BS CSE program, the CSE department intends to produce the following measurable outcomes at the time of graduation. Graduates of the BS CSE program will have the following skills:

- an ability to apply knowledge of mathematics, science and engineering
- an ability to analyze a problem and identify and define the computing requirements appropriate to its solution
- an ability to design and conduct software and/or hardware experiments, as well as to analyze and interpret data
- an ability to design software and/or hardware to meet desired needs
- an ability to function on multidisciplinary teams
- an ability to identify, formulate and solve computer science and engineering problems
- an understanding of professional and ethical responsibility
- an ability to communicate effectively
- the broad education necessary to understand the impact of engineering and computer science solutions in a global and societal context
- a recognition of the need for, and an ability to engage in, lifelong learning
- a knowledge of contemporary issues
- an ability to use the techniques, skills and modern tools necessary for computer science and engineering practice
- an ability to display leadership

## **Typical Curriculum for BS in Computer Science and Engineering**

### **Freshman Year**

#### **First Semester**

- CHEM 1130 - Engineering General Chemistry. **Semester Hours: 5** (see note 2)
- C SC 1410 - Fundamentals of Computing. **Semester Hours: 3**
- C SC 1510 - Logic Design. **Semester Hours: 3**
- ENGL 1020 - Core Composition I: CO1. **Semester Hours: 3** (see note 1)
- MATH 1401 - Calculus I: MA1. **Semester Hours: 4**

**Total: 18 Hours**

## **Second Semester**

- C SC 2312 - Intermediate Programming. **Semester Hours: 3**
- C SC 2421 - Data Structures and Program Design. **Semester Hours: 3**
- C SC 2531 - Logic Laboratory. **Semester Hours: 1**
- MATH 2411 - Calculus II: MA1. **Semester Hours: 4**
- PHYS 2311 - General Physics I: Calculus-Based. **Semester Hours: 4**
- PHYS 2321 - General Physics Lab I. **Semester Hours: 1**

**Total: 16 Hours**

## **Sophomore Year**

### **First Semester**

- C SC 2132 - Circuit Analysis I. **Semester Hours: 3**
- C SC 2511 - Discrete Structures. **Semester Hours: 3**
- C SC 2525 - Assembly Language and Computer Organization. **Semester Hours: 3**
- MATH 2421 - Calculus III: MA1. **Semester Hours: 4**
- PHYS 2331 - General Physics II: Calculus-Based. **Semester Hours: 4**
- PHYS 2341 - General Physics Lab II. **Semester Hours: 1**

**Total: 18 Hours**

### **Second Semester**

- C SC 2142 - Circuit Analysis II. **Semester Hours: 3**
- C SC 3412 - Algorithms. **Semester Hours: 3**
- ENGL 2030 - Core Composition II: CO2. **Semester Hours: 3**
- MATH 3195 - Linear Algebra and Differential Equations. **Semester Hours: 4**  
Core Curriculum Elective (see note 1) (3 semester hours)

**Total: 16 Hours**

## Junior Year

### First Semester

- General Science Elective (*see note 2*) (3 semester hours)
- C SC 3415 - Principles of Programming Languages. **Semester Hours: 3**
- C SC 3651 - Digital Hardware Design. **Semester Hours: 3**
- Core Curriculum Electives (*see note 1*) (6 semester hours)

**Total: 15 Hours**

### Second Semester

- C SC 3453 - Operating System Concepts. **Semester Hours: 3**
- C SC 3645 - Discrete Linear Systems. **Semester Hours: 3**
- C SE Technical Elective (*see note 3*) (3 semester hours)
- Core Curriculum Electives (*see note 1*) (6 semester hours)

**Total: 15 Hours**

## Senior Year

### First Semester

- C SC 4508 - Introduction to Software Engineering. **Semester Hours: 3**
- C SC 4535 - Probability and Statistics. **Semester Hours: 3**
- C SC 4591 - Computer Architecture. **Semester Hours: 3**
- C SE Technical Elective (*see note 3*) (3 semester hours)
- MATH 4650 - Numerical Analysis I. **Semester Hours: 3**

**Total: 15 Hours**

### Second Semester

- C SC 4034 - Theoretical Foundations of Computer Science. **Semester Hours: 3**
- C SC 4735 - Computers, Society and Ethics. **Semester Hours: 3**
- C SC 4739 - Senior Design II. **Semester Hours: 3**
- C SE Technical Elective (*see note 3*) (3 semester hours)
- Core Curriculum Elective (*see note 1*) (3 semester hours)

**Total: 15 Hours**

## **Program Total: 128 Hours**

In addition to planning for sequences of courses based on prerequisites, students should plan to complete sophomore-level courses before taking junior-level courses.

1. Downtown Campus core curriculum: core requirements of the College of Engineering and Applied Science are outlined in the section titled “Undergraduate Core Curriculum in Engineering” or at [www.cudenver.edu/cse](http://www.cudenver.edu/cse). In the communication area, students must pass ENGL 1020-3, Core Composition I, with a C- or better prior to taking either C SC 2421 or C SC 4739.
2. The chemistry sequence CHEM2031/CHEM2038 may be substituted for CHEM1130. In addition to the required chemistry and physics courses, students must take a general science elective chosen from basic or engineering science. Refer to the “CSE Undergraduate Advising Handbook” for further information.
3. Computer science and engineering technical electives: The student must take three courses (9 semester hours) chosen from any C SC 4000-level courses and/or any EE 4000-level computer engineering courses that are not part of the required bachelor of science in computer science and engineering (BSCSE) curriculum.

## **Non Degree**

# **Computer Science Minor**

The Department of Computer Science and Engineering offers a minor in computer science. The requirements for the minor are listed below.

## **Program Requirements**

1. Any undergraduate student currently enrolled in a UC Denver degree program with a major other than computer science and engineering may earn a minor in computer science. This includes students from the College of Engineering and Applied Science, the College of Liberal Arts and Sciences, the Business School, the College of Arts & Media and the School of Public Affairs.
2. The student must complete the following classes with a grade of C- or better:
  - C SC 1410 - Fundamentals of Computing. **Semester Hours: 3**
  - C SC 2421 - Data Structures and Program Design. **Semester Hours: 3**
  - C SC 2511 - Discrete Structures. **Semester Hours: 3**
  - MATH 1401 - Calculus I: MA1. **Semester Hours: 4**
  - MATH 2411 - Calculus II: MA1. **Semester Hours: 4**

3. The student must complete (with a C- or better) three additional computer science courses at the 3000 level or higher with the approval of an undergraduate advisor.  
*Note:* Some courses at the 3000 level and above require additional prerequisites. A student must fulfill all prerequisites for the courses he/she selects. See the catalog course descriptions for prerequisite information for each course.
4. All computer science courses 3000 level and above must be taken at the Downtown Campus of UC Denver.
5. At the time of graduation, the student must have a UC Denver cumulative GPA of 2.0 and must have a 2.0 GPA for the eight classes taken for the minor.
6. The student must file a minor declaration form with an undergraduate advisor or with the Engineering Student Services office in North Classroom, 3024. For more information or an advising appointment, contact the Department of Computer Science and Engineering in North Classroom, 2605, or by phone at 303-556-4314.

## Master of Science

# Computer Science MS

- ▶ Graduate School Rules apply to this program

## General MS Degree Requirements

In addition to the basic requirements of the university, the Department of Computer Science and Engineering requires master's degree candidates to complete an approved program of study consisting of at least 30 semester hours of graduate-level computer science courses while maintaining a GPA of at least 3.0. With prior approval by the graduate committee, a student may substitute up to 9 semester hours of graduate-level mathematics or other engineering courses. All courses must be taught by University of Colorado graduate faculty.

A student must submit an approved plan of study to the department during the first semester of his/her admission. An academic advisor will consult with each student to develop a plan of study.

## Adequate Progress Toward MS in Computer Science Degree

Students are expected to finish the MS degree program within five years. Candidates for the MS degree may not get credit for a course taken longer than five years before the date on which the degree is to be granted.

Students who do not enroll for any course work relevant to computer science in a given semester (summer semesters excluded) must supply the Department of Computer Science and Engineering with a written statement describing the reason for the inactivity. Students who are

inactive for three consecutive semesters (summer semesters excluded) can be removed from the program.

Students may choose either Plan I (thesis) or Plan II (MS project).

## Plan I—Thesis

Students choosing Plan I take 24 semester hours of graduate course work plus 6 semester hours of thesis work. Three courses must be chosen from among five core courses and three additional courses chosen from among more than a dozen “breadth” courses. All must be passed with a grade of B or better. Plan I students must also write a thesis and defend it before a thesis committee. The students in Plan I may take two independent study courses for a maximum of 6 hours.

## Plan II—MS Project

Students choosing Plan II take 27 semester hours of graduate course work. Three courses must be chosen from among five core courses and three additional courses chosen from among more than a dozen “breadth” courses. All must be passed with a grade of B or better. The students in Plan II may take only one independent study course for a maximum of 3 semester hours.

*Note:* Students can take only graduate engineering (21 semester hours must be CS courses) and graduate mathematics courses. No more than 6 semester hours can be taken in the form of online courses.

## Doctor of Philosophy

# Computer Science and Information Systems PhD

► Graduate School Rules apply to this program

**Program co-directors:** Gita Alaghband (CSE) and Mike Mannino (Business School)

**Web site:** [www.csisphd.cudenver.edu](http://www.csisphd.cudenver.edu)

The Department of Computer Science and Engineering (CSE) and the Business School offer a joint doctor of philosophy degree program in computer science and information systems (CSIS). The program targets students with a master’s-level education in either computer science or information systems who seek research training that combines CS and IS along with strong industry interaction. The joint PhD program provides training for academic positions, industrial

research positions and senior consulting positions. The specific goals of the program complement these general goals:

- create a pool of graduates with CSIS research training who are qualified for academic and nonacademic careers
- meet student demand for advanced training in CSIS with accommodations for full-time and part-time students
- promote interdisciplinary research between CSE and the Business School
- enhance technology transfer between CSIS academic units and Front Range technology businesses through joint research, student internships, faculty externships and committee participation

## **Program Components**

### **Plan of Study**

A list of course work and other requirements for the degree should be prepared with the advisor and then submitted to the co-directors for approval. The successful completion of all work indicated on the plan of study is an important prerequisite for the conferring of the degree. A plan of study should be submitted for approval by the end of the first semester of the program. The current plan of study should be updated before the beginning of the second year of the program and submitted for re-approval by the co-directors.

### **First and Second Papers**

Students prepare papers during their second and third years. For part-time students, the timing might be longer in which case a prior approval by the advisor is required. The papers should be of high quality to ensure publication in conference proceedings or journals. The advisor serves as a mentor to help the student complete these papers, and each paper is submitted for approval to the advisor. An industry representative may also be used as an evaluator.

### **Comprehensive Exam**

After completing the required course work, each student will take a written comprehensive exam that requires integration of computer science and information systems knowledge. The program co-directors will solicit questions from faculty, schedule the examination and coordinate with faculty to grade the exam.

### **Dissertation Proposal**

Each student should prepare a proposal that will be evaluated by the doctoral committee. A proposal should be ready for review at least one semester before the expected completion date of the degree. The proposal is submitted for review and approval by the doctoral committee. An oral presentation of the dissertation proposal before the doctoral committee is required for

approval. An approved proposal is then submitted to the co-directors of the program for final approval.

## Dissertation Completion

Once the dissertation proposal is approved, each student prepares and submits a dissertation. The dissertation is defended before the doctoral committee in a public meeting. Final approval for the dissertation is given by a vote of the dissertation committee after the public defense.

## Graduation

Upon completion of all degree requirements including the dissertation defense, the student receives the degree of doctor of philosophy. Students applying through CSE receive the PhD from the College of Engineering and Applied Science, while students applying through information systems receive the PhD from the Business School.

## Electrical Engineering

- Mission Statement
- Undergraduate Curriculum
- Graduate

**Acting Chair:** Miloje (Mike) Radenkovic

**Administrative Assistant:** Janiece Hockaday

**Office:** North Classroom, 2615

**Telephone:** 303-556-2872

**Fax:** 303-556-2383

**Web site:** [www.cudenver.edu/electrical](http://www.cudenver.edu/electrical)

## Faculty

### Professors:

Titsa Papantoni, PhD, University of Southern California, Professional Engineer (PE)—Greek Chamber of Professional Engineers and Texas

Renjeng Su, DSc, Washington University

### Associate Professors:

Jan Bialasiewicz, PhD, DSc, Silesian Technical University, Poland, PE—Colorado

Hamid Fardi, PhD, University of Colorado

Miloje Radenkovic, University of Belgrade, Yugoslavia

**Assistant Professors:**

Tim Chifong Lei, PhD, University of Michigan

Fernando Mancilla-David, PhD, University of Wisconsin at Madison

**Senior Instructors:**

Brian Atkinson, MS, University of Colorado

Robert Grabbe, MS, University of Colorado

**Professor Adjunct:**

Carl Johnk, PhD, University of Illinois at Urbana-Champaign

Modern electrical engineering is a very broad and diverse field. Never before has there been such a challenge and opportunity for electrical engineering to serve mankind. Today's electrical engineers are involved in the development of technology, materials and products to improve the quality of life. They are concerned with the generation and transmission of power, the control and utilization of natural and synthetic resources, the communication of data and information and the intelligent use of computers in consumer as well as industrial products and processes. Systems in electrical engineering range in size from microprocessors through megawatt energy conversion systems to global audio and video communication networks.

At UC Denver, the electrical engineering curriculum prepares students for careers in product design, manufacturing, research, development, operation and plant engineering, technical sales and application engineering. The goal is to educate and inspire students to achieve their maximum career potential.

**Mission Statement**

We provide graduate programs and an ABET-accredited undergraduate program that are accessible to a diverse group of students—students of different racial and cultural backgrounds, full-time students as well as those who have considerable work and family commitments outside their academic learning, and students with a wide variety of work experiences.

**Undergraduate Curriculum**

Entering students begin their program with a solid foundation in mathematics, physics, chemistry and computers. Social science, humanities and communication courses provide a diverse background. Intensive courses follow in the theory and laboratory application of digital logic and electrical circuits, electromagnetic fields, electronics, computer engineering and digital hardware design, linear systems, controls, electrical machines and power systems and microprocessors. Throughout the entire course of study, students reinforce their understanding of theory through laboratory experience and extensive design projects. A strong background is provided in all of the major fields of electrical engineering: circuits and electronics,

microcomputers, signal and image processing, communications, autonomous and robotic systems, power and energy conversion, and automatic control systems and instrumentation. Ethics is an integral part of the curriculum. During the senior year, advanced undergraduate-level courses in different specialty areas, design projects and professional electives allow the student to explore areas of special interest.

Students should supplement this information about the curriculum by consulting a copy of the “E E Advisement Guide,” which may be obtained in the Department of Electrical Engineering office located in North Classroom, 2615. The “E E Advisement Guide” contains the latest information concerning the curriculum as well as guidelines and procedures with which each student should be familiar. To be awarded the bachelor of science in electrical engineering (BSEE), a student must satisfactorily complete 128 semester hours, satisfy all university graduation requirements and maintain at least a 2.0 GPA in all electrical engineering and computer science courses attempted. Appointments to see any of the departmental advisors may be made by calling 303-556-2872.

## **Graduate**

The Department of Electrical Engineering offers graduate programs with the following areas of emphasis: systems and controls; signal and image processing; optics and communication systems; electrical power, machines and energy systems; microelectronics, VLSI and simulation; and computer engineering. The department offers graduate programs leading to the degrees of master of science in electrical engineering and master of engineering.

## **Requirements for Admission**

Requests for applications for graduate study in electrical engineering should be addressed to Department of Electrical Engineering, UC Denver, Campus Box 110, P.O. Box 173364, Denver, CO 80217-3364.

International applicants who are not citizens or permanent residents of the United States should make application through the Office of International Admissions, Campus Box 185, P.O. Box 173364, Denver, CO 80217-3364. All applicants for admission must submit complete credentials as outlined in the instructions that accompany the application materials.

## **Bachelor of Science**

# **Electrical Engineering BS**

## **Undergraduate Program Objectives**

Objectives of the bachelor of science in electrical engineering are to develop graduates:

- who are immediately productive engineers and can advance their careers on different professional tracks in the engineering industry

- who can pursue graduate education in engineering or other fields such as business, medicine and law

These objectives are consistent with the mission of the University of Colorado Denver, congruent with the goals of the College of Engineering and Applied Science and reflective of the mission of the Department of Electrical Engineering.

## Typical Curriculum for BS (Electrical Engineering)

### Freshman Year

#### First Semester

- CHEM 1130 - Engineering General Chemistry. **Semester Hours: 5**
- E E 1201 - Introduction to Electrical Engineering. **Semester Hours: 1**
- E E 1510 - Logic Design. **Semester Hours: 3**
- ENGL 1020 - Core Composition I: CO1. **Semester Hours: 3** (*see note 1*)
- MATH 1401 - Calculus I: MA1. **Semester Hours: 4**

**Total: 16 Hours**

#### Second Semester

- E E 1520 - Embedded Systems Engineering I. **Semester Hours: 3**
- E E 2531 - Logic Laboratory. **Semester Hours: 1**
- MATH 2411 - Calculus II: MA1. **Semester Hours: 4**
- PHYS 2311 - General Physics I: Calculus-Based. **Semester Hours: 4**
- PHYS 2321 - General Physics Lab I. **Semester Hours: 1**  
Core Curriculum Elective (*see note 1*) (3 semester hours)

**Total: 16 Hours**

### Sophomore Year

#### First Semester

- E E 2132 - Circuit Analysis I. **Semester Hours: 3**
- ENGL 2030 - Core Composition II: CO2. **Semester Hours: 3**
- MATH 2421 - Calculus III: MA1. **Semester Hours: 4**
- MATH 3195 - Linear Algebra and Differential Equations. **Semester Hours: 4**
- PHYS 2331 - General Physics II: Calculus-Based. **Semester Hours: 4**

**Total: 18 Hours**

## Second Semester

- E E 2142 - Circuit Analysis II. **Semester Hours: 3**
- E E 2552 - Sophomore Circuits Laboratory. **Semester Hours: 1**
- E E 2651 - Introduction to Computer Engineering. **Semester Hours: 3**  
Core Curriculum Elective (*see note 1*) (6 semester hours)

**Total: 13 Hours**

## Junior Year

### First Semester

- E E 3133 - Electromagnetic Fields. **Semester Hours: 3**
- E E 3215 - Electronics I. **Semester Hours: 3**
- E E 3316 - Linear Systems Theory. **Semester Hours: 3**
- E E 3651 - Digital Hardware Design. **Semester Hours: 3**
- E E 3715 - Electronics Laboratory. **Semester Hours: 1**  
Core Curriculum Elective (*see note 1*) (3 semester hours)

**Total: 16 Hours**

### Second Semester

- E E 3164 - Energy Conversion. **Semester Hours: 3**
- E E 3225 - Electronics II. **Semester Hours: 3**
- E E 3701 - Computer Architecture and RTOS. **Semester Hours: 3**
- E E 3724 - Power Laboratory I. **Semester Hours: 1**
- E E 3735 - Junior Laboratory. **Semester Hours: 1**
- E E 3817 - Engineering Probability and Statistics. **Semester Hours: 3**  
Core Curriculum Elective (*see note 1*) (3 semester hours)

**Total: 17 Hours**

## Senior Year

### First Semester

- E E 4309 - Senior Design Project I. **Semester Hours: 3**  
Professional Elective (*see note 3*) (3 semester hours)

Engineering Science Elective (*see note 4*) (3 semester hours)  
E E Specialty and Laboratory (*see note 5*) (4 semester hours)  
E E Specialty Course (3 semester hours)

**Total: 16 Hours**

## **Second Semester**

- E E 4319 - Senior Design Project II. **Semester Hours:** 3 (*see note 3*)  
Professional Elective (*see note 4*) (3 semester hours)  
E E Specialty and Laboratory (*see note 6*) (4 semester hours)  
E E Specialty (*see note 6*) (3 semester hours)  
Core Curriculum Elective (*see note 1*) (3 semester hours)

**Total: 16 Hours**

## **Program Total: 128 Hours**

The particular curriculum to be satisfied by each student is the one published in the catalog current at the time of his/her 30-hour senior checkout. A graduation agreement should be requested by each student after completing registration for his/her last semester. Additional information is contained in the "E E Advisement Guide." Students should also refer to the section in this catalog on "Academic Policies of the College of Engineering and Applied Science."

1. Common core requirements of the College of Engineering and Applied Science are outlined in the section titled "Undergraduate Core Curriculum in Engineering" in this catalog or in the "E E Advisement Guide."
2. All electrical engineering students must satisfactorily complete E E 4309, Senior Design Project I, and E E 4319, Senior Design Project II, in consecutive semesters.
3. Professional electives may be selected from an approved list of upper-division or graduate-level courses or cooperative education. The electrical engineering advisor must be consulted prior to the selection of these electives.
4. The engineering science elective may be satisfied by taking ENGR 3012, Thermodynamics.
5. Seventeen semester hours of electrical engineering elective and specialty courses in association with the laboratories are required.

### **Laboratory Requirements**

Students are required to take at least two laboratories out of the following six groups. Theory components are either prerequisites or corequisites to the laboratory components. The theory component (without the laboratory) may be taken as a specialty course.

- E E 4136 - Control Systems Analysis. **Semester Hours: 3**
- E E 4276 - Digital Control Systems. **Semester Hours: 3**
- E E 4406 - Control Systems Laboratory. **Semester Hours: 1**
  
- E E 4225 - Advanced Electronics. **Semester Hours: 3**
- E E 4435 - Advanced Electronics Laboratory. **Semester Hours: 1**
  
- E E 4247 - Communication Theory. **Semester Hours: 3**
- E E 4248 - Digital Communication Systems. **Semester Hours: 3**
- E E 4467 - Communications Laboratory. **Semester Hours: 1**
  
- E E 4133 - Advanced Electromagnetic Fields. **Semester Hours: 3**
- E E 4423 - Microwave Laboratory. **Semester Hours: 1**
  
- E E 4501 - Microprocessor-based Design. **Semester Hours: 3**
- E E 4521 - Microprocessor Lab. **Semester Hours: 1**
  
- E E 4511 - Hardware-Software Interface. **Semester Hours: 3**
- E E 4561 - Hardware-Software Lab. **Semester Hours: 1**

**Other courses available (without any laboratory component) as electrical engineering specialty courses include the following:**

- E E 4174 - Power Electronic Systems. **Semester Hours: 3**
- E E 4184 - Power Systems Analysis. **Semester Hours: 3**
- E E 4555 - VLSI Circuit Simulation. **Semester Hours: 3**

## **Computer Engineering Option**

Students can add a computer engineering emphasis to their electrical engineering degree program by making the following changes in the curriculum described above:

### **Junior Year**

#### **First Semester**

Substitute E E 3651, Digital Hardware Design, for E E 3817, Engineering Probability and Statistics.

- E E 3651 - Digital Hardware Design. **Semester Hours: 3**

## Second Semester

Substitute E E 3817, Engineering Probability and Statistics, E E 3701, Computer Architecture and RTOS (real time operating system), for E E 3651, Digital Hardware Design, E E 3724, Power Laboratory, and a humanities and social sciences course.

- E E 3817 - Engineering Probability and Statistics. **Semester Hours: 3**
- E E 3701 - Computer Architecture and RTOS. **Semester Hours: 3**

## Senior Year

### First Semester

Choose E E 4501, Microprocessor-based Design, and E E 4521, Microprocessor Laboratory, as one electrical engineering specialty and laboratory selection.

- E E 4501 - Microprocessor-based Design. **Semester Hours: 3**
- E E 4521 - Microprocessor Lab. **Semester Hours: 1**

### Second Semester

Choose E E 4511, Hardware-Software Interface Design, E E 4561, Hardware-Software Laboratory, and a humanities and social sciences elective as professional elective and electrical engineering specialty and laboratory selections.

- E E 4511 - Hardware-Software Interface. **Semester Hours: 3**
- E E 4561 - Hardware-Software Lab. **Semester Hours: 1**

## Master of Engineering

# Electrical Engineering MEng

► Graduate School Rules apply to this program

The master of engineering (MEng) degree program is broad based and is designed especially for that person who wants to further his/her education in more than just electrical engineering. A minimum of 30 semester hours of academic work is required for the MEng degree. At least 15 of these hours must be in electrical engineering courses at the 5000-level or above. At least 15 semester hours must be taken in the Department of Electrical Engineering at UC Denver. As many as 15 semester hours may be taken outside of engineering. The student who wishes to enter the master of engineering program should apply to the electrical engineering department in the same manner as a master of science applicant.

## Master of Science

# Electrical Engineering MS

► Graduate School Rules apply to this program

The master of science (MS) program offers two plans, thesis (Plan I) and master's project (Plan II). In each, the student must complete 30 graduate semester hours. To satisfy the breadth requirement, two courses outside the area of specialization are required and two mathematics courses are recommended. Plan I requires a minimum of 24 semester hours of graduate course work and 6 semester hours of MS thesis work. Plan II requires a minimum of 27 semester hours of graduate course work and 3 semester hours of MS project. A minimum of 21 graduate semester hours must be earned through the electrical engineering department at UC Denver. Candidates with a BS degree from UC Denver can count 6 electrical engineering UC Denver graduate credits toward both undergraduate and graduate degrees if their undergraduate GPA is at least 3.0. Double counting applies only to credits earned with a B or better grade.

## Mechanical Engineering

**Chair:** Samuel W. J. Welch

**Program Assistant:** Petrina M. Morgan

**Office:** North Classroom, 3502

**Telephone:** 303-556-8516

**Fax:** 303-556-6371

**Web site:** [www.cudenver.edu/mechanical](http://www.cudenver.edu/mechanical)

## Faculty

### Professors:

Peter E. Jenkins, PhD, Purdue, MBA, Pepperdine, Professional Engineer, PE—Texas

J. Kenneth Ortega, PhD, University of Colorado

John A. Trapp, PhD, University of California at Berkeley

### Associate Professors:

Ronald A. L. Rorrer, PhD, Virginia Polytechnic Institute and State University, PE—Colorado

L. Rafael Sanchez, PhD, Michigan Technological University

Mohsen Tadi, PhD, Virginia Polytechnic Institute and State University

Samuel W. J. Welch, PhD, University of Colorado

Sean E. Wright, PhD, University of Victoria

**Adjoint Assistant Research Professor:**

Atousa Plaseied, PhD, University of Toledo

**Senior Instructor:**

Joseph F. Cullen Jr., MS, University of Colorado

**Professor Emeritus:**

James Gerdeen, PhD, Stanford University

**Associate Professor Emeritus:**

B. Thomas Arnberg, MS, University of Colorado

## **Mission Statement**

The mission of the Department of Mechanical Engineering is to contribute to the economic development of the state of Colorado and the Denver metropolitan area by providing high-quality bachelor's and master's programs (BS, MS/ME) in mechanical engineering for a diverse group of working students.

## **Undergraduate**

The mechanical engineer is concerned with satisfying the needs of society using a combination of material, human and economic resources. Mechanical engineering covers a wide spectrum of activities in the engineering profession. These activities include the conversion and transmission of energy and associated power processes; the kinematic, dynamic, strength and wear considerations, as well as economic aspects of the development, design and use of materials, machines and processes; and the analysis, synthesis and control of entire engineering systems.

The mechanical engineering curriculum begins with a strong emphasis on mathematics, physics and chemistry. It continues with a concentration in engineering sciences, including solid and fluid mechanics; thermodynamics, heat and mass transport; materials; and systems analysis and control. It concludes with laboratory and design courses that demonstrate the ways in which scientific knowledge is applied in the design and development of useful devices and manufacturing processes.

The mechanical engineering program may be roughly subdivided into two-year groupings. In the first two years, the program emphasizes the fundamentals of mathematics and basic science

that are essential for an understanding of most branches of engineering. In the last two years of the program, the curriculum emphasizes engineering science and design and provides technical electives in the following areas:

- thermodynamics
- heat transfer
- fluid mechanics
- solid mechanics
- power
- bioengineering
- dynamics and controls
- computer-aided design and manufacturing
- thermomechanical systems
- composite materials

To be awarded the BS (ME), a student must complete a minimum of 128 semester hours of course work, must satisfy all university graduation requirements and maintain at least a 2.0 in all mechanical engineering courses. All students are required to set up an appointment with the senior check-out advisor before registering for the last 30 hours of their degree program. The last 30 hours must be earned as a degree student in the College of Engineering and Applied Science at UC Denver.

## **Graduate**

The Department of Mechanical Engineering offers graduate courses, a master of science (MS) degree program and a master of engineering (MEng) program. The PhD in mechanical engineering is offered through the Department of Mechanical Engineering, University of Colorado at Boulder. The areas of research interest in which a student may undertake studies at the Downtown Campus include manufacturing processes, fluid mechanics, solid mechanics, bioengineering, energy thermodynamics, and composite materials.

As a student in the MS program, you must meet with your graduate advisor before or during your first semester and design a sequence of elective courses that form a coherent program plan.

Requests for applications for graduate study in mechanical engineering should be addressed to UC Denver Department of Mechanical Engineering, Campus Box 112, P.O. Box 173364, Denver, CO 80217-3364.

Applicants who are not citizens or permanent residents of the United States should make application through the Office of International Admissions, Campus Box 185, P.O. Box 173364, Denver, CO 80217- 3364. All applicants for admission must submit complete credentials as outlined in the instructions that accompany the application materials.

## **Concurrent Bachelor's/Master's Degrees**

Students wishing to obtain a BS degree with a major in mechanical engineering and either the MS or the MEng degree in mechanical engineering may do so with up to 6 semester hours of

5000-level or above courses applying to both degrees. The 5000-level courses must meet the degree requirements for the graduate degree sought and must be suitable technical electives for the BS. This option is open only for students seeking both degrees at UC Denver. Students must meet admission requirements to be accepted into the graduate program. Completion of two 5000-level courses does not guarantee admission into the graduate program. Please see an Engineering Student Services advisor for restrictions and guidelines.

## PhD Program

The PhD in mechanical engineering is available through the Department of Mechanical Engineering at University of Colorado at Boulder. Downtown Campus faculty may serve as research advisors by individual arrangement.

## Bachelor of Science

# Mechanical Engineering BS

## Program Objectives

The program offered by the Department of Mechanical Engineering of the University of Colorado Denver can be completed in the afternoon and evening hours to accommodate both working and traditional students. The department seeks to graduate a diverse population of students with bachelor's and master's degrees, enabling them to:

- be employed by a diverse group of industries, research laboratories and educational institutions
- pursue careers in traditional engineering, interdisciplinary areas, research and education
- pursue postgraduate education and advanced degrees

## Typical Curriculum for BS (Mechanical Engineering—see note 5)

### Freshman Year

#### First Semester

- CHEM 1130 - Engineering General Chemistry. **Semester Hours:** 5
- ENGL 1020 - Core Composition I: CO1. **Semester Hours:** 3 (*see note 2*)
- ENGR 1025 - Engineering Graphics and Computer-Aided Design. **Semester Hours:** 3

- MATH 1401 - Calculus I: MA1. **Semester Hours: 4**

**Total: 15 Hours**

## **Second Semester**

- MATH 2411 - Calculus II: MA1. **Semester Hours: 4**  
M E Technical Elective—lower level (*see note 4*) (3 semester hours)
- PHYS 2311 - General Physics I: Calculus-Based. **Semester Hours: 4**
- PHYS 2321 - General Physics Lab I. **Semester Hours: 1**  
Core Curriculum Elective (*see note 1*) (3 semester hours)

**Total: 15 Hours**

## **Sophomore Year**

### **First Semester**

- MATH 2421 - Calculus III: MA1. **Semester Hours: 4**
- M E 2023 - Statics. **Semester Hours: 3** (*see note 3*)
- PHYS 2331 - General Physics II: Calculus-Based. **Semester Hours: 4**
- PHYS 2341 - General Physics Lab II. **Semester Hours: 1**  
Core Curriculum Electives (*see note 1*) (6 semester hours)

**Total: 18 Hours**

### **Second Semester**

- ENGL 2030 - Core Composition II: CO2. **Semester Hours: 3**
- ENGR 3012 - Thermodynamics. **Semester Hours: 3**
- MATH 3195 - Linear Algebra and Differential Equations. **Semester Hours: 4**
- M E 2033 - Dynamics. **Semester Hours: 3** (*see note 3*)
- M E 3030 - Electric Circuits and Systems. **Semester Hours: 3**
- M E 3032 - Electric Circuits and Systems Lab. **Semester Hours: 1**

**Total: 17 Hours**

## **Junior Year**

### **First Semester**

- M E 3010 - Elementary Numerical Methods and Programming. **Semester Hours: 3**
- M E 3021 - Introduction to Fluid Mechanics. **Semester Hours: 3**
- M E 3022 - Thermodynamics II. **Semester Hours: 3**
- M E 3027 - Measurements. **Semester Hours: 3**
- M E 3028 - Laboratory of Mechanical Measurements. **Semester Hours: 1**
- M E 3043 - Strength of Materials. **Semester Hours: 3**

**Total: 16 Hours**

## **Second Semester**

- M E 3023 - System Dynamics I: Vibrations. **Semester Hours: 3**
- M E 3024 - Introduction to Materials Science. **Semester Hours: 3**
- M E 3031 - Fluids/Thermal Laboratory. **Semester Hours: 1**
- M E 3034 - Properties of Engineering Materials. **Semester Hours: 1**
- M E 3035 - Design of Mechanical Elements. **Semester Hours: 3**
- M E 3042 - Heat Transfer. **Semester Hours: 3**
- M E 3065 - Intermediate Dynamics. **Semester Hours: 3**

**Total: 17 Hours**

## **Senior Year**

### **First Semester**

- M E 3145 - Manufacturing Processes Design. **Semester Hours: 3**
- M E 4023 - System Dynamics II: Controls. **Semester Hours: 3**
- M E 4035 - Senior Design I. **Semester Hours: 3**
- M E Technical Electives (3 semester hours)
- Core Curriculum Elective (*see note 1*) (3 semester hours)

**Total: 15 Hours**

### **Second Semester**

- M E 4045 - Senior Design II. **Semester Hours: 3**
- M E Technical Electives (6 semester hours)
- Core Curriculum Electives (*see note 1*) (6 semester hours)

**Total: 15 Hours**

## Program Total: 128 Hours

Students should check with departmental advisors to determine their degree requirements. The particular curriculum to be satisfied by each student is the one published in the catalog *current* at the time of their matriculation. For additional information, see the departmental advisor.

Students should refer to the section in this chapter on “Academic Policies” of the College of Engineering and Applied Science. In addition to planning for sequences of courses based on prerequisites, students should plan to complete sophomore-level courses before taking junior level courses and should have completed their junior-level mechanical engineering courses before starting their senior-level mechanical engineering electives. All students should see their advisors at least once each semester.

1. Common core requirements of the College of Engineering and Applied Science. Refer to the “Undergraduate Core Curriculum in Engineering” in this catalog or to the “Common Core Requirements” guide available from your advisor for further information.
2. The communication requirements include ENGL 1020, Core Composition I, and ENGL 2030, Core Composition II.
3. C E 2121 and 3111 may be substituted for ME 2023 and 2033.
4. Not all courses may be offered every semester. Students should check the current *Schedule Planner*.
5. Students enrolled prior to fall 2006 may choose either the new core curriculum or the old core curriculum.

## Master of Engineering

# Mechanical Engineering MEng

- Graduate School Rules apply to this program

The master of engineering (MEng) is an interdisciplinary degree program designed to meet the needs of those practicing engineers who wish to follow an integrated program of studies in engineering and allied subjects related to the individual student’s professional work. Students can combine advanced engineering course work with graduate-level non-engineering courses such as business administration, environmental sciences, social sciences, biological sciences or public administration.

Prospective students are required to present a well-defined objective in order to be admitted to the program. In consultation with faculty advisors, an academic program is developed to meet this objective.

An advisory committee will be appointed for each student by the department. The advisory committee that guides the student is responsible for approving the individual’s degree program

and admission to candidacy, and approves the student's written report and the awarding of the degree.

The requirements for admission are the same as those for the MS degree awarded through the College of Engineering and Applied Science. A minimum of 30 semester hours of academic work are required for the MEng degree. At least 15 of these hours must be at the 5000 level or above in mechanical engineering. A maximum of 12 semester hours may be taken outside of engineering. In addition to course work, a written report is required in the MEng program as a final project (3 semester hours). The report may be related to the student's professional work. The report will be of the same general quality as that required for the master of science thesis and must be defended orally. It may be based on work done for credit under independent study.

## Master of Science

# Mechanical Engineering MS

► Graduate School Rules apply to this program

For the master of science (MS) degree in mechanical engineering, students may choose between two plans with each plan totaling 30 semester hours. Students following Plan I (thesis option) take 24 semester hours of formal course work plus 6 semester hours of thesis work. Students following Plan II (project option) take 27 semester hours of formal course work plus a 3 semester hour final project requiring a report. Students following Plan I or Plan II must submit a proposal to their examination committee prior to the semester in which they register for their thesis or project semester hours, and the examination committee must approve the proposal for the thesis or project.

Students in either plan may choose one of three options. In the first two options, the student may choose to specialize in either thermal science or mechanics. The third option is the general mechanical engineering option.

The **thermal science option** requires 12 semester hours of course work in analytical methods, numerical methods, fluid mechanics and thermodynamics. The student then selects 9 semester hours of course work in approved electives from a selection of thermal science electives.

The **mechanics option** requires 12 semester hours of course work in analytical methods, numerical methods, elasticity and dynamics. The student then selects 9 semester hours of course work in approved electives from a selection of mechanics electives. For students following Plan I, both the thermal science and mechanics options allow the student to pick one approved 3-semester-hour elective not necessarily in the chosen specialty. For students following Plan II, both the thermal science and mechanics options allow the student to pick two approved 3-semester hour electives not necessarily in the chosen specialty.

The **general mechanical engineering option** requires the student to take 18 semester hours of required course work in analytical methods, numerical methods, fluid mechanics, thermodynamics, elasticity and dynamics. For students following Plan I, the general mechanical

engineering option allows the student to pick two approved 3-semester hour electives. For students following Plan II, the general mechanical engineering option allows the student to pick three approved 3-semester hour electives.

# College of Liberal Arts and Sciences

## Dean

**Daniel J. Howard**; Professor of Biology

## Associate Deans

**Brenda J. Allen**, Associate Dean for Planning and Initiatives; Professor of Communication  
**Laura M. Argys**, Associate Dean for Research and Creative Activities; Professor of Economics  
**Mary Coussons-Read**, Associate Dean for Faculty and Staff Affairs; Professor of Psychology  
**Tammy Stone**, Associate Dean for Curriculum and Student Affairs; Associate Professor of Anthropology

## Contact

### Administration Office

North Classroom, Suite 5014

Phone: 303-556-2557

Fax: 303-556-4861

### Undergraduate Advising Office Mailing Address

North Classroom, Suite 4002

Phone: 303-556-2555

Fax: 303-556-6277

College of Liberal Arts and Sciences

Campus Box 144

P.O. Box 173364

Denver, CO 80217-3364

[www.cudenver.edu/clas](http://www.cudenver.edu/clas)

## Application Deadlines

### Undergraduate

Fall—July 22

Spring—December 1

Summer—May 3

### Graduate

Varies by department.

See individual department sections of this chapter for deadlines.

*The beauty of an education in the liberal arts is its simultaneous diversity and specialization, its combination of breadth and depth. Students in the College of Liberal Arts and Sciences at UC*

*Denver specialize in a major such as chemistry, English or psychology while creating a foundation of knowledge through general education requirements. Having a broad background in the arts and sciences prepares you to begin your career or to change careers later, to pursue advanced study in a discipline or to study for a professional career such as law or medicine. We believe it also sets the stage for a rewarding and productive life overall. Pursuing a liberal arts curriculum not only increases your knowledge, it enables you to develop such skills as logical argumentation and clear expression, gain insights about relationships in nature and society, develop critical thinking and interpretive ability, solve complex problems rationally and heighten your aesthetic appreciation.*

At the College of Liberal Arts and Sciences (CLAS), we coordinate undergraduate programs with our own graduate programs as well as UC Denver's professional schools, through which you can combine technical expertise with the broad critical and analytical skills essential to complex decision making. While our dedicated faculty have outstanding academic credentials, their greatest strength is their commitment to highly motivated students representing a broad range of age and experience. Their goal is not only to teach, but to instill in our students a lifelong love for learning and respect for free and independent thinking.

Our curriculum maintains traditionally high university academic standards while providing numerous flexible learning opportunities to meet our students' varied objectives. We offer opportunities to study urban programs, confront contemporary issues, participate in off-campus internships and make use of the city's resources. Advisory committees from the community work with CLAS departments and programs, allowing cultural, historical and environmental efforts in Denver to be supported and enhanced by our academic programs.

Liberal arts and sciences undergraduates receive either a BA or BS degree. Many go on to further study in some of the best graduate and professional schools around the country, while others begin their careers in a variety of positions in industry, commerce and government. Each area of study offers a wide variety of curricula, including traditional undergraduate major programs, interdisciplinary studies and pre-professional programs.

## **College of Liberal Arts and Sciences Educational Goals**

The College of Liberal Arts and Sciences defines liberal education as including four major components:

1. Central elements of knowledge including:
  - a. knowledge of the diversity and significant dimensions of human culture and a specific understanding of American culture, including its political and ethnic diversity
  - b. aesthetic awareness and appreciation of the cultural contributions made to the human experience by the social sciences and humanities
  - c. an understanding of the methods of inquiry and development of theory that are the bases of knowledge in the natural and physical sciences
2. Essential skills for analysis, writing, computation, communication and decision making
3. The development of a constructive orientation toward society through the enhancement of the individual's capacity to make informed and responsible choices based on

reflective consideration of the democratic principles of due process, civil liberties and the balance between individualism and the common good

4. The ability to apply knowledge of the arts and sciences to society's specific needs

The college works to instill in students an understanding of these components through required skills and core courses and through the knowledge and skills required by each major program in the college.

## **Undergraduate Programs**

A complete list of major and minor programs appears in At A Glance: College of Liberal Arts and Sciences.

## **Major Degree Programs**

Students can earn baccalaureate degrees (including areas of emphasis indented below the major areas) in the majors listed in the college At A Glance.

## **Minor Programs**

A college minor represents a concentration of content knowledge, but not to the extent afforded in a major. Minors are optional for liberal arts students, but are encouraged to broaden educational experience and enhance occupational skills.

Students interested in a minor should contact the CLAS Advising Office, North Classroom, 4002, 303-556-2555, for information. Students may also contact the department directly.

## **Double Majors**

Students may graduate with more than one major by completing all requirements for each major.

## **Double Degrees**

Students may earn two undergraduate degrees in liberal arts or from two different schools or colleges of the University of Colorado simultaneously by fulfilling all requirements for both degrees. For example, the Business School and the College of Liberal Arts and Sciences have a double-degree program leading to a BS in business administration and a BA in the student's chosen major.

The College of Liberal Arts and Sciences requires that a student complete at least 90 liberal arts semester hours to be granted two bachelor's degrees. Students must complete a minimum of 150 semester hours applied toward the two degrees.

Students planning one of these multiple programs should consult with the CLAS Advising Office at the earliest possible date to get approval for a double-degree program.

## Second Degrees

Students who have been awarded a bachelor's degree (either from the college or elsewhere) may be granted a second bachelor's degree provided that (a) all general requirements for that degree have been met; (b) the major for the second bachelor's degree is different from the major for the first; and (c) the college and major department residence requirements are satisfied. A second degree from the college requires a minimum of 30 additional semester hours of credit.

## Graduate Programs

Graduate degree programs offered by the faculty of the college through the Graduate School are listed in *At A Glance: College of Liberal Arts and Sciences*. Many degrees provide the opportunity for students to specialize in concentrations within the discipline; these are listed below the degree title.

## Certificate Programs

The college offers undergraduate and graduate certificate programs that demonstrate proficiency in a specialized field of study. These programs differ from minor programs in that certificates may cross traditional disciplinary boundaries and are awarded independently of formal graduation.

Certificate programs are open to degree-seeking students as well as those who want to enhance their professional expertise, and require the completion of three to six related courses (9-19 semester hours). The list of certificate programs in *At A Glance* have been approved by the college and will appear on the student's official University of Colorado transcript upon completion of all certificate requirements.

Information about certificate programs can be found in the coordinating department section of this catalog, the departmental Web sites or contact the department directly.

## Signature Areas

CLAS has developed a 12-year strategic plan (2008-2020) that includes five signature areas. Based on proposals prepared by faculty from across the college and university, these areas encompass interdisciplinary themes related to diverse contemporary issues, as their titles demonstrate:

- Colorado Center for Public Humanities
- Math and Science Learning and Education
- Social Justice
- Sustainability
- Women's and Gender Studies

Each signature area group has developed and begun to implement its vision. A managing director works with faculty and administrators from CLAS and other academic units to

coordinate the development of interdisciplinary curricula, research projects, community outreach and academic programs. The CLAS Web site will announce activities and post updates about the signature areas at: <http://thunder1.cudenver.edu/clas/signatureAreas.html>

## **Undergraduate Policies and Procedures**

### **Requirements for Admission**

**CLAS Advising Office:** North Classroom, 4002

**Telephone:** 303-556-2555

**Fax:** 303-556-6277

**Web site:** <http://thunder1.cudenver.edu/clas/advising/index.htm>

### **New Freshmen**

Students planning to enter the College of Liberal Arts and Sciences must meet the requirements described in the Information for Undergraduate Students chapter of this catalog.

### **Transfer Students**

Students who have attended another college or university are expected to meet general requirements for admission of transfer students as described in the Information for Undergraduate Students chapter.

Transfer students with at least 30 semester hours of transferrable credit who have been denied admission to the college by the Downtown Campus Office of Admissions, and who have special circumstances not covered by the regular admission policies, may petition the CLAS Academic Standards Committee for provisional admission. The Academic Standards Committee requires evidence of academic performance before provisional admission is granted. Policies and procedures for the CLAS Academic Standards Committee are available through the CLAS Advising Office.

### **Grading Policies**

The College of Liberal Arts and Sciences adheres to the University of Colorado grading policies found in the Registration and Records chapter of this catalog. The college also maintains specific grading policies for liberal arts students.

### **Incomplete Grades**

When a student has special circumstances that make it impossible to complete course assignments, faculty members have discretion to award an incomplete grade. Effective January 1, 2009, all incomplete courses are now assigned a grade of Incomplete (*I*). Incomplete grades are *not* awarded for poor academic performance or as a way of extending assignment

deadlines. While not required, a CLAS course completion agreement form (available from the CLAS Advising Office) is strongly suggested when faculty and student agree on an incomplete grade.

To be eligible for an incomplete grade, students must:

- have successfully completed 75 percent of the course
- have special circumstances (verification may be required) that preclude the student from attending class and completing graded assignments
- make arrangements to complete missing assignments with the original instructor within one academic year

Students are allowed up to three semesters (one year) to complete the requirements for the incomplete, after which the I reverts to an F grade on the student's transcript. Any request to allow a grade change after the one-year period must be petitioned to the CLAS Academic Standards Committee.

## **Pass/Fail Grading Option**

Students may select the pass/fail grading option for most courses. In addition to Downtown Campus policies covering the pass/ fail grading option (see the Registration and Records chapter of this catalog), CLAS students must adhere to the following college pass/fail grading policies:

1. Courses in a student's major, minor and certificate may not be taken on a pass/fail basis.
2. Courses required to show proficiency may not be taken on a pass/fail basis: ENGL (core curriculum), MATH (core curriculum) and first two semesters of foreign language.
3. Courses used to satisfy the intellectual competencies section of the UC Denver core curriculum may not be taken on a pass/fail basis.
4. Courses in the knowledge area section of the Downtown Campus core curriculum may be taken on a pass/fail basis.
5. Courses used to satisfy CLAS graduation requirements may be taken on a pass/fail basis. (Exception: communicative skills, major/minor courses.)
6. Students must sign up by the drop/add deadline for the semester.

## **Repeated Courses**

Students may re-register for any course. Both (all) courses remain on the transcript and both (all) grades are used to calculate the student's GPA. Course credit toward graduation is counted only once for a given course no matter how many times the course is repeated.

## **Academic Policies**

Students are referred to the Registration and Records and University Policies chapters of this catalog for a description of academic policies that apply to all undergraduate students at UC

Denver's Downtown campus. The policies that follow apply specifically to the College of Liberal Arts and Sciences.

## **ACADEMIC ADVICE AND INFORMATION**

Students in the college are expected to assume responsibility for planning their academic programs in accordance with college policies and major requirements. To assist students, the college maintains the CLAS Advising Office, North Classroom, 4002, 303-556-2555. Students are assigned to a college advisor in this office according to the students' last names and must meet with this advisor upon matriculation into the college. The CLAS Advising Office also has specialty college advisors in teacher education and health careers. The college advisor is responsible for advising students of college policies and requirements, and the certification of college requirements at graduation.

As soon as students have determined a major, they should meet with a major department advisor. The major department advisor will be responsible for the student's major advising and for certification of the completion of the major program at graduation.

Students planning to ultimately earn a degree from one of the professional schools should also see an advisor in that school or college.

## **EARLY ALERT**

The University of Colorado Denver Downtown Campus participates in a campuswide early alert program to identify undergraduate students needing assistance from academic and student service offices. Providing assistance early in the semester is very important to student success in their baccalaureate program. The College of Liberal Arts and Sciences is committed to actively participate in the program through a collaborative working relationship between faculty and academic advisors in the college.

The early alert program is designed for faculty to identify students in weeks five and six of the semester who need assistance because of academic performance, class participation and/or behavior issues. Assistance is provided to students identified by faculty through academic advising and through referrals to appropriate UC Denver student service offices.

Goals of the early alert program are to:

- increase student academic success
- improve student persistence and graduation rates
- increase communication between students and faculty
- increase communication between students and academic advisors
- increase student utilization of student service offices

Further information about the UC Denver early alert program is available from the Undergraduate Experiences Office at 303-556-6506.

## **ACADEMIC PROBATION AND SUSPENSION**

Undergraduate students who maintain a minimum 2.0 cumulative GPA in all University of Colorado course work are considered in good standing. Students who fail to maintain a 2.0 cumulative GPA are subject to academic policies of probation and suspension. A student must be in good standing to graduate with a baccalaureate degree from the College of Liberal Arts and Sciences.

Details of academic probation and suspension are available in the CLAS Advising Office. These policies apply to undergraduate students majoring in the College of Liberal Arts and Sciences. Graduate students are governed by Graduate School guidelines .

## **Probation**

Students whose cumulative University of Colorado GPA falls below a 2.0 will be placed on academic probation. Probation is a warning to students that the minimum level of academic performance is not being maintained. Students placed on probation for the first time will be required to participate in a program designed to help them attain academic good standing as quickly as possible.

There is no restriction on the amount of time a student can remain in probationary status. Students on probation do not have restrictions on course selection or credit hours; however, a restricted schedule to concentrate on grades is encouraged. Probationary students are returned to good standing status only when their cumulative University of Colorado GPA reaches a minimum 2.0.

While on academic probation, students must maintain a minimum 2.3 semester GPA. Failure to satisfy this academic requirement for continued probation will result in suspension.

## **Suspension**

Students who fail to meet the semester GPA requirements while on probation are placed on suspension. Suspension is an official notification that a student has not maintained the required minimum grade performance and has failed to meet the required conditions for continued probation.

A student's suspension status is permanently indicated on the official University of Colorado transcript. Suspended students are returned to good standing status only when their cumulative University of Colorado GPA reaches a minimum 2.0.

There is no restriction on the amount of time a student can remain in suspension status. Students on suspension are required to register manually (Web registration precluded) each semester and only with written permission of their advisor in the CLAS Advising Office.

CLAS students on suspension are restricted to the following University of Colorado course registration options for each fall/spring semester or summer term: (1) up to two on-campus courses, and (2) CLAS courses or Downtown Campus core courses.

While on suspension, students must attain a minimum 2.3 semester GPA. Failure to satisfy this academic requirement for suspension will result in academic dismissal.

## **Dismissal**

Students who fail to meet the semester GPA requirements while on suspension are dismissed from the University of Colorado. Students on academic dismissal are precluded from registering anywhere in the University of Colorado system for any semester or summer term.

## **EARNING ACADEMIC CREDIT—SPECIAL OPTIONS**

Students in the college may earn credit toward a degree for knowledge gained prior to enrollment in the college or for knowledge gained outside traditional college courses. Specific programs by which credit is awarded are described below. In addition, credit may be earned for ROTC.

General information regarding these options can be found in the “Transfer of College-Level Credit” section of the Information for Undergraduate Students chapter. Students should contact the CLAS Advising Office for specific details of these programs. For credit in a student’s major or minor, the appropriate department must be consulted.

## **Advanced Placement/International Baccalaureate**

Students who have taken advanced courses in high school and who have earned high scores on the Advanced Placement or International Baccalaureate standardized exams may be eligible for university credit. See the Information for Undergraduate Students chapter of this catalog under “Transfer of College-Level Credit” for additional information. Individual departments establish advanced placement criteria for credit. Students should contact the department advisor for specific details concerning advanced placement credit.

## **College Level Examination Program (CLEP)**

College of Liberal Arts and Sciences students may earn university credit by examination in subject areas in which they have obtained college-level proficiency. The use of CLEP subject examinations toward major, minor or certificate requirements is subject to a separate evaluation by the faculty advisor in the department or program. To receive academic credit from CLEP, students must present official test results to the Downtown Campus Office of Admissions. A maximum of 30 hours of CLEP credit will count toward the degree. See the “Transfer of College-Level Credit” in the Information for Undergraduate Students chapter of this catalog for additional information.

## **Credit by Examination**

Students with sufficient experience and knowledge may receive credit for a specific course by taking a comprehensive examination given by the faculty. Students should consult the Registration and Records chapter of this catalog for more information.

## **Internships or Cooperative Education**

Undergraduate students may seek credit from an employment experience that contains academic content and is sponsored by a CLAS faculty member. Internships are helpful for career exploration early in a student's academic career or for job experience after developing academic content in the major.

Students must have a minimum 2.75 cumulative GPA in a minimum of 15 semester hours of UC Denver course work. A maximum of 3 semester hours of internship credit per semester and 9 semester hours overall are allowed toward the 120 semester hours applied toward graduation. Undergraduate students should contact the Experiential Learning Center for details about the internship contract and faculty sponsorship requirements.

## **Courses in the Professional Schools and in Physical Education**

Students may count up to 24 semester hours of academic course work taken outside of liberal arts, such as business, engineering, architecture, journalism and education.

Up to 8 semester hours of activity courses in physical education will count toward the 120 hours required for the degree; these are included in the 24 semester hours allowed outside CLAS.

## **Independent Study**

Qualified CLAS undergraduate students who seek to further their examination of knowledge outside the structured classroom are encouraged to register for independent study.

Undergraduate independent study is a nonstructured, independent research project under the sponsorship and supervision of a faculty member. Students should consult with the faculty sponsor to discuss the project and initiate the independent study contract.

To qualify for independent study credit, students must have a declared major or minor in the discipline of the independent study project and a minimum cumulative UC Denver GPA of 2.5. Those seeking senior level independent study must have a minimum junior standing and sufficient course work to allow independent research in the discipline.

Faculty seeking to sponsor an independent study project must have either instructor or tenure-track rank. Faculty seeking to sponsor an independent study project as part of an undergraduate honors project must be tenure-track rank.

Independent study projects are typically awarded credit on a 3:1 (4:1 in summer) basis for contact hours per week to semester hours. That is, a 3-semester-hour independent study project typically requires 9 hours of effort per week over the semester.

## **Graduation Requirements**

Undergraduate students graduating from the College of Liberal Arts and Sciences must fulfill requirements for the college and for the major department. Residence requirements apply to both college and major department. A checklist of graduation requirements follows in this section.

Students are responsible for knowing the requirements for their degree and for fulfilling these requirements. Upon completion of the college and major requirements, the student will be awarded the appropriate degree.

## General Requirements

- a minimum of 120 semester hours passed
- a minimum 2.0 cumulative GPA
- a minimum of 45 semester hours of upper-division work
- a minimum of 30 semester hours of CLAS course work with letter grades at the Downtown Campus
- fulfillment of all college and major requirements

### CLAS CORE CURRICULUM AND GRADUATION REQUIREMENTS

*Note:* Not more than 24 hours outside the college (for example, business and engineering) can be applied toward the 120 hours required for the bachelor's degree.

## General Education

The general education graduation requirements are established by the CLAS faculty and combine specific requirements from (1) the Downtown Campus core curriculum, (2) the CLAS graduation requirements and (3) foreign language proficiency.

## Major Requirements

In addition to completing the college requirements outlined above, students must declare a major and fulfill all requirements of the major department. Department requirements include at least 30 semester hours of work in the major with a minimum grade of C (2.0), of which at least 16 semester hours in the major are at the upper-division level. The GPA in the major must be at least 2.0.

The college places a maximum number of semester hours (required plus elective courses) in the major department, discipline or program as follows:

### *Degree Maximum Hours*

BA     48

BS     56

The department is responsible for determining when a student has successfully completed the major requirements and for certifying the completion to the dean of the college.

## **Declaration of Major**

It is important that students declare a major as early as possible in order to receive proper advising toward departmental requirements. Students in the college must declare a major by the start of their junior year (greater than 60 hours). Transfer students to the college with junior or senior standing should declare a major in their first semester at UC Denver. Students are allowed to change their major at any time.

## **Residence Requirements**

A minimum number of semester hours must be earned in residence in the College of Liberal Arts and Sciences. All students have college and major residence requirements. Students should check with their major department to ascertain residence requirements for the major.

Students transferring to the Downtown Campus must pay particular attention to residence requirements. Students transferring academic credit from Metropolitan State College of Denver should see the CLAS Advising Office for special consideration of residence credit.

Residence credit hours are earned from CLAS courses taught by UC Denver faculty while the student is enrolled as a degree student in the College of Liberal Arts and Sciences.

All CLAS students must meet college residence requirements.

1. Students must earn a minimum of 30 residence semester hours.
2. For students who exceed the minimum 30-hour residence requirement, a minimum of 21 out of the last 30 semester hours applied toward graduation requirements must be in residence.
3. Departments maintain a residence requirement for the major, minor and certificates. Students should consult with a faculty advisor concerning departmental residence requirements.

## **Intent to Graduate**

Students must submit their intent to graduate online application by the published deadline for the semester they expect to graduate. If the degree is not completed, they must resubmit the intent to graduate each subsequent semester until graduation. Failure to submit the intent to graduate will result in delayed graduation.

## **Graduation Application**

Students are required to meet with their CLAS major and minor advisors at the beginning of the semester/term in which they plan to graduate to initiate the graduation verification process. CLAS advisors will distribute graduation applications to students who qualify, and then their intent to graduate online application is approved. The deadline for filing a graduation application with the CLAS Advising Office is the published last day to add courses in each semester.

Failure to submit the intent to graduate and graduation application with the CLAS Advising Office will result in delayed graduation.

## **Academic Honors**

### **College Honors**

A student who performs superlatively in course work in the college will be awarded a bachelor's degree accompanied by the statement *with distinction*. To be eligible for graduation with distinction, a student must have completed a minimum of 45 semester hours at the University of Colorado (on any CU campus), including the final semester, with a GPA of at least 3.75. The 45 semester hours must be completed in the student's junior and senior years. A maximum of 6 out of the final 45 semester hours may be completed with a grade of *P* (on *P/F* option).

### **Departmental Honors**

Departments in the college offer programs through which students can qualify for Latin honors: *cum laude*, *magna cum laude* or *summa cum laude*. Determination of the level of honors is made by the department. Detailed information can be obtained from the CLAS Advising Office or from the individual department.

### **Dean's List**

Each semester, the college publishes and displays a Dean's List honoring students who demonstrate high scholastic achievement. To earn a place on the list, students must achieve a 3.75 GPA in all University of Colorado hours taken during the semester, including a GPA of at least 3.75 in all CLAS courses. To be eligible for the Dean's List, students must also complete, for letter grades, a minimum of 9 semester hours (6 semester hours in the summer session) in structured CLAS courses, excluding independent study, cooperative education and internships, by the end of the semester.

## **Graduate Policies and Procedures**

### **Admission to Graduate Programs**

Each CLAS graduate program handles admissions to its master's or doctoral programs, and defines its own admission standards and procedures based upon the general Graduate School guidelines. Some departments process application files within the department and some have the Office of Admissions process application materials, so be sure to check with the department to which you are applying to learn their specific procedures and deadlines.

The criteria for admission shall be based on a combination of the following: minimum 3.0 GPA, standardized examinations, prior professional experience, portfolios or other indicators. Regular admission to master's programs requires the completion of a bachelor's degree or master's

degree from an accredited college or university at the time of matriculation or demonstration of the completion of work equivalent to that required of these degrees as specified by UC Denver.

Students are admitted as regular or provisional students. Students receiving provisional admission are subject to certain requirements set out by their programs for a probationary period, not to exceed two years. The requirements may be more stringent, but provisional students must complete each semester's course work with a GPA of 3.0 or higher on all work taken.

International students must meet all requirements for regular admission as well as the requirements of the UC Denver Office of International Affairs. These include: documentation in English or a certified English translation of the completion of a bachelor's degree, master's degree or the equivalent at the time of matriculation as evaluated by International Admissions; financial documents required by the UC Denver Office of Admissions; a certified English translation of all records and references not in English; TOEFL scores above 525. See the Information for International Students chapter for more information.

## **Transfer Credits**

Up to 12 semester hours can be transferred in from another graduate program (including hours taken at UC Denver as a nondegree student with a grade of B- or better) and applied toward a CLAS master's degree. Courses taken while still an undergraduate student may be counted as pre-admission credits, but may not exceed 15 and cannot have been applied toward the undergraduate degree. Only courses numbered 5000 and above or classified as graduate level can be transferred. Up to 30 transfer semester hours or semester hours taken as a nondegree student may be applied toward a PhD degree. Courses taken more than 10 years prior to admission must be revalidated by the department or program.

## **Readmission**

If less than one calendar year has passed since a student in good standing was last enrolled in courses at UC Denver, a student must only notify the program. If a student does not register for three consecutive terms, he/she needs to be re-admitted. This requires the student to submit Part I of the graduate admission form to their department or program; they must also pay the application fee. Those who have not been active for more than four years must complete the full application process.

PhD students may apply for a time extension or leave of absence as long as the total time to complete the degree does not exceed 10 years. Up to one year of an approved leave of absence may be taken without reapplying to the program upon return.

## **Changing Degree Programs**

Students changing degree programs need to be admitted by the new department. They must provide all items required of students applying for the first time, but may petition the program to which they were originally admitted to release their initial application materials to the new

department. Any transfer of courses to the new degree program is at the discretion of the new department or program.

## **Advisors**

Students should consult with their faculty advisors early and often. Each graduate program has a faculty coordinator who should be consulted about program requirements. This may be the same person as a student's faculty advisor. While students are strongly encouraged to meet with their faculty advisor every semester, they *must* meet with their faculty advisor and/or faculty coordinator at the beginning of their last semester to verify that all degree requirements have been met and to have their candidacy form approved and signed.

## **Graduate Courses**

All courses that count toward a graduate degree must be approved by the degree-granting graduate program. At least 30 hours must be considered graduate rank (taught by graduate faculty). Eighteen hours are required at 5000-level or above with the remainder subject to departmental approval. Courses below the 4000-level can only be applied if taken beyond the 30-hour graduate minimum.

Students may use courses offered through the continuing and professional education program in the pursuit of graduate study only if they obtain proper academic approval from the graduate program.

Graduate students may take up to a total of 7.5 independent study semester hours (in a 30-hour program), or 25 percent of the total program hours, under the direct supervision of a faculty member and with the approval of the CLAS graduate dean. However, it is important that students check with their programs concerning the maximum number of independent study credit hours that may count toward their degree, as this number may vary. The minimum UC Denver GPA required to register for independent study credits is 3.0, and students must be admitted to a CLAS degree program. Each independent study project may be taken for 1-3 semester hours. Students use the special processing form to outline the project and how the grade is determined, which then must be approved by the supervising faculty member and CLAS graduate dean.

Graduate-level internship credit may be earned in some programs. Students must be admitted to a CLAS degree program, have completed a minimum of 6 semester hours and have a minimum 3.0 GPA. A maximum of 6 hours of internship credit is allowed, except where specified by the program (i.e., nonthesis clinical psychology). Students should contact the Experiential Learning Center for details about the internship contract and faculty sponsorship requirements.

## **Minimum GPA**

A minimum cumulative GPA of 3.0 in courses applied to a degree program is required. Grades of B- or better are accepted for most master's degree programs; however, some programs have

more stringent grade requirements. Doctoral minimum grade is B-. Courses applied to a graduate degree may not be taken pass/fail.

## Probation

A student whose cumulative GPA falls below 3.0 or who receives a grade lower than a B- will be placed on academic probation by the CLAS graduate dean. In the two semesters following placement on probation, the student's course work GPA must be at least 3.0, only in courses applicable to the degree and all grades at or above a B, or the student will be suspended. At the end of two semesters after being placed on probation, the student must raise his/her cumulative GPA to 3.0 or he/she will be suspended. A student may petition the CLAS graduate dean for an extension of the probationary period in extenuating circumstances.

## Incomplete Grades

When a student has special circumstances that make it impossible to complete course assignments, faculty members have discretion to award an incomplete grade. Effective January 1, 2009, all incomplete courses are now assigned a grade of Incomplete (I). Incomplete grades are *not* awarded for poor academic performance or as a way of extending assignment deadlines. While not required, a CLAS course completion agreement form (available from the CLAS Advising Office) is strongly suggested when faculty and student agree on an incomplete grade.

To be eligible for an incomplete grade, students must:

- have successfully completed 75 percent of the course
- have special circumstances (verification may be required) that preclude the student from attending class and completing graded assignments
- make arrangements to complete missing assignments with the original instructor within one academic year

Students are allowed three semesters (one year) to complete the requirements for the incomplete, after which the I reverts to an F grade on the student's transcript. Any request to allow a grade change after the one-year period must be petitioned to the CLAS Academic Standards Committee.

## Thesis/Project/Dissertation

Master's programs can be either thesis plan or nonthesis plan; nonthesis plans may include a project or report. No more than 6 thesis semester hours can be applied toward a master's program. Students may register for one or more thesis or project credits each semester up to the maximum.

For doctoral programs, a minimum of 5 hours and maximum of 10 hours of dissertation credit may be registered for in any semester. Students must receive approval from the dean of the Graduate School or college graduate dean to register for fewer than 10 dissertation hours.

Doctoral candidates must be registered for dissertation credit each fall and spring semester following successful completion of the comprehensive examination. Students on leave of absence, approved by the program and filed with the Graduate School, do not have to register for dissertation credits. A student does not have to register for thesis or dissertation credits after a successful final examination and thesis defense even if the final version of the thesis/dissertation and the record of the final examination are submitted to the Graduate School at a later date.

## **Thesis/Dissertation Procedures**

The thesis/dissertation must comply with specifications outlined in “Guidelines for Preparing Master’s and Doctoral Theses,” which can be downloaded from the CLAS Graduate Advising Web site, and have received a preliminary thesis format approval from the Graduate School. The student’s faculty committee must approve the final draft of the thesis, three copies of which must be filed with the Graduate School before graduation. The thesis binding fee must be paid when the thesis is submitted to the Graduate School.

## **Research Protocol**

Students doing research that involves gathering data from human subjects must have their research protocol approved by the Human Research Committee. Students doing research that uses animals in any form must have their research protocol approved by the Institutional Animal Care and Use Committee.

## **Graduation Application**

Graduate students in a master’s degree program initiate the graduation process through the CLAS Administration Office, North Classroom Building 5014. Doctoral candidates initiate the graduation process through the Graduate School, Lawrence Street Center, Suite 300. Both master’s and doctoral candidates must follow deadline dates published in the online CLAS Graduate Advising Web site and on sheets available from departmental graduate advisors, the CLAS Administration Office or the Graduate School.

All graduate students must submit their intent to graduate online application the semester they intend to graduate, an application for admission to candidacy and a request for graduate examination/thesis defense.

## **Admission to Candidacy**

The application for admission to candidacy form is available in the CLAS Administration Office, the Graduate School, the student’s program office or online at the CLAS Graduate Advising Web site. This application must be signed by the student’s advisor and the program coordinator, certifying that the student’s work is satisfactory and that the program outlined in the application meets the requirements set for the student.

A student on probation is not eligible to be awarded a degree until he/she is removed from probation. A student with provisional admission status must be changed to regular admission status before admission to candidacy.

## **Intent to Graduate**

Students must submit their intent to graduate online application by the published deadline for the semester they expect to graduate. If the degree is not completed, they must resubmit the intent to graduate each subsequent semester until graduation. Failure to submit the intent to graduate will result in delayed graduation.

## **Deadlines**

The Graduate School deadlines (to file the application for admission to candidacy and intent to graduate, schedule and hold the comprehensive exam or thesis/project defense, submit thesis for format review, and turn in the final thesis) are published each semester and are available from the CLAS Administration Office, departmental graduate advisors and the Graduate School. Deadlines and forms are also posted on the CLAS Graduate Advising Web site. It is the student's responsibility to know and to adhere to these deadlines.

## **Comprehensive Examination or Thesis/Project/Dissertation Defense**

Students must be registered when they take the comprehensive examination or defend the thesis or project. This can be accomplished by registering to take a regular course, independent study/thesis/project credits or through candidate for degree registration. The examination may be oral, written or both.

The master's examination must be given by a committee of three members of the graduate faculty, all of whom sign an exam report form signifying that the student has passed the exam or defense. The committee chair must be a regular member of the Downtown Campus graduate faculty, and the other members must hold at least a special graduate faculty appointment. PhD dissertation defense committees include four graduate faculty members, one of whom is from outside the primary department and must unanimously approve the examination.

The record of the thesis defense must be approved by the student's faculty committee and filed with the CLAS Administration Office before graduation. In programs where the project/report defense counts as the comprehensive exam, this requirement applies to projects/reports as well. A student who fails the comprehensive final examination or defense may retake the examination only once.

## **Time Limits**

Master's degree students admitted after January 2009 have a maximum of five years from the date of the start of course work after admission to the program to complete all degree

requirements. This limit can be extended by a leave of absence approved by the student's graduate program. Students admitted prior to January 2009 have seven years to complete their master's degrees (according to previous Graduate School Rules).

Doctoral students have eight years from the date of the start of course work after admission to complete all degree requirements for a PhD (10 years with approved leave of absence).

*Note:* Individual graduate programs may have time limits that are more stringent.

## **Residency Requirements**

A minimum of three semesters of work must be completed at UC Denver.

## **Academic Ethics and Petitions**

### **Academic Ethics**

As members of the UC Denver academic community, faculty and students accept the responsibility to maintain the highest standards of intellectual honesty and ethical conduct in all forms of academic work. While most violations center around cheating or plagiarism, the UC Denver Academic Honor Code on the Downtown Campus is more comprehensive and includes the following categories: plagiarism, cheating, fabrication and falsification, multiple submission, misuse of academic materials and complicity in academic dishonesty.

The CLAS Academic Ethics Committee, composed of faculty, students and staff, is charged with establishing academic ethics policies and, when necessary, evaluating ethics charges against students or faculty. Faculty and students should be familiar with the Academic Honor Code for the Downtown Campus (see the University Policies chapter) and the CLAS Academic Ethics Policies, available from the CLAS Advising Office, North Classroom, 4002, and online at the CLAS advising Web site.

Faculty who charge student(s) with a violation of the Academic Honor Code may lower a student's grade without review. Faculty bringing such charges are required to notify the student in writing. Students charged with an ethics violation continue in the class and may appeal the faculty decision to the CLAS Academic Ethics Committee. Students charged with a violation of the Academic Honor Code are encouraged to meet with an advisor in the CLAS Advising Office to review their rights and obtain assistance with procedures.

### **Petitioning for Exceptions to Standing Academic Policy**

The CLAS Academic Standards Committee is responsible for the administration of the academic policies of the college as established by the faculty. This committee constitutes the bridge between the faculty in its legislative capacity and the students upon whom the legislation comes to bear. The committee is empowered to grant waivers of exemptions from and exceptions to the academic policies of the college. Students wishing to submit a petition to the committee should meet with the advising staff first to discuss the petition.

Students in the College of Liberal Arts and Sciences may appeal a grade. Every attempt is made to resolve grade disputes at the department level. However, unresolved grade issues may be appealed to the CLAS Academic Standards Committee and initiated through the CLAS Advising Office, North Classroom, 4002, 303-556-2555. Details of the grade appeal policies are available in the CLAS Advising Office.

The Office of the Registrar establishes deadlines each semester for registering, adding courses, dropping courses, selecting the pass/fail option and withdrawing from the university. These deadlines are clearly identified on the Registrar's Web site. Students seeking to waive these deadlines must petition the associate dean of the college. Instructions for deadline petitions are available from the CLAS Advising Office.

The Graduate Council reviews grievances related to procedural issues for graduate students that cannot be resolved at the college level.

## **Preparation for Professions**

Completion of the undergraduate curriculum of the College of Liberal Arts and Sciences can prepare students for a number of careers in the professions. See below for information on preparation for those professions most frequently asked about by students in the college. Students seeking information about other professions should contact the CLAS Advising Office, North Classroom, 4002, 303-556-2555.

## **Law**

Students intending to enter a school of law may major in any field while completing the bachelor's degree, since law schools do not typically specify course work entrance requirements. More important to law schools are methods of study, critical thinking and communication skills. Students interested in law school should consider the interdisciplinary minor in law studies (see Law Studies in the CLAS departmental descriptions). For further information, contact the CLAS Advising Office or one of the faculty advisors identified in the law studies minor.

## **Health Careers**

The college has faculty health careers advisors to assist students in preparing for careers in the following:

- dentistry
- medicine
- osteopathy
- veterinary medicine

Course programs also have been developed within the college to prepare students for the following specific careers within the general area of health sciences:

- dental hygiene
- medical technology
- nursing

- optometry
- pharmacy
- physical therapy
- physician assistant
- podiatry

Because the prerequisites for these health career programs are continually changing, students interested in pursuing one of these careers should contact a health careers advisor at 303-556-4350 or 303-556-6218 for current requirements and for advising. See the Health Professions chapter of this catalog for further information.

## **Education**

Liberal arts students seeking certification for teaching at the primary or secondary level must complete a baccalaureate degree plus approximately 40 semester hours of professional education required for licensure from the School of Education & Human Development.

Liberal arts students interested in a K–12 teaching career are encouraged to participate in the educational studies minor program or the K–12 teacher licensure program in collaboration with the School of Education & Human Development. See the Educational Studies/Teacher Licensure section in the CLAS departmental descriptions.

## **Collegewide Interdisciplinary Programs**

### **INTERDISCIPLINARY PROGRAMS IN THE COLLEGE OF LIBERAL ARTS AND SCIENCES**

#### **Joint Degree Programs BA/MPA**

The College of Liberal Arts and Sciences, in cooperation with the School of Public Affairs, offers students the opportunity to complete both a bachelor's degree and master's degree in five years rather than the usual six years. The program combines undergraduate general education and major studies with a specialized curriculum in public affairs and strives to develop intellectual and professional skills in a coordinated manner. Participating major programs in CLAS include communication, economics, political science and sociology, as well as others.

Students in the BA/MPA program must fulfill all of the graduation requirements for the College of Liberal Arts and Sciences; maintain a 3.5 undergraduate GPA in CLAS and have completed 75 percent of their undergraduate program to be eligible for admission; and enroll formally in the programs through the CLAS Advising Office. Students admitted to the program begin taking graduate-level courses in public administration during their senior year. These courses will count toward the bachelor's degree as electives. For further information, contact the CLAS Advising Office, 303-556-2555.

## **Centers and Institutes**

### **Center for Computational Biology**

**Director:** Stephen Billups  
**Telephone:** 303-556-6269  
**E-mail:** dana.franklin@ucdenver.edu  
**Web site:** <http://ccb.cudenver.edu/>

The Center for Computational Biology (CCB) is a multi-campus center aimed at catalyzing interdisciplinary research and developing educational programs in computational biology throughout the University of Colorado system. The center brings together faculty and students from a variety of fields, including mathematics, computer science and the biosciences, to engage in interdisciplinary research aimed at advancing biological discovery through the development and application of computational tools and mathematical models and techniques. The center leads the development of new courses and educational programs for University of Colorado students. While coordinating degree programs at all levels, the CCB offers its own certificate in computational biology, a 15-semester-hour graduate certificate program that can be completed independently or in conjunction with the MS in applied mathematics. The certificate focuses on retraining a Colorado workforce that will be able to contribute to the economic growth resulting from new biotechnology companies. This includes a broad base of educational activities, such as internships, that form partnerships with companies and laboratories. All programs led by the CCB initiative integrate education with research; students are introduced to research as part of their education.

## **Center for Computational Mathematics**

**Director:** Jan Mandel  
**Telephone:** 303-556-4475  
**E-mail:** Jan.Mandel@ucdenver.edu  
**Web site:** <http://ccm.ucdenver.edu/index.shtml>

The Center for Computational Mathematics was established to foster research in one of the discipline's most exciting new field. Through extensive ties with industry along the Front Range and government laboratories across the country, the center provides outstanding opportunities for motivated students to receive additional training and experience.

## **Center for Ethics and Community**

**Director:** Candice L. Shelby  
**Telephone:** 303-556-4803  
**E-mail:** Candice.Shelby@ucdenver.edu  
**Web site:** <http://carbon.cudenver.edu/~cshelby/cec.htm>

The Center for Ethics and Community seeks to strengthen ethics in schools, the community, universities and all professions. Certificate programs are available to members of the UC Denver community, as well as individuals outside the university.

## **Center for New Directions in Politics and Public Policy**

**Director:** Kathryn Cheever  
**Telephone:** 303-556-5950  
**E-mail:** kathryn.cheever@ucdenver.edu  
**Web site:** <http://thunder1.cudenver.edu/newdirections/index.htm>

The center's programs are based on the notion that effectively addressing the public priorities of the 21st century requires that those working on matters of public interest possess a keen understanding of the political forces that guide or thwart the successful mobilization of resources and the achievement of constituent goals consistent with the public interest. Similarly, the need and opportunity for the active engagement—or leadership—of concerned citizens in the policymaking process is greater than ever before. Accordingly, students in any of the center's academic programs will be representative of not only those working professionals in the public and nonprofit sectors, but also elected officials; community activists; interest-group stakeholders; educators from a wide range of demographic, occupational and personal backgrounds; and simply concerned citizens.

## **Center for Research in the Health and Behavioral Sciences**

**Director:** Susan Dreisbach  
**Telephone:** 303-556-6796  
**E-mail:** Susan.Dreisbach@ucdenver.edu

The Center for Research in the Health and Behavioral Sciences (CRHBS) is dedicated to promoting research and community service in health issues facing the local Denver area, Colorado, the nation and beyond. Research conducted by the allied CRHBS faculty is unique in integrating biomedical, public health and social science perspectives. Current external funding of research through CRHBS is focused on such topics as preventing HIV and STD transmission program evaluation. Research assistant and internship positions for students in the health and behavioral sciences doctoral program are commonly available through CRHBS.

## **Colorado Center for Public Humanities**

**Director:** Philip Joseph  
**Telephone:** 303-556-4648  
**E-mail:** philip.joseph@ucdenver.edu  
**Web site:** <http://clas.cudenver.edu/publichumanities/>

The work of this center is oriented around two primary goals. First, as a think-tank, the center investigates the public value of the humanities disciplines in relation to historical change by sponsoring programs that help to clarify the roles that humanities-based scholarship can play within the region, the nation and the world more generally. Our second goal is to direct the engagements of humanities scholars toward extra-academic communities. In pursuing this objective, the center will support scholars whose research programs are designed to reach civic groups outside the university walls and to benefit from the involvement of these groups.

## Fourth World Center for the Study of Indigenous Law and Politics

**Director:** Glenn T. Morris

**Telephone:** 303-556-2850

**E-mail:** glenn.morris@ucdenver.edu

**Web site:** <http://carbon.cudenver.edu/public/fwc/>

The Fourth World Center for the Study of Indigenous Law and Politics was founded in 1984 as a resource commons of authoritative information on indigenous peoples' affairs. The major components of the center's educational project are:

- the creation and presentation of a university-level multidisciplinary curriculum focused on the study of indigenous peoples
- the publication of the *Fourth World Bulletin*, a journal on indigenous politics with a global concentration
- the development of university textbooks for the study of indigenous politics
- the presentation of public forums
- the presentation of testimony before international legal organizations

The center features a library, periodicals, audio and visual equipment and online news archives on current development issues surrounding "the Fourth World."

## Shared Analytical Services Laboratory

**Lab Manager:** Jeff Boon

**Telephone:** 303-556-4520

**E-mail:** jeffery.boon@ucdenver.edu

**Web site:** <http://thunder1.cudenver.edu/clas/sasl/index.html>

The Shared Analytical Services Laboratory fosters and promotes disciplinary and interdisciplinary research in the environmental sciences. Faculty represent disciplines within the College of Liberal Arts and Sciences, as well as civil engineering. Services provided by the laboratory are available to all members of the university community, as well as to members of the public and private sectors through joint projects.

## Smart-Girl Leadership Institute

**Telephone:** 303-556-2557

**E-mail:** Lissa.Gallagher@ucdenver.edu

**Web site:** <http://thunder1.cudenver.edu/clas/smartgirl/>

The Smart-Girl Leadership Institute is a prevention and enrichment program that trains college students to lead and inspire adolescent girls to make smart choices and become confident, capable and self-reliant women. UC Denver students earn credit while they build the skills to lead small groups of girls through a fun and effective curriculum.

## Writing Center

**Director:** Justin J. Bain

**Office:** North Classroom, 4014

**Telephone:** 303-556-4845

**Web site:** [www.cudenver.edu/writingcenter](http://www.cudenver.edu/writingcenter)

The Writing Center provides free writing assistance to all members of the UC Denver community, including students, faculty, staff and alumni. Professional writing consultants are available to assist writers in one-on-one sessions. All consultations are by appointment; to schedule an appointment please visit our Web site.

In addition, the center hosts professional development workshops for graduate students and faculty; maintains a library of grammar handbooks, citation manuals and composition texts; and conducts informational class visits. For additional information on our services for students, see the listing in the Student Services chapter.

## Departments and Programs

### Anthropology

**Chair:** Stephen Koester

**Program Assistant:** Connie Turner

**Office:** Administration Building, 270

**Undergraduate Advisor:** Christopher Beekman

**Graduate Director:** John Brett

**Telephone:** 303-556-3554

**Fax:** 303-556-8501

**Web site:** [www.cudenver.edu/anthropology/](http://www.cudenver.edu/anthropology/)

### Faculty

#### Professor:

Stephen Koester, PhD, University of Colorado

#### Associate Professors:

Christopher Beekman, PhD, Vanderbilt University

John Brett, PhD, University of California at San Francisco and Berkeley

Tammy Stone, PhD, Arizona State University

David Tracer, PhD, University of Michigan

**Assistant Professors:**

Sarah Horton, PhD, University of New Mexico

Charles Musiba, PhD, University of Chicago

Marty Otanez, PhD, University of California-Irvine

Julien Riel-Salvatore, PhD, Arizona State University

**Instructor:**

Tiffany Terneny, PhD, University of Texas-Austin

**Adjunct Faculty:**

David Ruppert, PhD, University of Arizona

Jean Scandlyn, PhD, Columbia University

Sue Woods, PhD, University of Colorado

## **Undergraduate**

Anthropology is the study of human origins and evolution, the present conditions of human life and the prospects for the future. It considers human beings as biological and social entities and seeks to explain both diversities and commonalities of peoples and cultures. For undergraduates, anthropology provides a rich overview of human life. It also introduces them to a variety of skills and practical research methods anthropologists apply in laboratory and field studies of the ecological constraints on human existence, the cultural bases of individual and organizational behavior and the problems and circumstances relating to the maintenance of today's healthy, productive human action in general.

Anthropological training provides entry to a variety of careers in archaeology, museology, education, community service, public administration, public health, international affairs and business. The specific skills it provides are useful to students of environmental design, city planning, community development, the medical and nursing professions and allied health sciences, law, public affairs and secondary education.

## REQUIREMENTS FOR MAJOR

### Departmental Honors Requirements

Students wishing to graduate with departmental honors in anthropology must have a cumulative GPA of at least 3.5 with a 3.7 minimum GPA in anthropology for *cum laude* (3.8 for *magna cum laude* and 3.9 for *summa cum laude*), as well as prepare an honors thesis of high quality. They must also take ANTH 4810, Integrating Anthropology. Interested students should inquire in the department no later than two semesters before graduation.

## REQUIREMENTS FOR MINOR

### Graduate

- ▶ Graduate School rules apply to this program

The unique intellectual challenge of anthropology is to integrate knowledge from many disciplines for a global understanding of cultural and biological diversity in the past and the present. Individual courses in cultural and biological anthropology and archaeology cut across lines of the humanities and social and natural sciences. Because of this integrative perspective on the human condition—and the training provided in objectively assessing cultural patterning and social interaction—anthropology graduates have a versatile base for career development. In particular, the training you'll receive in the department provides entry to careers in archaeology, education, community service, development, international affairs and business, public administration and public health. The specific skills gained are also useful to students of city planning, community development, environmental design, law, the health professions (including medicine and nursing), public affairs and secondary education.

### Specialties and Tracks

UC Denver's Department of Anthropology provides an outstanding graduate education in anthropology, giving students a broad yet thorough grounding in the three major subfields of anthropology, as well as specialized instruction in one or more research orientations in which department faculty have substantial expertise. The graduate faculty in anthropology are particularly known for their research and publications in the areas of applied medical anthropology, biological anthropology, ethnicity, evaluation methods, food and nutrition, functional morphology, human ecology, political ecology and globalization, primate evolution, primate behavior, prehistoric political economy, sociopolitical evolution, Southwestern and Mexican archaeology and urban and community anthropology. Students also have opportunities

to study abroad, to participate in an archaeological field school and to gain international research experience.

### **Topical Concentrations**

- medical anthropology
- archaeological studies
- biological anthropology
- sustainable development and political ecology

## **ANTHROPOLOGY MA PLANS OF STUDY**

### **Application Process**

Application is open to holders of a BA, BS or higher degree in any field, and we welcome applications from individuals pursuing particular interests and careers, especially those related to one of the areas of concentration noted above. The departmental deadline for receipt of all application materials is **February 15** for admission in the following fall.

Acceptance to the program is competitive and based on:

- an undergraduate record of good quality (3.0 GPA or higher for all undergraduate studies)
- prior training in anthropology
- GRE scores (verbal, analytic and quantitative)
- three letters of recommendation
- a statement of the applicant's purpose in pursuing the degree
- two copies of transcripts from all undergraduate/graduate institutions attended

If you have no prior anthropology training, we encourage you to gain the necessary background as a nondegree student before applying to the graduate program. Prior training required in anthropology corresponds to that required for the minor, consisting of approximately 18 semester hours and including introductory courses in biological/physical anthropology, cultural anthropology and archaeology. Students with exceptional qualifications may be admitted without prior anthropology training but will be required to make up deficiencies without graduate credit during the course of their graduate study.

#### **Accelerated BA/MA option application:**

Students may apply for the Plan III option when the following *minimum* criteria are met. Please note that admission is not automatic but is competitive, based on a review of the application, statement of purpose, transcripts and letters of recommendation. Minimum criteria are:

- 60 semester hours of undergraduate course work at UC Denver (i.e., junior-level standing)
- 24 semester hours of anthropology course work, and be enrolled in and intend to complete a minimum of 30 semester hours from UC Denver faculty in anthropology by the end of the semester in which application is made

- an undergraduate record of good quality (overall minimum GPA of 3.25; minimum GPA of 3.5 in anthropology)

To apply, students must complete an application available in the Department of Anthropology; prepare statement of purpose or essay describing academic interests, objectives and career goals; and submit letters of recommendation from at least two UC Denver anthropology faculty.

## Financial Aid

The department offers limited tuition assistance, teaching assistantships and research assistantships for graduate students on a semester-by-semester basis. Appointment is competitive and is typically based on a student's academic credentials, GRE scores and preparation in anthropology. Contact the department for details. For information on grants, federal work-study programs, scholarships and loans, contact the UC Denver financial aid office.

## Bachelor of Arts

# Anthropology BA

Students majoring in anthropology for the BA degree must declare such by the time they have completed 60 semester hours. Majors must complete a minimum of 40 semester hours in anthropology with a grade of C (2.0) or better in each course. At least 24 hours must be at the upper-division level and a minimum of 21 semester hours must be taken from Downtown Campus faculty. (Note that all upper-division courses have lower-division prerequisites.)

## Program Requirements

### Required Anthropology Courses

- ANTH 1302 - Introduction to Archaeology: SS3. **Semester Hours: 4**
- ANTH 1303 - Introduction to Biological Anthropology: SC1. **Semester Hours: 4**
- ANTH 2102 - Culture and the Human Experience: SS3. **Semester Hours: 3**

### Choose three:

- ANTH 3101 - Foundations of Cultural Anthropology. **Semester Hours: 3**
- ANTH 3121 - Language and Communication. **Semester Hours: 3**
- ANTH 3301 - World Prehistory. **Semester Hours: 3**
- ANTH 3512 - Human Evolution. **Semester Hours: 3**

**Total: 20 Hours**

## Anthropology Electives

Recommend courses:

- ANTH 4050 - Quantitative Methods in Anthropology. **Semester Hours: 3**
- ANTH 4810 - Integrating Anthropology. **Semester Hours: 3**

**Total (minimum): 20**

**Major Total: 40 Hours**

## Accelerated Joint BA/MA Program

The department now offers an accelerated joint BA/MA degree option. See the description for Plan III in the ANTHROPOLOGY MA PLANS OF STUDY section for details.

## Non Degree

# Anthropology Minor

A minimum of 18 semester hours in anthropology must be completed with an average of C (2.0) or better. Nine of the 18 hours must be upper division and 9 hours must be taken from Downtown Campus faculty.

## Program Requirements

### Required Courses

Choose a minimum of three courses from the following:

- ANTH 1302 - Introduction to Archaeology: SS3. **Semester Hours: 4**
- ANTH 1303 - Introduction to Biological Anthropology: SC1. **Semester Hours: 4**
- ANTH 2102 - Culture and the Human Experience: SS3. **Semester Hours: 3**
- ANTH 3101 - Foundations of Cultural Anthropology. **Semester Hours: 3**
- ANTH 3121 - Language and Communication. **Semester Hours: 3**
- ANTH 3301 - World Prehistory. **Semester Hours: 3**
- ANTH 3512 - Human Evolution. **Semester Hours: 3**

**Total: 9-11 Hours**

## Elective Courses

Total: 7-9 Hours

Minor total: 18 Hours

## Master of Arts

# Anthropology, MA

► Graduate School Rules apply to this program.

## Plans of Study

MA students may pursue Plan I (thesis option) or Plan II (nonthesis option).

- **Plan I:** 33 semester hours of course work, of which 4-6 will be allocated to thesis hours. The thesis may consist of a report of original research, a comprehensive evaluation of existing research or a report on an internship experience in which disciplinary theory is applied to a practical question or series of practical questions. Students electing this option must prepare a thesis prospectus (research plan). The prospectus must be submitted to and approved by the student's primary advisor one semester prior to beginning thesis work. The entire thesis committee must approve a draft of the thesis at least six weeks prior to any proposed defense date.
- **Plan II:** 39 hours of course work.

Your plan of study, including a statement of proposed course work and thesis subject if applicable, must be submitted to and approved by your advisor by the third semester in residence.

The balance of courses (9-21 semester hours, depending on whether you pursue Plan I or II) should be used to develop the research or area concentration chosen from those available in the department. Up to 9 hours of course credit (at the 4000 level or above) may be in disciplines outside of but related to anthropology with the approval of your graduate advisor.

The Department of Anthropology offers an accelerated BA/MA degree option (Plan III) for accomplished undergraduate students. This option permits students to apply some courses taken at the undergraduate level toward meeting knowledge area requirements (research concentrations) for the MA degree. It also permits students to begin taking graduate courses (at the 5000 level or above), up to a maximum of 9 hours, while still considered by the university to be an undergraduate student. The accelerated degree option is designed to permit the full-time student to complete a full BA and MA program in anthropology in 10 semesters (assuming matriculation as a freshman and full-time residence). *The accelerated degree option is only available to students who complete, or intend to complete, at least 30 semester hours from UC*

*Denver anthropology faculty.* Courses taken at any other institution, including common pool courses taught by MSCD faculty, cannot be applied toward completion of accelerated degree requirements. Transfer students may be required to take additional anthropology course work to qualify for the Plan III option.

Plan III students must complete the same core requirements as Plan I and Plan II students. To graduate in one year post-baccalaureate, admitted Plan III students should plan on completing at least two of the required core seminar courses during their senior undergraduate year. Students who are accepted to Plan III, but who do not eventually meet residency or minimum GPA requirements, will be transferred to Plan I or II options.

- **Plan III:** 30 semester hours of course work taken at the graduate (5000 or above) level, inclusive of thesis hours. The student is *encouraged* (though not required) to take at least 9 graduate-level hours while still considered an undergraduate. During the final semester of residence as a graduate student, the student must take and pass the department's comprehensive examination (described below). If a student wishes to complete a thesis, 4-6 hours of the 30 required course hours will be devoted to thesis work. Up to 3 thesis hours may be taken before the student meets requirements for the BA degree. See the Department of Anthropology Web site for a discussion of the relative advantages and disadvantages of pursuing the thesis option.

All graduate courses taken by students in the accelerated degree option must be completed with a grade of *B-* or better.

There are special admission and application requirements for the accelerated degree option (Plan III). Please see the Application Process section for information.

Students must maintain an overall GPA of 3.0 to remain in good standing and receive a grade of *B-* or better in a course to have it count toward graduation. The Graduate School on the Downtown Campus requires a minimum of two full years devoted to advanced study, but students are strongly discouraged from spending more than four years. Generally, three years of full-time participation are required to complete the MA degree. Most of our students attend part time and thus take slightly longer to complete their degree program. All students are required to pass a six-hour written comprehensive examination, usually taken after core course work has been completed.

Your graduate anthropology education begins by taking ANTH 5810, Integrating Anthropology, plus two core courses that together encompass contemporary theory in anthropology. These are followed by three courses in research methods and techniques, including statistics. You are required to take the core series in two of the three subdisciplines. After completing this core, you will select from among the specialized elective courses in the research concentrations described in more detail below. You will work closely with an advisor in selecting the range of courses appropriate both to a problem orientation and to your career objectives.

## **Tier One: A Survey of Theoretical Perspectives in Contemporary Anthropology**

*Required in fall of first year*

- ANTH 5810 - Integrating Anthropology. **Semester Hours: 3**

**Choose two:**

- ANTH 6103 - Current Theory in Ethnography. **Semester Hours: 3**
- \* ANTH 6307 - Contemporary Perspectives in Archaeology. **Semester Hours: 3**
- † ANTH 6503 - Biological Anthropology Core: The Fossil Record. **Semester Hours: 3**

**Total: 9 Hours**

## **Tier Two: Methods of the Discipline**

*All students must complete or demonstrate competence in subjects covered by the following:*

- ANTH 5053 - Quantitative Methods in Anthropology. **Semester Hours: 3**

**Choose two:**

- ANTH 6063 - Qualitative Research Design and Methods. **Semester Hours: 3**  
(same as HBSC 7051-3)
- \* ANTH 6317 - Archaeological Research Design and Analysis. **Semester Hours: 3**
- † ANTH 6513 - Biological Anthropology Core: Modern Human Variation. **Semester Hours: 3**

**Total: 9 Hours**

*\* Students who wish to apply for a teaching assistantship in archaeology must have completed this course.*

*† Students who wish to apply for a teaching assistantship in biological anthropology must have completed this course.*

## **Tier Three: Research Concentrations (9-21 semester hours)**

You will round out your program by selecting from the diverse range of courses offered in the department according to your particular interests in anthropology, your career goals and your plans for future graduate study. You may take courses in one or more concentrations. The courses listed are suggestions only; you must work closely with your advisor in constructing your particular program of study.

### **MEDICAL ANTHROPOLOGY**

Medical anthropology is a subdiscipline of anthropology that includes the study of all aspects of health, illness and disease in human communities and populations. It draws on all of the

perspectives that distinguish anthropology as a unique discipline: the analysis of human evolution and adaptation; cultural development, expressions and variability; and historical change and continuity. Medical anthropology takes as its subject a broad range of specific topics, including the study of health care systems, factors that affect the distribution and determinants of disease in populations, maternal and child health, nutrition and food habits, human development, political ecology, health policy and language and communication in health care contexts. Faculty in the department emphasize the applied dimensions of medical anthropology, preparing students for careers in public health, health care and health sciences research. Courses in the department are complemented by electives in other departments (sociology, biology, psychology, history, geography), programs on the Downtown Campus (health administration, public affairs, education) and programs at the Anschutz Medical Campus (schools of medicine, dental medicine, pharmacy and nursing).

## Courses

- ANTH 5014 - Global Health Studies I: The Biocultural Basis of Health. **Semester Hours:** 3
- ANTH 5024 - Global Health Studies II: Comparative Health Systems. **Semester Hours:** 3
- ANTH 5030 - Ethnobiology. **Semester Hours:** 3
- ANTH 5040 - Anthropology of Food and Nutrition. **Semester Hours:** 3
- ANTH 5060 - Evolutionary Medicine. **Semester Hours:** 3
- ANTH 5090 - Political Economy of Drug Culture. **Semester Hours:** 3
- ANTH 5150 - Human Biocultural Adaptability. **Semester Hours:** 3
- ANTH 5260 - Human Reproductive Ecology. **Semester Hours:** 3
- ANTH 5560 - Human Ecology. **Semester Hours:** 3
- HBSC 7310 - Environmental Epidemiology. **Semester Hours:** 3

*Note:* Students are also strongly encouraged to take elective courses in public health, epidemiology and biostatistics, which are available in the Department of Biometrics and Preventive Medicine on the Anschutz Medical Campus. See the Health Professions chapter of this catalog for further information.

## ARCHAEOLOGICAL STUDIES

The archaeological studies program concentrates on the study of past human societies using archaeological data collected in field and museum settings. While a quantitative and scientific approach is emphasized, the theoretical perspectives employed also draw heavily from political economy and cultural ecology. The department offers a variety of theoretical, methodological and area courses, which may be supplemented by others in the geography and environmental sciences and history departments. Internships are available in local museums and historic preservation offices in the Denver metropolitan area.

- ANTH 5210 - Archaeology of the American Southwest. **Semester Hours:** 3
- ANTH 5320 - Archaeology of Mexico and Central America. **Semester Hours:** 3

- ANTH 5330 - Lithic Analysis. **Semester Hours: 3**
- ANTH 5570 - Landscape Archaeology. **Semester Hours: 3**
- ANTH 5910 - Field Experience in Archaeology. **Semester Hours: 3 to 6**
- GEOG 5060 - Remote Sensing I: Introduction to Environmental Remote Sensing. **Semester Hours: 3**
- GEOG 5080 - Introduction to GIS. **Semester Hours: 3**
- GEOG 5220 - Environmental Impact Assessment. **Semester Hours: 3**
- HIST 5231 - History in Museums. **Semester Hours: 3**
- HIST 5232 - Historic Preservation. **Semester Hours: 3**
- HIST 5234 - Introduction to Public History. **Semester Hours: 3**

## **BIOLOGICAL ANTHROPOLOGY**

The biological anthropology concentration is concerned with modern human biological diversity and the past evolutionary history that has led to such diversity. Students in this concentration develop a firm understanding of the evolutionary processes that lead to physical and behavioral variation in humans and nonhuman primates. The concentration also emphasizes the theoretical and quantitative methods used to explore and explain this variation. Students may take courses in diverse areas including evolutionary biology, genetics, ecology, ethnobiology, epidemiology, nutrition, medical anthropology, paleoanthropology, paleontology and primatology. Because biological anthropology is multidisciplinary in nature, students are encouraged to consider courses offered outside the department.

- ANTH 5014 - Global Health Studies I: The Biocultural Basis of Health. **Semester Hours: 3**
- ANTH 5030 - Ethnobiology. **Semester Hours: 3**
- ANTH 5040 - Anthropology of Food and Nutrition. **Semester Hours: 3**
- ANTH 5060 - Evolutionary Medicine. **Semester Hours: 3**
- ANTH 5150 - Human Biocultural Adaptability. **Semester Hours: 3**
- ANTH 5500 - Advanced Issues in Human Evolution. **Semester Hours: 3**
- ANTH 5520 - Human Biological Variation. **Semester Hours: 3**
- ANTH 5530 - Anthropological Genetics. **Semester Hours: 3**
- ANTH 5550 - Primate Comparative Anatomy. **Semester Hours: 3**
- ANTH 5560 - Human Ecology. **Semester Hours: 3**
- ANTH 5580 - Neanderthals and the Origin of Modern Humans. **Semester Hours: 3**
- ANTH 5640 - Darwinian Approach to Human Behavior. **Semester Hours: 3**
- BIOL 5074 - Human Reproductive Biology. **Semester Hours: 3**
- BIOL 5134 - Human Genetics. **Semester Hours: 3**
- BIOL 5494 - Population and Evolutionary Genetics. **Semester Hours: 3**
- HBSC 7031 - Human Ecology and Environmental Adaptation. **Semester Hours: 3**
- HBSC 7310 - Environmental Epidemiology. **Semester Hours: 3**

## **SUSTAINABLE DEVELOPMENT AND POLITICAL ECOLOGY**

This concentration provides a critical, multicultural and multidisciplinary perspective on issues of development and resource conservation, with a strong emphasis on the integration of theoretical knowledge with field-based training opportunities. Three major themes are addressed within this concentration:

1. the types of resource management systems present in the world and their relationship to particular ecosystems
2. the types of knowledge systems and ideas associated with this diverse array of resource management systems, environmental knowledge and theoretical perspectives included
3. the culture of institutions—ranging from small-scale NGOs to the World Bank—that design and implement conservation and development

A central goal of this emphasis is to provide students with the information, opportunities and resources required for pursuing a wide variety of career options in conservation and/or development. In addition to offering the following courses, the department encourages students to develop a specialized skill in conjunction with other departments and schools including areas such as GIS mapping (geography), ecology (biology/anthropology), legal and policy issues (political science, School of Public Affairs), land use (geography, School of Public Affairs) and research/evaluation methodologies (anthropology).

- ANTH 5030 - Ethnobiology. **Semester Hours: 3**
- ANTH 5070 - Culture of Development and Globalization. **Semester Hours: 3**
- ANTH 5170 - Culture and the Environment. **Semester Hours: 3**
- ANTH 5220 - Community in Global Context. **Semester Hours: 3**
- ANTH 5450 - Development and Conservation: Contemporary Issues. **Semester Hours: 3**
- ANTH 5460 - Development and Conservation: Theory and Practice. **Semester Hours: 3**  
Other courses in consultation with faculty advisor.

**Total: 9-21 Hours**

## **Degree Total Hours**

**PLAN I: 33 Hours (including 4-6 hours of thesis)**

**PLAN II: 39 Hours**

## **Chemistry**

**Chair:** Mark R. Anderson

**Program Assistant:** Laura Cuellar

**Office:** North Classroom, 3002

**Telephone:** 303-556-4885

**Fax:** 303-556-4776

**Web site:** [www.cudenver.edu/chemistry](http://www.cudenver.edu/chemistry)

## **Faculty**

### **Professors:**

Larry G. Anderson, PhD, Indiana University

Mark R. Anderson, PhD, University of Wisconsin

Robert Damrauer, PhD, Massachusetts Institute of Technology

Douglas Dyckes, PhD, Case Western Reserve University

James H. Hageman, PhD, University of California, Los Angeles

John A. Lanning, PhD, University of Tennessee

### **Associate Professors:**

Doris R. Kimbrough, PhD, Cornell University

Xiaotai Wang, PhD, University of Virginia

### **Assistant Professors:**

Karen Knaus, PhD, Cleveland State University

Hai Lin, PhD, University of Science and Technology of China

Scott Reed, PhD, University of Oregon

### **Instructors:**

Margaret Bruehl, PhD, Northwestern University

Priscilla Burrow Crocker, PhD, University of Colorado

Marc Donsky, PhD, University of California, Berkeley

Lisa Lanning, PhD, University of Vermont

## Undergraduate

Why study chemistry? A practical reason is that our highly technical society faces many problems that can be solved through an understanding of the science of chemistry and its methods of solving problems. A more intangible reason is that chemistry is central to a variety of other disciplines and that many problems ultimately will have chemical solutions.

At the undergraduate level, students can prepare for:

1. careers in chemical and medical laboratories
2. careers in nursing, medical technology, dental hygiene and other health-oriented fields
3. post-baccalaureate programs in chemistry, biology, biochemistry, medicine, physical therapy and dentistry.

At the graduate level, an MS degree program is offered. Students with MS degrees have job opportunities in research and technical laboratory services. In addition, flexible programs can be designed to combine chemical knowledge and skills with other interests of the MS-level student (e.g., biology or environmental science).

## REQUIREMENTS FOR MAJOR

### BS/MS PROGRAM

## Departmental Honors

Qualified students are encouraged to participate in the chemistry honors program. Three levels of honors are awarded by the Downtown Campus. To earn *cum laude* honors in chemistry, a student must satisfy one of the following criteria: (1) an overall GPA of 3.2 or better and a chemistry GPA of 3.5 or better; or (2) an overall GPA of 3.2, a chemistry GPA of 3.2 or better, and six hours of CHEM 4840, Independent Study, spread over a minimum of two semesters. To earn *magna cum laude* or *summa cum laude* honors in chemistry, a student must satisfy each of the following criteria: an overall GPA of 3.2 or better, a chemistry GPA of 3.5 or better; six hours of CHEM 4840, Independent Study, spread over a minimum of two semesters with a GPA of 3.1 or better; and presentation of a thesis on the independent study research to a faculty advisory committee. The committee decides if *magna cum laude* or *summa cum laude* honors are to be awarded.

## REQUIREMENTS FOR MINOR

## Graduate

The MS degree offered at the Downtown Campus is a broad-based chemistry degree that allows students to take courses and do research in the following basic fields: analytical, biochemistry, inorganic, organic, physical or environmental chemistry.

The MS program is available to both full- and part-time students. The chemistry faculty strive to ensure that students receive excellent advising and supervision of work. Students enrolled in the program have an opportunity to be appointed as laboratory teaching assistants. Research activities on the part of the chemistry faculty provide opportunities for graduate students to obtain research assistantships.

## **CHEMISTRY MS**

### **BS/MS PROGRAM**

## **Bachelor of Science**

# **Chemistry BS**

## **Requirements for Major**

Students must declare their major by the time they have completed 60 semester hours. The chemistry major requires 45 semester hours in chemistry. Transfer students must take at least 14 upper-division chemistry hours, including CHEM 4128, 4518 or 4538, in residency at the Downtown Campus. A student who has declared a chemistry major at UC Denver may not take additional chemistry courses outside of the department for the purpose of applying those credits toward meeting the requirements of the major without prior written approval of the undergraduate advisor. Normally, no more than 3 additional hours of transfer credits will be allowed. The minimum grade in chemistry courses is C- (1.7) and a minimum chemistry GPA of 2.0 is required in chemistry and ancillary required courses. All majors must successfully complete the following core:

## **TRADITIONAL CHEMISTRY MAJOR**

### **Required Chemistry Courses**

- CHEM 2031 - General Chemistry I: SC1. **Semester Hours: 3**
- CHEM 2038 - General Chemistry Laboratory I: SC1. **Semester Hours: 1**
- CHEM 2061 - General Chemistry II: SC1. **Semester Hours: 3**
- CHEM 2068 - General Chemistry Laboratory II: SC1. **Semester Hours: 2**
- CHEM 3011 - Inorganic Chemistry. **Semester Hours: 3**
- CHEM 3111 - Analytical Chemistry. **Semester Hours: 3**
- CHEM 3118 - Analytical Chemistry Laboratory. **Semester Hours: 2**
- CHEM 3411 - Organic Chemistry I. **Semester Hours: 4**

- CHEM 3418 - Organic Chemistry Laboratory I. **Semester Hours: 1**
- CHEM 3491 - Honors Organic Chemistry II. **Semester Hours: 4**
- CHEM 3498 - Honors Organic Chemistry Laboratory II. **Semester Hours: 2**
- CHEM 4121 - Instrumental Analysis. **Semester Hours: 3**
- CHEM 4128 - Instrumental Analysis Laboratory. **Semester Hours: 2**
- CHEM 4511 - Physical Chemistry I. **Semester Hours: 3**
- CHEM 4518 - Physical Chemistry I Laboratory. **Semester Hours: 2**
- CHEM 4521 - Physical Chemistry II. **Semester Hours: 3**
- CHEM 4538 - Physical Chemistry II Laboratory. **Semester Hours: 2**

**And one of the following two courses:**

- CHEM 3018 - Inorganic Chemistry Laboratory. **Semester Hours: 2**
- CHEM 4828 - Biochemistry Lab. **Semester Hours: 2**

**Total Required Courses: 45 Hours**

**Required Ancillary Courses**

- MATH 1401 - Calculus I: MA1. **Semester Hours: 4**
- MATH 2411 - Calculus II: MA1. **Semester Hours: 4**
- MATH 3511 - Mathematics of Chemistry. **Semester Hours: 4**
- PHYS 2311 - General Physics I: Calculus-Based. **Semester Hours: 4**
- PHYS 2321 - General Physics Lab I. **Semester Hours: 1**
- PHYS 2331 - General Physics II: Calculus-Based. **Semester Hours: 4**
- PHYS 2341 - General Physics Lab II. **Semester Hours: 1**

**Total Required Ancillary Courses : 22 Hours**

**Recommended Electives**

- CHEM 3018 - Inorganic Chemistry Laboratory. **Semester Hours: 2**
- CHEM 3810 - Biochemistry. **Semester Hours: 4**
- OR-
- CHEM 4810 - General Biochemistry I. **Semester Hours: 3**
- CHEM 4700 - Environmental Chemistry. **Semester Hours: 3**
- CHEM 4820 - General Biochemistry II. **Semester Hours: 3**
- Any CHEM 5000-level lecture class (3-4 semester hours)

**Total Electives: 14-16 Hours**

## Chemistry Major Total: 81-83 Hours

Students interested in the chemistry major should consult regularly with a chemistry advisor. A complete description of the chemistry major's program may be obtained in the Department of Chemistry office or department Web site.

Qualified majors are strongly urged to participate in independent study or departmental honors programs.

Students planning chemistry as a career should be familiar with the recommendations of the American Chemical Society for the professional training of chemists. For ACS certification, students are required to take inorganic laboratory and at least one semester of biochemistry. No course with a grade of less than *C* (2.0) can be applied toward ACS certification. Students should check with a chemistry advisor for details. The Downtown Campus maintains an ACS chapter of student affiliates.

## Bachelor of Science/Master of Science

### Chemistry BS/MS

While students are completing a BS degree in chemistry, they may also complete some of the requirements for an MS degree in chemistry under the following guidelines:

- The student must apply and be accepted for participation in the BS/MS program prior to completion of the BS degree and be advised by both the undergraduate and graduate advisors.
- Up to 9 semester hours of graduate-level course work may be taken as an undergraduate and applied toward the MS degree. This course work may not be applied toward the BS degree or ACS certification requirements for the BS degree.
- Up to 3 semester hours of independent study (research) may be applied toward the graduate degree if that research is expanded and continued for a portion of the master's thesis research. This requires approval of the student's graduate research advisor in chemistry, the chemistry graduate program director and the CLAS associate dean for graduate studies.
- The chemistry department will waive the requirement for qualifying examinations in each area of chemistry for which the student has completed the undergraduate sequence of courses and laboratories at the Downtown Campus with grades of *B* or better for each course.
- The student must apply for and be admitted to the graduate program in chemistry beginning the semester immediately following completion of the BS degree in chemistry at the Downtown Campus.

This program allows undergraduate students who have begun their research as undergraduates to complete up to 12 semester hours (with approval of the graduate dean) toward the 30

semester hours required for a Plan I MS degree in chemistry while they are still completing their BS degree. This makes it possible for students to complete an MS degree in chemistry in only one year beyond the BS degree in chemistry. Students entering the program through the BS/MS program option must fulfill all of the requirements of the Plan I or Plan II graduate programs.

## **Non Degree**

# **Chemistry Minor**

The objective of the chemistry minor is to provide broad introductory course work and laboratory experience to science majors without the more technical mathematical and chemical prerequisites required of the chemistry major. The chemistry minor is open to all CLAS students and should prove beneficial for science majors, pre-professional health science majors and students seeking science education certification.

There are course work and grade requirements that must be satisfied to obtain a chemistry minor. Students must take a minimum of 20 semester hours of chemistry courses with a minimum of 10 upper-division chemistry hours. Upper-division course work must include three of the six subdisciplines that comprise chemistry: analytical, biochemistry, inorganic, organic, physical and environmental chemistry. All chemistry minor courses must be taken for a letter grade rather than with the pass/fail grading option. A minimum 2.0 GPA in the chemistry minor courses must be earned. To satisfy the department residency requirement, a minimum of 7 upper-division hours of chemistry must be taken at the Downtown Campus. A complete description of the chemistry minor may be obtained in the department office or Web site:

[http://www.cudenver.edu/chemistry/minor\\_requirements.html](http://www.cudenver.edu/chemistry/minor_requirements.html)

## **Master of Science**

# **Chemistry MS**

► Graduate School Rules apply to this program

## **Requirements for Admission**

Students must meet the Downtown Campus Graduate School admission requirements with specific chemistry requirements as follows:

- Undergraduate GPA of at least 3.0.
- Undergraduate major in chemistry essentially equivalent to the one offered at UC Denver (see the undergraduate requirements), including two semesters of organic,

analytical and physical chemistry with laboratories and one semester of inorganic chemistry. No student will be admitted to the graduate program who is not within two classes of meeting the undergraduate requirements.

- GRE examination is recommended, as is the advanced chemistry GRE examination.
- International students have additional admission requirements concerning immigration status, proof of financial responsibility and acceptable TOEFL scores.
- Failure to meet the full admission standards may lead to provisional admission.

Prospective students are encouraged to contact the graduate program director or visit the chemistry department Web site for additional details concerning the chemistry program, admission procedures, financial assistance and faculty research interests.

## General Program Requirements

At the heart of the graduate program is a set of four core graduate courses in the fields of analytical, inorganic, organic and physical chemistry. A student must qualify in order to register for any core graduate class, either by passing a qualifying examination in that field or by passing the equivalent undergraduate class in that area at UC Denver with a grade of *B* (3.0) or better. All entering students are required to qualify in all four core fields. The qualifying requirements must be completed during the first year in the graduate program. Individual core classes may have additional prerequisites.

Depending on the program option that she/he selects, a student will be required to pass either three (Plan I) or all four (Plan II) of the graduate core courses with no grade in a core course below *B-* (2.7).

The remaining course work for the degree will consist of regular graduate offerings in chemistry, a limited number of which may be substituted by approved classes in related fields. In particular, students interested in interdisciplinary areas, such as biochemistry or environmental chemistry, are encouraged to take cognate courses outside the chemistry department. The chemistry graduate program director must approve in advance any graduate class taken outside the department that is to count toward the degree. All students are required to annually submit an updated program plan for approval and to have their progress evaluated by the graduate program director.

## Specific Degree Requirements

There are two options for obtaining a master's degree from the Downtown Campus Department of Chemistry: Plan I, the thesis option, and Plan II, the course work emphasis option. All students must complete at least 3 semester hours of master's report (CHEM 6960). A student is allowed to participate in the thesis option only after the successful completion of the master's report with the proposed advisor, and upon the mutual agreement of both the student and advisor that the student is prepared to work on a master's thesis. Students who select the course work emphasis option may petition to have up to 3 additional semester hours of master's report research substitute for an equivalent number of course work hours.

### Plan I. Thesis Option

Plan I is a research-oriented program involving a minimum of 30 semester hours with the following requirements:

- 21-23 semester hours of formal course work, including three of the four graduate core courses
- 4-6 semester hours of CHEM 6950, Master's Thesis research; successful completion of the thesis research includes the presentation of the results at a departmental seminar
- 3 semester hours of CHEM 6960, Master's Report research
- a grade of *B-* (2.7) or better in all courses completed: *B-* (2.7) or better in all core courses
- a cumulative GPA of 3.0 or better in all courses taken as a graduate student
- an acceptable formal thesis consistent with the guidelines of the Graduate School
- successful oral defense of the master's thesis before a committee of at least three graduate faculty members, two of whom must be tenure track faculty members in the chemistry department
- compliance with all Graduate School Rules, available from the Graduate School or CLAS Graduate Advising Web site
- all work must be completed within five years of completion of the first graduate class in the department

Plan I thesis research must be conducted under the direct supervision of a tenure-track faculty member of the Downtown Campus Department of Chemistry. Plan I students must take a minimum of 15 semester hours of formal course work in chemistry at the 5000 level or above. Students may petition the graduate program director in advance for permission to take one or two courses at the graduate level outside of chemistry that would count toward the requirements for an MS in chemistry.

### **Plan II. Course Work Emphasis Option**

Plan II is a course work-oriented program involving a minimum of 33 semester hours with the following requirements:

- 27-30 semester hours of formal course work, including all four graduate core courses
- at least 3 (but not more than 6) semester hours of CHEM 6960, Master's Report, research
- a grade of *B-* (2.7) or better in all courses completed; *B-* (2.7) or better in all core courses
- a cumulative GPA of 3.0 or better in all courses taken as a graduate student
- a final research report
- presentation of the research project in a final seminar
- successful defense of the project before a committee of at least three graduate faculty members, one of whom must be a tenure-track faculty member in the chemistry department
- compliance with all Graduate School Rules, available from the Graduate School or CLAS Graduate Advising Web site
- all work must be completed within five years of completion of the first graduate class in the department

A Plan II student may petition the graduate program director to substitute up to 3 semester hours of master's report (CHEM 6960) research, beyond the required minimum, for an

equivalent number of semester hours of formal course work. Approval will be perfunctory for research performed with the support and under the direct supervision of a faculty member in the Department of Chemistry on the Downtown Campus. Plan II students must take a minimum of 24 semester hours of formal course work in chemistry at the 5000 level or above. Students may petition the graduate program director in advance for permission to take up to two courses at the graduate level outside of chemistry that would count toward the requirements for an MS in chemistry.

## Chinese Studies

**Director:** Stephen C. Thomas

**Faculty Advisors:**

Ji Chen, Lawrence Street Center, 390K, 303-556-6611

Stephen C. Thomas, King Center, 520, 303-556-5259

**Office:** Political Science, King Center 520

**Telephone:** 303-556-5259

**Web site:** [www.cudenver.edu/polisci/chinesestudies.html](http://www.cudenver.edu/polisci/chinesestudies.html)

This innovative program offers specialized study of China through course work in the related disciplines of language, anthropology, history, geography, literature and political science. China's economic and political presence is increasingly prominent in the United States. According to a recent national survey, Chinese is the fastest-growing foreign language in American colleges and universities. UC Denver is uniquely positioned to make use of its location as the cultural, economic and political center of the Rocky Mountain region and of its diverse, well-trained and highly qualified faculty to offer a course of interdisciplinary studies related to China.

The increasing prominence of China in world affairs has made knowledge of Chinese language and cultures a valuable asset in numerous fields. Today, career opportunities abound for Chinese studies graduates in government, international business, banking and financial services, law, medicine, journalism and graduate study in sinology. The breadth of the program's course offerings, coupled with the resources of the faculty, ensures that its graduates will be especially well prepared for any of these professional pursuits.

The program in Chinese studies offers a host of study abroad opportunities throughout the academic year and every summer. UC Denver has on-going programs in Beijing and Taipei, as well as an association with Yunnan University in Kunming. Study abroad programs of five weeks to one year in length may be arranged, and program faculty can help students enroll in intensive Chinese language programs in Taiwan or on the mainland. Students pursuing the minor in Chinese language and area studies are encouraged to complete the program with a period of residence and study in China.

### REQUIREMENTS FOR CHINESE STUDIES MINOR

## Non Degree

# Chinese Studies Minor

The minor requires a total of 21 semester hours. A minimum of 15 semester hours must be taken from Downtown Campus faculty. All courses must be completed with a grade of C (2.0) or better.

## Requirements for the Minor

### Required Courses

- CHIN 1010 - Beginning Chinese I. **Semester Hours: 5**
- \* CNST 1000 - China and the Chinese: AH1. **Semester Hours: 3**
- \* CNST 4000 - Senior Seminar in Chinese Studies. **Semester Hours: 3**

**Total: 11 Hours**

*\*Note:* CNST 1000 should be taken toward the beginning of the minor, and CNST 4000 should be taken toward the completion of required course work. Note that students must take a minimum of 5 semester hours of Chinese language courses.

### Additional Courses

An additional 10 hours of course work should be selected from the following list of courses:

- ANTH 4000 - Special Topics in Anthropology. **Semester Hours: 1 to 4**
- ANTH 4995 - Travel Study. **Semester Hours: 3 to 9**
- CHIN 1020 - Beginning Chinese II. **Semester Hours: 5**
- CHIN 2110 - Second Year Chinese I. **Semester Hours: 5**
- CHIN 2120 - Second Year Chinese II. **Semester Hours: 5**
- F A 4750 - Arts of China. **Semester Hours: 3**
- GEOG 3160 - Geography of China. **Semester Hours: 3**
- HIST 4420 - Traditional China: China to 1600. **Semester Hours: 3**
- HIST 4421 - Modern China. **Semester Hours: 3**
- P SC 4186 - East Asia in World Affairs. **Semester Hours: 3**
- P SC 4615 - Politics and Government of China. **Semester Hours: 3**
- P SC 4726 - Russian and Chinese Foreign Policy. **Semester Hours: 3**
- PHIL 3666 - Asian Philosophies and Religions. **Semester Hours: 3**
- PHIL 3981 - Chinese Philosophy and Culture. **Semester Hours: 3**

**Total: 10 Hours**

**Minor Total: 21 Hours**

\* New courses may not appear in the course description section of this catalog. Contact the department for further information.

## **Communication**

**Chair:** Stephen J. Hartnett

**Program Assistant:** Sally Thee

**Graduate Advisor:** Barbara Walkosz

**Undergraduate Advisor:** Wanda Lakota

**Internship Coordinator:** Suzanne Stromberg

**Office:** Plaza Building, 102

**Telephone:** 303-556-2591

**Fax:** 303-556-6018

**Web site:** [www.cudenver.edu/communication/](http://www.cudenver.edu/communication/)

## **Faculty**

### **Professors:**

Brenda J. Allen, PhD, Howard University

Sonja K. Foss, PhD, Northwestern University

### **Associate Professors:**

Larry Erbert, PhD, University of Iowa

Stephen J. Hartnett, PhD, University of California at San Diego

Michael Monsour, PhD, University of Illinois-Champaign

James F. Stratman, PhD, Carnegie-Mellon University

Omar Swartz, PhD, Purdue University and JD, Duke University

Barbara Walkosz, PhD, University of Arizona

### **Instructors:**

Deborah V. Burgess, MS, University of Denver

James Hightshoe, PhD, University of Denver

Wanda Lakota, MA, University of Denver

Diann Logan, MA, University of Colorado at Denver

Kathleen Pounders, MA, University of Colorado at Denver

Suzanne Stromberg, MA, Regent University

Students wishing to study communication may choose to complete a bachelor of arts in communication. The communication curriculum is designed to create a learning environment in which students develop the skills, knowledge and abilities necessary to use communication to create a more civil and humane world.

Communication is a discipline concerned with the study of messages in the contexts of human relationships. Courses examine the nature, use and role of messages among individuals and within small groups, organizations and society in whatever form they assume—oral, nonverbal, written, visual, mediated and technological. The curriculum provides a balance of theory-based knowledge of communication and practical skills.

## **Undergraduate**

### **REQUIREMENTS FOR MAJOR**

## **Academic Honors**

Academic honors are conferred at graduation on students whose achievements are above those required for the bachelor's degree. Three levels of honors are available to students. *Cum laude* honors may be earned by communication majors with a cumulative GPA of 3.0 and a GPA of 3.5 in 30 hours of communication courses. *Magna cum laude* and *summa cum laude* honors require the completion of a semester-long project during the senior year. Additional information about academic honors may be obtained from the undergraduate advisor in communication.

## **Undergraduate Internships**

Internships are opportunities for students to work in communication-related positions in the community and receive academic credit for that work. They provide a way for students to maximize their communication background and their understanding of concepts, theories, models and frameworks within the communication discipline.

To qualify to register for internships in communication, undergraduate students must be communication majors and have a cumulative GPA of 2.75.

Students typically receive 3 hours of academic credit for a one-semester internship in which they work between 15 and 30 hours a week. Communication majors may complete up to 6 hours of internship credit (CMMU 3939).

For further information about internships, contact the Experiential Learning Center in Tivoli Student Union, Suite 260, 303-556-6656.

## **MINOR IN COMMUNICATION**

# Undergraduate Certificates

## UNDERGRADUATE CERTIFICATE IN MEDIATION

## UNDERGRADUATE CERTIFICATE IN PUBLIC RELATIONS

## UNDERGRADUATE CERTIFICATE IN TECHNICAL AND PROFESSIONAL COMMUNICATION

### Grade and Residency Requirements for Certificates

A grade of B or better must be earned in each course completed as part of the certificate (B- is not acceptable). All semester hours for a certificate must be earned at the Downtown Campus.

## Graduate

### Grade Requirements

Students must maintain a GPA of 3.0 or higher across all courses applied to a graduate degree or to a graduate certificate.

### Course Transfer Policy

A maximum of 6 semester hours of relevant graduate course work may be transferred from another university. Students cannot receive credit for transferred courses in which less than a *B* grade was earned. Course work transferred from another university must be approved by the director of the MA program.

### Time Limits for Completion of Degree

Students have seven years from the date of the beginning of their course work to complete all requirements for a master's degree in communication.

## MASTER OF ARTS IN COMMUNICATION

### Application Procedures for U.S. Citizens

Students must submit the following materials to apply for admission to the MA program:

- letter of application explaining career plans and reason for interest in the degree
- graduate admission application
- application for graduate admission—part II
- three letters of recommendation, preferably from university faculty (those writing the recommendations must use the request for recommendation form and their own letterhead stationery)
- two official transcripts from every college or university attended

- resume or *vita*
- writing sample
- GRE scores
- \$50 application fee (nonrefundable)

Application forms are available from the communication department program assistant or the department's Web site.

The deadline for application for the fall semester is April 1, for spring semester October 1. All application materials should be sent to:

Program Assistant  
University of Colorado Denver  
Department of Communication  
Campus Box 176; P. O. Box 173364  
Denver, CO 80217-3364

## **Application Procedures for International Students**

Students who are not U.S. citizens should begin the process of application to the MA program in communication by contacting the Office of International Affairs at UC Denver. This office will assist students in compiling their application materials, which then are submitted to the communication department. International students should not apply to the communication department directly. See the Information for International Students chapter for further information.

## **Graduate Certificates**

**GRADUATE CERTIFICATE IN PUBLIC RELATIONS**

**GRADUATE CERTIFICATE IN TECHNICAL AND PROFESSIONAL COMMUNICATION**

### **Grade and Residency Requirements for Certificates**

A grade of B or better must be earned in each course completed as part of the certificate (B- is not acceptable). All semester hours for a certificate must be earned at the Downtown Campus.

**COMMUNICATION COURSES**

## **Bachelor of Arts**

# **Communication BA**

## **Requirements for Admission**

Undergraduates must declare their intention to major in communication by the time they have completed 60 semester hours and apply to the communication department to be accepted as a major.

## Program Requirements

The communication major requires that students take a total of 39 hours of course work in communication, 18 of which must be taken in residence at the Downtown Campus. At least 21 of the 39 hours must be upper division. Students must achieve a C- (1.7) or higher to receive credit for a course in the major and a minimum GPA of 2.0 in their communication courses.

## Core Courses

- CMMU 1011 - Fundamentals of Communication: SS3. **Semester Hours: 3**
- CMMU 1021 - Fundamentals of Mass Communication: SS3. **Semester Hours: 3**
- CMMU 2041 - Interpersonal Communication. **Semester Hours: 3**
- CMMU 2050 - Business and Professional Speaking. **Semester Hours: 3**
- OR-
- CMMU 2101 - Presentational Speaking. **Semester Hours: 3**

**Total: 12 Hours**

## Electives

### Skill Area Electives

In addition to the four communication core courses, students are required to complete two courses from each of four skill areas: creation of community, communication within systems, analysis of communication and production of communication.

**Total: 24 Hours**

### Upper Division Elective

Choose one upper-division communication elective course from departmental offerings

**Total: 3 Hours**

## Major Total: 39 Hours

For more information, see the faculty advisor and the department's Web site.

## Certificate

# Mediation Undergraduate Certificate

Mediation is an area of knowledge and skills concerned with the communication processes involved in helping others solve their conflicts in mutually beneficial ways. The area of mediation through communication provides opportunities for the development of communication skills and knowledge by professionals in public, legal, political, governmental, corporate and not-for-profit contexts.

The undergraduate certificate in mediation is designed for communication majors and others outside the major who desire to enter the field of alternative dispute resolution with the skills, knowledge and abilities to aid others in the productive management or resolution of their conflicts. It is also useful for nondegree-seeking working professionals without bachelor's degrees who plan to enter or re-enter the workplace and want to acquire the knowledge and skills necessary to market themselves as mediation specialists.

## Certificate Requirements

The undergraduate certificate in mediation requires 12 semester hours (four courses).

### Core Courses

- CMMU 4262 - Mediation. **Semester Hours: 3**

**Students must complete at least one of the following two courses (those who take both classes take one elective rather than two; those who take only one class must select two electives):**

- CMMU 4255 - Negotiations and Bargaining. **Semester Hours: 3**
- CMMU 4260 - Communication and Conflict. **Semester Hours: 3**

### Electives

- CMMU 3271 - Communication and Diversity. **Semester Hours: 3**
- CMMU 4015 - Communication and Civility. **Semester Hours: 3**
- CMMU 4140 - Argumentation. **Semester Hours: 3**
- CMMU 4151 - Group Communication. **Semester Hours: 3**
- CMMU 4215 - Ethics in Communication. **Semester Hours: 3**
- CMMU 4681 - Communication Issues in Trial Court Practices and Processes. **Semester Hours: 3**

**Total: 12 Hours**

Students may be allowed to take courses other than those on this list to fulfill the requirements for the certificate, if those courses better fit their professional goals.

# Public Relations Graduate Certificate

Public relations is a management function that establishes and maintains mutually beneficial relationships between an organization and the publics on whom its success or failure depends. Virtually every kind of institution—for-profit and not-for-profit alike—recognizes the need for dialogue with the groups of people who can and will influence its future. The graduate certificate in public relations is designed to provide students with the principles and theories that guide the work of public relations practitioners in a variety of contexts including private industry, government and nonprofit settings.

The graduate certificate in public relations is for working professionals who already have earned bachelor's degrees but who would like to enhance or upgrade their skills in the area of public relations. These individuals complete the certificate as nondegree students; those who decide to enroll in the MA program in communication following completion of the certificate may transfer 9 hours of credit earned for the certificate to the master's degree. For students already enrolled in a master's program in communication, the certificate can be completed as part of or in addition to the course work required for the master's degree. Students who have completed the undergraduate certificate in public relations are not eligible to complete this certificate.

## Certificate Requirements

The graduate certificate in public relations requires four courses (12 semester hours). Students who have not had a previous course in public relations must complete:

## Required Courses

- CMMU 5635 - Principles of Public Relations. **Semester Hours: 3**

## Elective Courses

Students choose three or four, depending on whether they already have had a course equivalent to CMMU 5635:

- CMMU 5240 - Organizational Communication. **Semester Hours: 3**
- CMMU 5290 - Web Design. **Semester Hours: 3**
- CMMU 5300 - Multimedia Authoring. **Semester Hours: 3**
- CMMU 5665 - Principles of Advertising. **Semester Hours: 3**
- CMMU 5805 - Graphics. **Semester Hours: 3**

**Total: 12 Hours**

Students may be allowed to take courses other than those on this list to fulfill the requirements for the certificate if those courses better fit their professional goals. Requests for approval for different courses should be made in writing to the MA program director.

# Public Relations Undergraduate Certificate

Public relations is a management function that establishes and maintains mutually beneficial relationships between an organization and the publics on whom its success or failure depends. Virtually every kind of institution—for-profit and nonprofit alike—recognizes the need for dialogue with the groups of people who can and will influence its future. The undergraduate certificate in public relations is designed to provide students with the principles and theories that guide the work of public relations practitioners in a variety of contexts including private industry, government and nonprofit settings.

The undergraduate certificate in public relations is designed for undergraduate communication majors who wish to demonstrate to potential employers that they possess skills and knowledge in the area of public relations. It also is useful for nondegree-seeking working professionals without bachelor's degrees who plan to enter or re-enter the workplace and who want to acquire the knowledge and skills necessary to employ principles of public relations in their professional environments.

## Certificate Requirements

The undergraduate certificate in public relations requires 12 semester hours (four courses).

## Core Courses

- CMMU 4635 - Principles of Public Relations. **Semester Hours: 3**

## Additional Courses

Choose three:

- CMMU 3620 - Television Production. **Semester Hours: 3**
- CMMU 3680 - Mass Communication Skills. **Semester Hours: 3**
- CMMU 4140 - Argumentation. **Semester Hours: 3**
- CMMU 4200 - Persuasion. **Semester Hours: 3**
- CMMU 4240 - Organizational Communication. **Semester Hours: 3**
- CMMU 4290 - Web Design. **Semester Hours: 3**
- CMMU 4300 - Multimedia Authoring. **Semester Hours: 3**
- CMMU 4665 - Principles of Advertising. **Semester Hours: 3**
- CMMU 4682 - Political Communication. **Semester Hours: 3**

- CMMU 4805 - Graphics. **Semester Hours: 3**

**Total: 12 Hours**

# Technical and Professional Communication Graduate Certificate

The graduate certificate in technical and professional communication is designed for working adults who are employed or seeking employment in the field of technical communication, one of the fastest-growing sectors in today's global, high-tech economy. Students pursuing the certificate receive state-of-the-art training in the core skills demanded by the profession including technical writing, technical editing and graphic design. The certificate also allows students to choose courses from specialized areas within technical communication, such as multimedia authoring, health risk communication and usability testing.

The graduate certificate in technical and professional communication is designed for working professionals who already have earned bachelor's degrees but who would like to enhance or upgrade their skills in the area of technical communication. These individuals complete the certificate as nondegree students; those who decide to enroll in the MA program in communication following completion of the certificate may transfer all 9 hours of credits earned for the certificate to the master's degree. For students already enrolled in a master's program in communication, the certificate can be completed as part of or in addition to the course work required for the master's degree.

## Certificate Requirements

The graduate certificate in technical and professional communication requires 9 semester hours (three courses), with 6 hours of required courses and 3 hours of electives.

## Required Courses

- CMMU 5405 - Technical Communication: Writing. **Semester Hours: 3**
- CMMU 5505 - Technical Communication: Editing. **Semester Hours: 3**
- CMMU 5830 - Visual Principles in Technical Communication. **Semester Hours: 3**

## Elective Courses

Any course in the area of technical communication at the 5000 level or above.

**Total: 9 Hours**

# Technical and Professional Communication Undergraduate Certificate

The undergraduate certificate in technical and professional communication is designed for several types of students:

- working adults who are employed or who are seeking employment in the field of technical communication but who are not seeking an undergraduate degree
- students who are majoring in communication and want to enhance their technical communication abilities
- students pursuing a major other than communication who want to enhance their technical communication abilities

Students enrolled in this certificate receive state-of-the-art training in core professional skills, including technical writing, technical editing and graphic design. The certificate is especially helpful for those who plan to enter (or re-enter) the workplace and who want to acquire the knowledge and skills necessary to contribute to technical documentation projects.

## Certificate Requirements

The undergraduate certificate in technical and professional communication requires 12 semester hours (four courses).

### Required Core

- CMMU 3120 - Technical Communication. **Semester Hours: 3**

### Electives

Choose three:

- CMMU 4300 - Multimedia Authoring. **Semester Hours: 3**
- CMMU 4410 - Science Writing. **Semester Hours: 3**
- CMMU 4510 - Usability Testing. **Semester Hours: 3**
- CMMU 4605 - Rhetorical Theory for Technical Communication. **Semester Hours: 3**
- CMMU 4620 - Health Risk Communication. **Semester Hours: 3**
- CMMU 4750 - Legal Reasoning and Writing. **Semester Hours: 3**
- CMMU 4805 - Graphics. **Semester Hours: 3**

**Total: 12 Hours**

## Non Degree

# Communication Minor

Knowledge in an area of study such as business, biology or sociology means little unless it can be communicated effectively. The minor in communication is designed to provide students who are not communication majors with knowledge and skills in communication that are useful in any discipline or profession.

The minor in communication requires 18 semester hours, with 15 hours of required courses and 3 hours of electives.

## Requirements

### Core Courses

- CMMU 1011 - Fundamentals of Communication: SS3. **Semester Hours: 3**
- CMMU 2041 - Interpersonal Communication. **Semester Hours: 3**
- CMMU 2101 - Presentational Speaking. **Semester Hours: 3**
- CMMU 4151 - Group Communication. **Semester Hours: 3**
- CMMU 4200 - Persuasion. **Semester Hours: 3**

**Total: 15 Hours**

### Elective Courses

In addition to the five courses specified above, students must take one upper-division course (3000 level or above) to be selected with the aid of the undergraduate advisor in communication.

**Total: 3 Hours**

**Minor Total: 18 Hours**

## Grade and Residency Requirements for Minors

A grade of C- or better must be earned in each course completed as part of the minor. No more than 6 of the semester hours for the minor may be transferred from another university.

## Master of Arts

# Communication MA

- ▶ Graduate School rules apply to this program

The master of arts in communication is a generalist degree designed to enhance students' intellectual and professional growth through the understanding and practice of effective communication.

## Degree Requirements

Students have two options for completing the MA degree in communication: the professional track and the academic track.

### Professional Track

The professional track requires the completion of 36 hours of graduate course work (5000 level or above). As explained below, students have the option of taking 6 hours of 4000-level courses. In this situation, a student will take 30 hours of graduate credit and 6 hours of 4000-level (undergraduate) course work. The requirements for course work are as follows:

#### Required Course

- CMMU 6013 - Introduction to Graduate Work in Communication. **Semester Hours: 3** (recommended to be taken the first semester of graduate course work; offered only in the fall semester)

#### Methods Courses

Most methods courses are offered every other year. The second methods course may be taken outside of the communication department with the approval of the student's advisor.

#### Choose two:

- CMMU 5011 - Research Methods: Quantitative. **Semester Hours: 3**
- CMMU 5022 - Critical Analysis of Communication. **Semester Hours: 3**
- CMMU 5221 - Research Methods: Qualitative. **Semester Hours: 3**
- CMMU 6205 - Empirical Research Methods for Communication and Technical Communication. **Semester Hours: 3**

**Total: 9 Hours**

#### Graduate Seminars

In addition to the above core requirements, students must take four graduate seminars from the Department of Communication. Graduate seminars are 5000- or 6000-level courses.

**Total: 12 Hours**

## **Electives**

Students must complete five electives. A minimum of three of these electives must be at the 5000 or 6000 level; the remaining two may be at the 4000 level. At least three of the five electives must be communication courses; the remaining two electives may be taken from outside of the Department of Communication.

[Students whose bachelor's degrees are not in communication are required to take one additional course (CMMU 4031). This course does not count toward the semester hours required for the degree; it is taken in addition to those 36 hours.]

- CMMU 4031 - Perspectives on Communication. **Semester Hours: 3**

**Total: 15 Hours**

Students must receive a grade of *B* or higher in all courses that are applied to the MA degree.

## **Track Total: 36 Hours**

### **Academic Track**

The academic track is distinguished from the professional track in that it requires the completion of a substantial academic writing project or projects. The academic track requires the completion of 36-37 hours of graduate course work. At least 30 of these hours must be at the 5000 or 6000 level; 6 hours (two courses) may be at the 4000 level. The requirements for course work are as follows:

- CMMU 6013 - Introduction to Graduate Work in Communication. **Semester Hours: 3** (recommended to be taken the first semester of graduate course work; offered only in the fall semester)

### **Methods Courses**

Most methods courses are offered every other year.

**Choose two:**

- CMMU 5011 - Research Methods: Quantitative. **Semester Hours: 3**
- CMMU 5022 - Critical Analysis of Communication. **Semester Hours: 3**
- CMMU 5221 - Research Methods: Qualitative. **Semester Hours: 3**

- CMMU 6205 - Empirical Research Methods for Communication and Technical Communication. **Semester Hours: 3**

**Total: 9 Hours**

## **Graduate Seminars**

In addition to the above core requirements, students must take four graduate seminars from the communication department. Graduate seminars are 5000- or 6000-level courses. The four courses must be approved by the student's advisor.

**Total: 12 Hours**

## **Electives**

Students must complete five electives. A minimum of two of these electives must be at the 5000 or 6000 level; the remaining two may be at the 4000 level. At least two of the electives must be communication courses; the remaining two may be taken from outside of the communication department. If a thesis is presented, the thesis credits will substitute for one elective course requirement.

[Students whose bachelor's degrees are not in communication are required to take one additional course (CMMU 4031). This course does not count toward the semester hours required for the degree; it is taken in addition to those 36-37 hours.]

- CMMU 4031 - Perspectives on Communication. **Semester Hours: 3**

**Total: 12-15 Hours**

(12 hours for thesis students; 15 for non-thesis)

## **Thesis**

Students either must present a major paper for publication (no additional course credit) or complete a thesis for 4 semester hours. Credit for a thesis may substitute for one elective course requirement.

**Total: 4 Hours**

Students must receive a grade of *B* or higher in all courses that are applied to the MA degree.

**Track Total: 36-37 Hours**

## **Options for Specialization**

The communication department has developed three options for students who wish to create an area of focus or specialization within the MA degree—communication management, technical communication and doctoral preparation. Students may choose to develop one of these options as they select their electives, or they may earn a general degree by selecting electives across the three areas of specialization. Any of the options may be pursued by students in the professional track; the doctoral preparation specialization is recommended for students in the academic track.

## **Communication Management**

Communication management is an area of knowledge and skills concerned with the processes involved in managing communication— creating, accessing and delivering communication services within organizational contexts. The area of communication management provides opportunities for the development of communication skills and knowledge by professionals in public, corporate and not-for-profit organizations. Anyone who must manage communication resources for an organization—including account executives, multimedia professionals, human resource specialists and trainers—can advance their career through a specialty in communication management.

## **Technical Communication**

Technical communication is the field concerned with creating documents (electronic as well as paper) that integrate words and images in ways that help individuals achieve their specific goals for using documents at work, school and home. Technical communication is the act of bringing together prose, graphics (including illustration, photography, video and quantitative displays), typography and page design for purposes of instruction, explanation, persuasion and decision making. A specialty in technical communication is available for students who want to develop their skills in technical communication but who also want the breadth available from course work in many areas of communication.

Students who develop a specialty in technical communication also may choose to receive a graduate certificate in technical and professional communication (9 hours).

## **Doctoral Preparation**

The specialty in doctoral preparation is for students who plan to pursue a PhD after completion of their MA degree. Individuals who earn a PhD typically engage in teaching and research as university professors, but the degree also may be pursued to increase marketability in the corporate world in areas such as consulting and training.

## **Economics**

**Chair:** Buhong Zheng

**Program Assistant:** Christine Lukvec

**Office:** Lawrence Street Center, 460

**Telephone:** 303-556-4413

**Fax:** 303-556-3547

**Web site:** <http://econ.cudenver.edu>

## **Faculty**

### **Professors:**

Laura M. Argys, PhD, University of Colorado

Mei-Chu W. Hsiao, PhD, University of Rochester

Steven G. Medema, PhD, Michigan State University

H. Naci Mocan, PhD, City University of New York

W. James Smith, PhD, University of Colorado

Buhong Zheng, PhD, West Virginia University

### **Associate Professors**

Steven R. Beckman, PhD, University of California Davis

Brian Duncan, PhD, University of California at Santa Barbara

Daniel I. Rees, PhD, Cornell University

Economics is the science of decision making. The rigorous and general approach that characterizes economics lends itself to a remarkably wide field of practical application. Economists are noted for major contributions in a number of fields including government policy, taxation, law, regulation, political economy, international trade and finance, international and U.S. development, marketing, environmental studies, medical policy, portfolio management and banking. The broad and rigorous training of economics majors accounts for their significant demand in virtually every industry and government agency. Economics provides excellent preparation for advanced graduate study as well. Recent studies indicate that economics is a preferred degree for prestigious MBA programs and law schools.

## **Undergraduate**

### **REQUIREMENTS FOR MAJOR**

### **REQUIREMENTS FOR MINOR**

## **Honors in Economics**

Students wishing to earn departmental honors in economics should consult with their advisor no later than the beginning of their senior year.

*Cum laude* will be awarded to students who complete an economics major with a 3.5 GPA in all upper-division (3000+) courses in economics taken at UC Denver, with a minimum of eight such courses, and either two additional electives in economics beyond those required for the major, taken at the 4000 or higher level, or an acceptable honors thesis. The thesis must be approved by a three-member committee of department faculty and will include a presentation of the results to that committee. Students should register for the thesis, using ECON 4850 as the course number, as a 3-semester hour independent study, in addition to the regular requirements for the major.

*Magna cum laude* will be awarded to students who complete an economics major with a 3.7 GPA in all upper-division (3000+) courses in economics taken at UC Denver, with a minimum of eight courses, and who complete an acceptable honors thesis.

*Summa cum laude* will be awarded to students who complete an economics major with a 3.88 GPA in all upper-division (3000+) courses in economics taken at UC Denver, with a minimum of eight courses, and who complete an outstanding honors thesis.

In order to be recognized in the graduation program as “Honors Pending,” a draft of the thesis must be submitted to the chair of the committee four weeks prior to the end of the semester. The oral presentation and other requirements must be completed one week before graduation.

In order to be recognized in the graduation program with the specific honors degree being conferred, e.g., *summa*, *magna*, etc., students must turn in the completed final copy of the honors thesis four weeks prior to the end of the semester, along with meeting other requirements by the week before graduation. Otherwise, recognition will come with the diploma after graduation.

Students who do not have an advisor should contact the department for assignment to an advisor. Students should meet with their advisor at least twice a year.

## Graduate

The MA program in economics at UC Denver is directed toward two groups: (1) those who look on the MA as a key to career development in business or government service, and (2) those who desire to go on to pursue the PhD in economics or related fields.

The strong quantitative emphasis of the department’s MA program is ideally suited for the pursuit of both these goals. Students are steeped in econometric theory and its applications from the beginning of the program, receiving broad exposure both to the tools of econometric analysis and the application of these tools to a wide range of economic phenomena. The applications involve extensive exposure to the professional literature in various applied fields and a research seminar in which each student will undertake a sophisticated applied research project under faculty supervision.

Students are allowed a great deal of flexibility in choosing their elective courses. Possibilities include advanced quantitative courses in economics, advanced field courses in economics (e.g., money and banking, international economics) business courses and advanced mathematics

courses (which are particularly useful for those who wish to pursue the PhD in economics). All of this is intended to give students the opportunity to complement their extensive quantitative training with additional knowledge and skills that will best enhance their prospects upon graduation.

## **MASTER OF ARTS IN ECONOMICS**

### **MA ECONOMICS/MS FINANCE DUAL DEGREE**

## **Bachelor of Arts**

# **Economics BA**

## **Requirements for Major**

Students majoring in economics for the BA degree must declare such by the time they have completed 60 semester hours and complete a minimum of 40 semester hours in economics. The minimum grade in each UC Denver economics course is a *C-* (1.7), except that one *D-* in one economics elective is allowed. A GPA of 2.5 in economics courses taken at UC Denver is required to graduate. No pass/fail grades may count toward the major.

## **Program Requirements**

### **Required Economics Courses**

- ECON 2012 - Principles of Economics: Macroeconomics: SS1. **Semester Hours: 3**
- ECON 2022 - Principles of Economics: Microeconomics: SS1. **Semester Hours: 3**
- ECON 3801 - Introduction to Mathematical Economics. **Semester Hours: 3**
- ECON 3811 - Statistics with Computer Applications. **Semester Hours: 4**
- ECON 4071 - Intermediate Microeconomic Theory. **Semester Hours: 3**
- ECON 4081 - Intermediate Macroeconomic Theory. **Semester Hours: 3**
- ECON 4091 - History of Economic Thought. **Semester Hours: 3**
- ECON 4811 - Introduction to Econometrics. **Semester Hours: 3**

**Total: 25 Hours**

## **Electives**

### **Economics Courses**

Any five 3-semester-hour courses taken in economics may satisfy this requirement, other than internships and independent studies which require the approval of the department chair.

## Political Science Course

One political science course. Suggested courses include but are not limited to P SC 1101, American Political System, and PSC 3022, Introduction to Comparative Politics.

**Electives Total: 18 Hours**

**Major Total: 43 Hours**

Graduating seniors must submit the three best papers that the student wrote in any three separate courses taken in the Department of Economics at UC Denver for the outcomes assessment of the economics program. The three papers should be handed in at one time in a folder to the economics office, before the first day of the month in which the student plans to graduate.

At least six of the major courses (18 semester hours), including at least three courses out of ECON 3801, 4071, 4081, 4091 and 4811, must be taken from economics faculty on the Downtown Campus.

Once a student has enrolled at UC Denver, no courses in the major may be taken outside the Downtown Campus economics department without permission from the undergraduate advisor. No math is formally required, except for the college algebra prerequisite for ECON 3811. Students desiring a recommendation to a graduate school in economics, however, should consult with economics faculty regarding additional mathematics courses.

## Non Degree

# Economics Minor

Students minoring in economics must complete a minimum of 15 semester hours in economics. All course work must be completed at the Downtown Campus, or the Department of Economics reserves the right to test the student's competence in the material covered. No grade below C- will be counted toward the minor requirements.

## Courses

- ECON 2012 - Principles of Economics: Macroeconomics: SS1. **Semester Hours: 3**
- ECON 2022 - Principles of Economics: Microeconomics: SS1. **Semester Hours: 3**

—plus—

Three upper-division electives in economics: **9 semester hours**

(ECON 3100 - Economics of Race and Gender. is acceptable)

**Total: 15 Hours**

At least two upper-division courses must not overlap with courses required in the student's major program.

## Master of Arts

# Economics MA

► Graduate School Rules apply to this program

## Requirements for Admission

- general requirements of the Graduate School (including a 3.0 undergraduate cumulative GPA)
- three letters of recommendation
- 15 semester hours of undergraduate economics (including theory and quantitative methods); variations to be discussed with graduate advisor
- acceptable GRE scores
- two official transcripts from all colleges attended
- international students must submit TOEFL scores

## Degree Requirements

The MA degree requires the completion of 30 semester hours of course work, of which 21 hours are core requirements. Each student's plan will be worked out in conjunction with the graduate advisor.

## Core Courses

All courses must be completed with a grade of B- or better.

- ECON 5073 - Microeconomic Theory. **Semester Hours: 3**
- ECON 5083 - Macroeconomic Theory. **Semester Hours: 3**
- ECON 5803 - Mathematical Economics. **Semester Hours: 3**
- ECON 5813 - Econometrics I. **Semester Hours: 3**
- ECON 5823 - Econometrics II. **Semester Hours: 3**
- ECON 6053 - Seminar In Applied Economics. **Semester Hours: 1.5**
- ECON 6073 - Research Seminar. **Semester Hours: 3**

**Total: 21 Hours**

## Electives

Three elective courses

**Total: 9 Hours**

**Degree Total: 30 Hours**

**Master of Science in Finance/Master of Arts in Economics**

## **Economics/Finance MA/MS**

For students interested in combining the quantitative skills of an economics degree with the specific applications of a business degree, we offer an MA economics/MS finance dual degree. This 42-semester-hour program is offered jointly with the Business School. It is a "dual" degree, meaning that students who complete the program earn two master's degrees: MA in economics and MS in finance. Students must be admitted separately to both the MA program in economics and MS program in finance; they may apply to both programs at the same time or apply to the economics program first, and then to the finance program at the end of their first semester, or vice versa. Both programs must be completed in the same semester to take advantage of the dual degree program. Further information about this program can be obtained from either the Department of Economics or the Business School. [Click here for admissions information for economics.](#)

The dual degree program is intended to create highly-skilled research professionals with considerable econometric skill as well as familiarity with their chosen financial institutions. Given the similarity in course work within the two programs, there can be considerable time savings for the student. Essentially, the program allows students to complete the two programs that separately would require 60 hours of course work with 42 hours of combined course work.

### **Degree Requirements**

#### **Core Courses**

- ECON 5073 - Microeconomic Theory. **Semester Hours: 3**
- ECON 5083 - Macroeconomic Theory. **Semester Hours: 3**
- ECON 5803 - Mathematical Economics. **Semester Hours: 3**
- ECON 5813 - Econometrics I. **Semester Hours: 3**
- ECON 5823 - Econometrics II. **Semester Hours: 3**
- ECON 6073 - Research Seminar. **Semester Hours: 3**
- BUSN 6640 - Financial Management. **Semester Hours: 3**
- FNCE 6300 - Macroeconomics and Financial Markets. **Semester Hours: 3**
- FNCE 6330 - Investment Management Analysis. **Semester Hours: 3**

**Total: 27 Hours**

## **Electives**

Four 6000-level finance elective courses: **12 semester hours**

One 5000-level or above economics elective course: **3 semester hours**

**Total: 15 Hours**

## **Dual Degree Total: 42 Hours**

## **Educational Studies / Teacher Licensure**

### **K–12 Teachers Licensure**

UC Denver offers an undergraduate teacher licensure program through a collaboration between the College of Liberal Arts and Sciences and the School of Education & Human Development. Students in the undergraduate licensure program earn (1) a broad knowledge background and content specialization in the College of Liberal Arts and Sciences and (2) pedagogy principles and classroom experience in the initial professional teacher education (IPTE) program through the School of Education & Human Development. When students have satisfactorily completed requirements, they simultaneously earn their baccalaureate degree, BA or BS, and teacher licensure for the state of Colorado.

The Downtown Campus undergraduate teacher licensure program offers licensure in the following areas with the allowed liberal arts majors:

Elementary Education Licensure \*

BA—Individually Structured Major

Secondary English Licensure \*

BA—English

Secondary Foreign Language Licensure

BA—French

BA—Spanish

Secondary Social Studies Licensure

BA—History

BA—Political Science

Secondary Mathematics Licensure

BS—Mathematics

\* Elementary Education and English licenses with dual endorsements in linguistically diverse education are pending approval by the Colorado Department of Education and the Department of Higher Education.

Students seeking undergraduate K–12 teacher licensure begin in the College of Liberal Arts and Sciences to complete the UC Denver core curriculum, content course work for both the major and licensure and an education internship. Admission to the IPTE licensure program in the School of Education & Human Development is competitive and requires students to do the following:

- attain a minimum 2.75 cumulative undergraduate GPA
- complete 120 hours of supervised experience with children through an approved internship
- complete all general education requirements
- complete all course work in the major
- complete all IPTE admission requirements

Interested students should contact the CLAS Advising Office, North Classroom, 4002, 303-556-2555, and ask to speak to the education academic advisor about undergraduate teacher licensure.

Further information can be found in the Teacher Education Program description in the School of Education and Human Development section of this catalog.

## **EDUCATIONAL STUDIES MINOR**

### **Non Degree**

# **Educational Studies Minor**

The preparation of high-quality K–12 teachers is dependent on both content knowledge and teaching methodologies. The College of Liberal Arts and Sciences, in cooperation with the School of Education & Human Development, offers an educational studies minor to assist undergraduate students unable to fit licensure course work into their bachelor's degree and to prepare them for the graduate-level licensure programs.

The CLAS educational studies minor is flexible in design and individually tailored for each student to complete some content requirements required for admission into the graduate-level teacher licensure programs at UC Denver. The educational studies minor requires course work in psychology and human development, democratic schooling principles, a K–12 internship and undergraduate course work required for licensure outside college and major requirements.

The educational studies minor is open to all Downtown Campus undergraduate students. For more information, students should contact the CLAS Advising Office, North Classroom, 4002, 303-556-2555.

## **English**

**Chair:** Nancy Ciccone  
**Program Assistant:** Elaine Beemer  
**Office:** 1015 9th Street Park  
**Telephone:** 303-556-8304  
**Fax:** 303-556-2959  
**Web site:** [www.cudenver.edu/english/](http://www.cudenver.edu/english/)

## **Faculty**

### **Professors:**

Susan Linville, PhD, University of Colorado  
Bradford K. Mudge, PhD, University of Texas, Austin

### **Associate Professors:**

Joanne Addison, PhD, Purdue University  
Pompa Banerjee, PhD, University of Massachusetts  
Nancy Ciccone, PhD, University of California, Berkeley  
Colleen Donnelly, PhD, University of Washington  
Jeffrey Franklin, PhD, University of Florida  
Philip Joseph, PhD, State University of New York, Buffalo  
Richard VanDeWeghe, PhD, Michigan State University  
Catherine A. Wiley, PhD, University of Wisconsin, Madison  
Cynthia Wong, PhD, University of Wisconsin, Milwaukee  
Ian Ying, PhD, University of Arizona  
Jake York, MFA, PhD, Cornell University

### **Assistant Professors:**

Teague Bohlen, MFA, Arizona State University  
Michelle Comstock, PhD, Purdue University  
Jennifer S. Davis, MFA, University of Alabama  
Gillian Silverman, PhD, Duke University  
Amy Vidali, PhD, University of Washington

English majors learn to acquire and synthesize information and to present their ideas and opinions skillfully. They find employment in fields in which the sophisticated use of language is necessary for achievement and advancement. Many graduates go on to postgraduate study, not only in writing, film studies and literature, but to schools of medicine, law, education, journalism and business.

## **Undergraduate**

### **English Majors**

An undergraduate wishing to major in English must declare a major and track by the time they have completed 60 semester hours and may choose one of two majors: literature or writing. The literature major allows a student to choose from one of three options: literature, creative writing or film studies. Students interested in a double major must choose one option in literature as well as the writing major and are required to complete 21 different courses (63 hours).

#### **ENGLISH MAJOR**

#### **ENGLISH WRITING MAJOR**

### **BA in English With Secondary Teacher Licensure**

Students seeking secondary English teacher licensure may pursue a BA in English with a restricted literature option. This enables them to complete their English literature major as well as fulfill requirements for licensure at the undergraduate level. Call 303-556-3790 for more information.

### **Departmental Honors**

Latin honors may be earned by participating in the department's honors program. Students with a 3.5 GPA in English are encouraged to begin the program in their junior year. The program requires additional course work (1-3 hours) and affords students the opportunity to work individually with the professor of their choice. Detailed information is available in the English department office.

### **Minors**

The Department of English also offers four separate minors. No courses taken for a minor may be counted toward an English major.

#### **Literature Minor**

#### **Writing Minor**

## **Creative Writing Minor**

## **Film Studies Minor**

## **Certificates**

The English department also offers a professional writing certificate and a teaching of English to speakers of other languages certificate.

### **Professional Writing Certificate**

### **Teaching of English to Speakers of Other Languages (CTESOL)**

## **Additional Information**

For additional information on majors, options, minors and certificates call the Department of English office at 303-556-8304 or 303-556-2584.

## **Graduate**

### **MA IN ENGLISH**

## **Bachelor of Arts**

# **English BA**

The course of study offered by the Department of English is designed to develop a student's ability to read literature responsibly and imaginatively, to foster an understanding and appreciation of our literary inheritance and to provide the historical perspective from which to evaluate contemporary writing. Careful study of the use of the English language also should help a student to resist the misuse and corruption of language in politics, the media and elsewhere. Students who complete the program in English are expected to have mastered the ability to express their ideas in clear and succinct prose.

## **Requirements for the English Major**

Students majoring in English must present a total of 39 hours in the literature, film and/or creative writing options (excluding ENGL 1010, 1020 and 2030), of which 27 hours must be earned in upper-division courses. None of the required 39 hours may be taken on a pass/fail basis. Only courses completed with a grade of C (2.0) or above may be counted toward the major. At least 15 upper-division hours of the student's work in English must be taken from

English faculty on the Downtown Campus. Students planning to major in English literature must consult with an advisor as soon as possible. Students must choose one of the three options.

## Literature Option

### REQUIRED COURSES

- ENGL 1400 - Introduction to Literary Studies. **Semester Hours: 3**
- ENGL 3001 - Critical Writing. **Semester Hours: 3**

**Total: 6 Hours**

### OPTION-SPECIFIC DISTRIBUTION REQUIREMENTS: Before the Mid-Nineteenth Century

Choose three:

- \* ENGL 3330-3350 - Topics in Literature. **Semester Hours: 3** (before 1850)
- ENGL 3520 - Religious Narratives. **Semester Hours: 3**
- ENGL 3661 - Shakespeare. **Semester Hours: 3**
- ENGL 3700 - American Literature to the Civil War. **Semester Hours: 3**
- \* ENGL 4000 - Studies of Major Authors. **Semester Hours: 3**
- ENGL 4080 - History of the English Language. **Semester Hours: 3**
- OR-
- ENGL 4400 - Old English I. **Semester Hours: 3**
- ENGL 4200 - History of the English Novel I. **Semester Hours: 3**
- ENGL 4500 - Medieval Literature. **Semester Hours: 3**
- ENGL 4510 - Whores and Saints: Medieval Women. **Semester Hours: 3**
- ENGL 4520 - English Renaissance. **Semester Hours: 3**
- ENGL 4530 - Milton. **Semester Hours: 3**
- ENGL 4540 - Restoration and the 18th Century. **Semester Hours: 3**
- ENGL 4560 - English Romanticism. **Semester Hours: 3**
- ENGL 4730 - Chaucer's Canterbury Tales. **Semester Hours: 3**
- OR-
- ENGL 4731 - Chaucer's Early Poetry. **Semester Hours: 3**

**Total: 9 Hours**

\* Repeatable if topics differ

### OPTION-SPECIFIC DISTRIBUTION REQUIREMENTS: After the Mid-Nineteenth Century

**Choose four:**

- ENGL 3160 - Language Theory. **Semester Hours: 3**
- \* ENGL 3300-3324 - Topics in Film. **Semester Hours: 3**
- \* ENGL 3330-3350 - Topics in Literature. **Semester Hours: 3** (after 1850)
- ENGL 3750 - American Literature from the Civil War. **Semester Hours: 3**
- \* ENGL 4000 - Studies of Major Authors. **Semester Hours: 3** (after 1850)
- ENGL 4166 - History of American Poetry. **Semester Hours: 3**
- ENGL 4210 - History of the English Novel II. **Semester Hours: 3**
- ENGL 4220 - African-American Literature. **Semester Hours: 3**
- ENGL 4230 - The American Novel. **Semester Hours: 3**
- ENGL 4235 - Faulkner. **Semester Hours: 3**
- ENGL 4236 - The American Short Story. **Semester Hours: 3**
- ENGL 4250 - Twentieth Century Fiction. **Semester Hours: 3**
- OR-
- ENGL 4460 - Contemporary World Literature. **Semester Hours: 3**
- OR-
- ENGL 4600 - Modernism. **Semester Hours: 3**
- ENGL 4300 - History of British Drama. **Semester Hours: 3**  
(can also be counted as before the mid-nineteenth century)
- OR-
- ENGL 4350 - History of American Drama. **Semester Hours: 3**
- ENGL 4320 - History of Poetry in English. **Semester Hours: 3**  
(can also be counted as before the mid-nineteenth century)
- ENGL 4580 - The Victorian Age. **Semester Hours: 3**  
Any 3000- or 4000-level ENGL course in gender, race, ethnic or international literature

**Total: 12 Hours**

\* Repeatable if topics differ

**REQUIRED AREA ELECTIVES**

Choose three courses in literature, film or creative writing (9 semester hours, *any level*)

**Total: 9 Hours**

**LITERARY STUDIES SENIOR CAPSTONE**

- ENGL 4000 - Studies of Major Authors. **Semester Hours: 3**
- OR-
- ENGL 4999 - Literary Studies Senior Seminar. **Semester Hours: 3**

**Total: 3 Hours**

## LITERATURE OPTION TOTAL: 39 Hours

Additional courses, total not to exceed 48 hours (any level).

### Creative Writing Option

Students interested in pursuing careers or graduate work in creative writing should choose the creative writing option in literature.

#### OPTION-SPECIFIC REQUIREMENTS

- ENGL 1400 - Introduction to Literary Studies. **Semester Hours: 3**
- ENGL 1601 - Telling Tales: Narrative Art in Literature and Film: AH2. **Semester Hours: 3**
- OR-
- ENGL 2250 - Introduction to Film. **Semester Hours: 3**
- ENGL 2154 - Introduction to Creative Writing. **Semester Hours: 3**
- ENGL 3001 - Critical Writing. **Semester Hours: 3**

**Total: 12 Hours**

#### ADVANCED COURSE WORK

Complete all courses in either poetry or fiction.

##### Poetry

- ENGL 3020 - Poetry Workshop. **Semester Hours: 3**
- ENGL 4025 - Advanced Poetry Workshop. **Semester Hours: 3**
- ENGL 4080 - History of the English Language. **Semester Hours: 3**
- OR-
- ENGL 4160 - Poetics. **Semester Hours: 3**
- ENGL 4166 - History of American Poetry. **Semester Hours: 3**
- OR-
- ENGL 4320 - History of Poetry in English. **Semester Hours: 3**

**Total: 12 Hours**

##### Fiction

- ENGL 3050 - Fiction Workshop. **Semester Hours: 3**
- ENGL 4055 - Advanced Fiction Workshop. **Semester Hours: 3**
- ENGL 4200 - History of the English Novel I. **Semester Hours: 3**
- OR-

- ENGL 4210 - History of the English Novel II. **Semester Hours: 3**
- ENGL 4230 - The American Novel. **Semester Hours: 3**  
-OR-
- ENGL 4236 - The American Short Story. **Semester Hours: 3**

**Total: 12 Hours**

## **REQUIRED AREA ELECTIVES**

**Choose three:**

- ENGL 3160 - Language Theory. **Semester Hours: 3**  
-OR-
- ENGL 4080 - History of the English Language. **Semester Hours: 3**
- \* ENGL 3300-3324 - Topics in Film. **Semester Hours: 3**
- \* ENGL 3330-3350 - Topics in Literature. **Semester Hours: 3**
- ENGL 3520 - Religious Narratives. **Semester Hours: 3**
- ENGL 3661 - Shakespeare. **Semester Hours: 3**
- ENGL 3700 - American Literature to the Civil War. **Semester Hours: 3**
- ENGL 3750 - American Literature from the Civil War. **Semester Hours: 3**
- \* ENGL 4000 - Studies of Major Authors. **Semester Hours: 3**
- ENGL 4166 - History of American Poetry. **Semester Hours: 3**
- ENGL 4200 - History of the English Novel I. **Semester Hours: 3**
- ENGL 4210 - History of the English Novel II. **Semester Hours: 3**
- ENGL 4220 - African-American Literature. **Semester Hours: 3**
- ENGL 4230 - The American Novel. **Semester Hours: 3**
- ENGL 4235 - Faulkner. **Semester Hours: 3**
- ENGL 4236 - The American Short Story. **Semester Hours: 3**
- ENGL 4250 - Twentieth Century Fiction. **Semester Hours: 3**  
-OR-
- ENGL 4460 - Contemporary World Literature. **Semester Hours: 3**  
-OR-
- ENGL 4600 - Modernism. **Semester Hours: 3**
- ENGL 4300 - History of British Drama. **Semester Hours: 3**  
-OR-
- ENGL 4350 - History of American Drama. **Semester Hours: 3**
- ENGL 4320 - History of Poetry in English. **Semester Hours: 3**
- ENGL 4500 - Medieval Literature. **Semester Hours: 3**
- ENGL 4510 - Whores and Saints: Medieval Women. **Semester Hours: 3**
- ENGL 4520 - English Renaissance. **Semester Hours: 3**
- ENGL 4530 - Milton. **Semester Hours: 3**
- ENGL 4540 - Restoration and the 18th Century. **Semester Hours: 3**
- ENGL 4560 - English Romanticism. **Semester Hours: 3**
- ENGL 4580 - The Victorian Age. **Semester Hours: 3**
- ENGL 4730 - Chaucer's Canterbury Tales. **Semester Hours: 3**

-OR-

- ENGL 4731 - Chaucer's Early Poetry. **Semester Hours: 3**

**Total: 9 Hours**

\* Repeatable if topics differ

**Choose one:**

- ENGL 2390 - Writing the Short Script. **Semester Hours: 3**
- ENGL 2415 - Introduction to Movie Writing. **Semester Hours: 3**
- ENGL 3020 - Poetry Workshop. **Semester Hours: 3**
- ENGL 3050 - Fiction Workshop. **Semester Hours: 3**
- ENGL 3084 - Advanced Composition. **Semester Hours: 3**
- ENGL 3154 - Technical Writing. **Semester Hours: 3**
- ENGL 3170 - Business Writing. **Semester Hours: 3**
- ENGL 3416 - Magazine Writing. **Semester Hours: 3**
- ENGL 4180 - Argumentation and Logic. **Semester Hours: 3**
- ENGL 4190 - Special Topics in Rhetoric and Writing. **Semester Hours: 3**
- ENGL 4701 - Multimedia in the Community. **Semester Hours: 3**

**Total: 3 Hours**

## **INTERNSHIP OR SENIOR WRITING PROJECT IN CREATIVE WRITING OR FILM STUDIES**

- ENGL 3939 - Internship/Cooperative Education. **Semester Hours: 1 to 3**
- OR-
- ENGL 4990 - Senior Writing Project in Creative Writing or Film Studies. **Semester Hours: 3**

**Total: 3 Hours**

## **CREATIVE WRITING OPTION TOTAL: 39 Hours**

Additional courses, total not to exceed 48 hours (any level).

## **Film Studies Option**

The film studies option within the English major is designed to prepare students for a range of professional careers in areas such as screenwriting, film criticism, video production and the teaching of film, as well as those students who plan to pursue graduate programs in film studies. Required courses give students a strong grounding in film history, verbal and visual narrative, and the critical terms and techniques used in both film and literary analysis. Electives give

students the option of emphasizing either the creative approach or the critical approach to moving-image media, or a combination of the two. The film studies option also affords students the opportunity to create video productions using state-of-the-art digital video and editing equipment and the possibility of airing their productions on cable TV. Offered in cooperation with the College of Arts & Media, the film studies option can be completed entirely on the Auraria Campus.

## OPTION-SPECIFIC REQUIREMENTS

- ENGL 2250 - Introduction to Film. **Semester Hours: 3**
- ENGL 3070 - History of Silent Film. **Semester Hours: 3**
- ENGL 3080 - History of Sound Film. **Semester Hours: 3**
- ENGL 4420 - Film Theory and Criticism. **Semester Hours: 3**

**Total: 12 Hours**

## REQUIRED AREA ELECTIVES

Students may take courses in all areas. Fifteen of the 27-hour minimum must be at the 3000/4000 level. Production courses must be taken through the College of Arts & Media. Equivalent screenwriting courses may be taken through CAM.

### A. Critical Studies

- ENGL 1400 - Introduction to Literary Studies. **Semester Hours: 3**
- ENGL 1601 - Telling Tales: Narrative Art in Literature and Film: AH2. **Semester Hours: 3**
- ENGL 3001 - Critical Writing. **Semester Hours: 3**
- \* ENGL 3075 - Film Genres. **Semester Hours: 3**
- \* ENGL 3085 - Film Directors. **Semester Hours: 3**
- ENGL 3200 - From Literature to Film. **Semester Hours: 3**
- \* ENGL 3300-3324 - Topics in Film. **Semester Hours: 3**
- \* ENGL 4190 - Special Topics in Rhetoric and Writing. **Semester Hours: 3**  
(film and media-focused only; e.g., Film and Rhetoric)
- ENGL 4701 - Multimedia in the Community. **Semester Hours: 3**
- \* ENGL 4770 - Topics in English: Film and Literature. **Semester Hours: 3**  
(film and media-focused only)
- ENGL 4990 - Senior Writing Project in Creative Writing or Film Studies. **Semester Hours: 3**  
(can be taken under B or C)

May also choose from any single approved film course offered through another department or a single 3000/4000-level literature course (3 semester hours)

### B. Screenwriting

- ENGL 2390 - Writing the Short Script. **Semester Hours: 3**
- ENGL 2415 - Introduction to Movie Writing. **Semester Hours: 3**
- ENGL 3415 - Screenwriting Workshop. **Semester Hours: 3**

### **C. Production**

- FILM 2000 - Film/Video Production II. **Semester Hours: 3**
- FILM 2150 - Film and Video Post-Production II. **Semester Hours: 3**

**Total: 27-28 Hours**

\* Repeatable if a different genre/director/topic.

### **FILM STUDIES OPTION TOTAL: 39-40 Hours**

Additional courses, total not to exceed 48 hours (any level).

## **College Core Courses for English Majors**

Students must complete the College of Liberal Arts and Sciences core curriculum requirements as specified in the CLAS Core Curriculum/Graduation Requirements chart. Check the Web Schedule Planner for specific course offerings.

### **Electives**

Elective hours may be selected at the student's discretion, but students are urged to work with their advisor in outlining a program in which electives and requirements support each other. Six hours earned in the internship/cooperative education program may be counted toward the major.

## **English Writing BA**

Especially designed for future writers, the writing major offers a wide range of intensive writing experiences combining such areas as rhetoric, professional, general and creative writing.

### **Requirements for the English Writing Major**

Students majoring in writing must present a total of 39 hours for the major (excluding ENGL 1010, 1020 and 2030), of which 27 hours must be earned in upper-division courses. None of the required 39 hours may be taken on a pass/fail basis. Only courses completed with a grade of C (2.0) or above may be counted toward the major. At least 15 upper-division hours of the student's work in writing must be taken from English faculty on the Downtown Campus.

Students planning to major in writing should consult with an advisor as soon as possible. This major is also available online.

## Required Courses

- ENGL 2070 - Grammar, Rhetoric and Style. **Semester Hours: 3**
- ENGL 2154 - Introduction to Creative Writing. **Semester Hours: 3**
- ENGL 3084 - Advanced Composition. **Semester Hours: 3**
- ENGL 3154 - Technical Writing. **Semester Hours: 3**
- OR-
- ENGL 3170 - Business Writing. **Semester Hours: 3**
- ENGL 3160 - Language Theory. **Semester Hours: 3**
- OR-
- ENGL 4080 - History of the English Language. **Semester Hours: 3**
- ENGL 4180 - Argumentation and Logic. **Semester Hours: 3**
- ENGL 4190 - Special Topics in Rhetoric and Writing. **Semester Hours: 3**

**Total: 21 Hours**

## Advanced Course Work

Students pursuing a general writing degree may choose from all writing courses listed. Students pursuing a concentration in professional writing or teaching English as a second language must complete at least 9 hours in those areas.

### Professional Writing Concentration

Choose at least three:

- ENGL 3154 - Technical Writing. **Semester Hours: 3**
- ENGL 3170 - Business Writing. **Semester Hours: 3**
- ENGL 3416 - Magazine Writing. **Semester Hours: 3**
- ENGL 3939 - Internship/Cooperative Education. **Semester Hours: 1 to 3**
- \* ENGL 4190 - Special Topics in Rhetoric and Writing. **Semester Hours: 3**  
(professional writing topic)
- ENGL 4280 - Proposal and Grant Writing. **Semester Hours: 3**
- ENGL 4701 - Multimedia in the Community. **Semester Hours: 3**
- ENGL 4995 - Senior Writing Project. **Semester Hours: 3**

\* Repeatable when title/content differ.

### Teaching English as a Second Language Concentration

Choose at least three:

- ENGL 3160 - Language Theory. **Semester Hours: 3**
- ENGL 4601 - Principles and Practices of Second Language Acquisition. **Semester Hours: 3**
- \* ENGL 3939 - Internship/Cooperative Education. **Semester Hours: 1 to 3**  
-OR-
- \* ENGL 4190 - Special Topics in Rhetoric and Writing. **Semester Hours: 3**  
-OR-
- \* ENGL 4995 - Senior Writing Project. **Semester Hours: 3**

\* TESOL topics only

## General Writing Courses

- ENGL 3020 - Poetry Workshop. **Semester Hours: 3**
- ENGL 3050 - Fiction Workshop. **Semester Hours: 3**
- ENGL 3415 - Screenwriting Workshop. **Semester Hours: 3**
- ENGL 3939 - Internship/Cooperative Education. **Semester Hours: 1 to 3**
- ENGL 4025 - Advanced Poetry Workshop. **Semester Hours: 3**
- ENGL 4055 - Advanced Fiction Workshop. **Semester Hours: 3**
- ENGL 4190 - Special Topics in Rhetoric and Writing. **Semester Hours: 3**
- ENGL 4990 - Senior Writing Project in Creative Writing or Film Studies. **Semester Hours: 3**
- ENGL 4995 - Senior Writing Project. **Semester Hours: 3**

## Total Advanced Course Work: 9-15 Hours

\* Repeatable when title/content differ.

## Electives

Students may opt to replace two of the five required “advanced course work” courses with other English 3000-4000 level courses (writing, literature, film, creative writing) and/or approved writing courses from other departments.

## Total: 0-6 Hours

## Senior Capstone in Writing

Senior Writing Project in Creative Writing or Film Studies (ENGL 4990) and Senior Writing Project (ENGL 4995) are not courses *per se*, but rather independent studies in which the student undertakes a major writing project under the supervision of Downtown Campus English faculty. The student chooses the topic while the project supervisor helps refine it, guides the research, reviews and comments on student’s drafts and grades the final product. The project

may derive from study in a particular course or it may be based on a topic of interest which does not stem from course work. Forms are available in the English department office and must be signed by the supervising faculty member.

Choose one of the following courses:

- ENGL 4990 - Senior Writing Project in Creative Writing or Film Studies. **Semester Hours: 3**
- ENGL 4991 - Senior Seminar in Writing. **Semester Hours: 3**
- ENGL 4995 - Senior Writing Project. **Semester Hours: 3**

## **Major Total: 39 Hours**

Additional courses, total not to exceed 48 hours (any level).

## **College Core Courses for English Writing Majors**

Students must complete the College of Liberal Arts and Sciences core curriculum requirements as specified in the CLAS Core Curriculum/Graduation Requirements chart. Check the Web Schedule Planner for specific course offerings.

## **Electives**

Elective hours may be selected at the student's discretion, but students are urged to work with their advisor in outlining a program in which electives and requirements support each other. Up to 6 hours earned in the cooperative education program may be counted toward the major.

## **Certificate**

# **Professional Writing Certificate**

The certificate consists of 12 semester hours that may be completed in one or two semesters. Enrollment is open to undergraduates, graduates, working professionals and returning students, and the certificate has no prerequisites.

## **Courses**

### **Three Required Courses (9 semester hours)**

- ENGL 2070 - Grammar, Rhetoric and Style. **Semester Hours: 3**  
-OR-
- ENGL 2154 - Introduction to Creative Writing. **Semester Hours: 3**

- ENGL 3154 - Technical Writing. **Semester Hours: 3**  
-OR-
- ENGL 3170 - Business Writing. **Semester Hours: 3**
  
- ENGL 4701 - Multimedia in the Community. **Semester Hours: 3**  
or at the graduate level:
- ENGL 5701 - Multimedia in the Community. **Semester Hours: 3**  
-OR-
- ENGL 3084 - Advanced Composition. **Semester Hours: 3**

## Elective Courses

**Three semester hours, chosen from the following courses:**

- ENGL 3084 - Advanced Composition. **Semester Hours: 3** (if not taken as a required course)
- ENGL 3154 - Technical Writing. **Semester Hours: 3** (if not taken as a required course)
- ENGL 3170 - Business Writing. **Semester Hours: 3** (if not taken as a required course)
- ENGL 3416 - Magazine Writing. **Semester Hours: 3**
- ENGL 3939 - Internship/Cooperative Education. **Semester Hours: 1 to 3**
- ENGL 4180 - Argumentation and Logic. **Semester Hours: 3**
- ENGL 4190 - Special Topics in Rhetoric and Writing. **Semester Hours: 3** (with advisor approval)
- ENGL 4280 - Proposal and Grant Writing. **Semester Hours: 3**

Other writing electives may be taken as offered, with advisor approval.

**Total: 12 Hours**

# Professional Writing Certificate for Graduate Students

## Professional Writing Certificate

The certificate consists of 12 semester hours that may be completed in one or two semesters. Enrollment is open to undergraduates, graduates, working professionals and returning students, and the certificate has no prerequisites.

## Courses

## Three Required Courses (9 semester hours)

- ENGL 2070 - Grammar, Rhetoric and Style. **Semester Hours: 3**
- -OR-
- ENGL 2154 - Introduction to Creative Writing. **Semester Hours: 3**
- 
- ENGL 3154 - Technical Writing. **Semester Hours: 3**
- -OR-
- ENGL 3170 - Business Writing. **Semester Hours: 3**
- 
- ENGL 4701 - Multimedia in the Community. **Semester Hours: 3**
- or at the graduate level:
- ENGL 5701 - Multimedia in the Community. **Semester Hours: 3**
- -OR-
- ENGL 3084 - Advanced Composition. **Semester Hours: 3**

## Elective Courses

### Three semester hours, chosen from the following courses:

- ENGL 3084 - Advanced Composition. **Semester Hours: 3** (if not taken as a required course)
- ENGL 3154 - Technical Writing. **Semester Hours: 3** (if not taken as a required course)
- ENGL 3170 - Business Writing. **Semester Hours: 3** (if not taken as a required course)
- ENGL 3416 - Magazine Writing. **Semester Hours: 3**
- ENGL 3939 - Internship/Cooperative Education. **Semester Hours: 1 to 3**
- ENGL 4180 - Argumentation and Logic. **Semester Hours: 3**
- ENGL 4190 - Special Topics in Rhetoric and Writing. **Semester Hours: 3** (with advisor approval)
- ENGL 4280 - Proposal and Grant Writing. **Semester Hours: 3**
- 

Other writing electives may be taken as offered, with advisor approval.

**Total: 12 Hours**

# Teaching of English to Speakers of Other Languages (CTESOL)

## Program Description

To meet the increasing needs of individuals seeking advanced training in teaching English as a second language, the English department at UC Denver now offers a graduate certificate in the teaching of English to speakers of other languages (CTESOL).

The certificate program is designed to build the necessary skills to teach English as a second language through focused preparation. It is primarily aimed at native speakers of English who want to teach overseas, but may serve the needs of international students wanting to teach English in their home country or other countries.

Upon successful completion of the program, CTESOL participants will be able to:

- Discuss the theoretical basis of second language instruction
- Demonstrate a variety of effective ESL teaching techniques
- Explain, in pedagogically relevant ways, the linguistic structures of the English language

## Curriculum

The curriculum consists of 12 semester hours (9 semester hours of required courses, and three semester hours of electives). The required courses must be taken at UC Denver. A GPA of 3.0 or better is required for all graduate courses.

## Required Courses

- ENGL 5171 - Language Theory. **Semester Hours: 3**
- ENGL 5601 - Principles and Practices of Second Language Acquisition. **Semester Hours: 3**

## Elective Courses

- ENGL 5093 - Rhetoric and the Teaching of Writing. **Semester Hours: 3**  
or an alternative elective approved by the program advisor

**Total: 12 Hours**

## Additional Information

**LENGTH OF TIME**

The course of study will typically last one academic year, including the summer session.

**WHEN YOU MAY BEGIN**

You may begin in any semester. There is no fixed deadline for application for admission.

**PREREQUISITES**

All applicants must have a bachelor's degree or the equivalent to be accepted to the program. Graduate students at UC Denver will also be permitted to apply for the certificate while they are concurrently completing another graduate degree. Permission may not be granted to graduate students in applied linguistics.

Non-native speakers of English are required to submit an official TOEFL (Test of English as a Foreign Language) report showing a score of at least 580. Those who score below 580 but above 525 on the TOEFL may be admitted conditionally to the program. Under these conditions, students will have their English language skills assessed by the faculty of the program immediately after they arrive on campus to determine whether further courses are needed to develop English language proficiency. After assessment, the students may be assigned to full-time language study in an intensive English program, permitted to take graduate-level classes on a conditional basis along with further designated language study or permitted to begin graduate study without further restrictions.

**CONTACT INFORMATION**

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**Non Degree**

# Creative Writing Minor

The creative writing minor gives students the opportunity to complement their area of major study with experience writing and reading poetry or fiction.

Students minoring in creative writing must complete a total of 15 hours. None of the required courses may be taken pass/fail. Only courses completed with a grade of C (2.0) or better may be counted toward the minor. All upper-division courses must be taken with Downtown Campus English faculty. Students should take ENGL 1020 before beginning the minor.

**Courses****Required Courses**

- ENGL 1400 - Introduction to Literary Studies. **Semester Hours: 3**
- ENGL 2154 - Introduction to Creative Writing. **Semester Hours: 3**

**Total: 6 Hours**

## **Electives for students interested in poetry**

- ENGL 3020 - Poetry Workshop. **Semester Hours: 3**
- ENGL 4025 - Advanced Poetry Workshop. **Semester Hours: 3**
- ENGL 4160 - Poetics. **Semester Hours: 3**  
-OR-
- ENGL 4166 - History of American Poetry. **Semester Hours: 3**  
-OR-
- ENGL 4320 - History of Poetry in English. **Semester Hours: 3**

**Total: 9 Hours**

## **Electives for students interested in fiction**

- ENGL 3050 - Fiction Workshop. **Semester Hours: 3**
- ENGL 4055 - Advanced Fiction Workshop. **Semester Hours: 3**
- ENGL 4200 - History of the English Novel I. **Semester Hours: 3**  
-OR-
- ENGL 4210 - History of the English Novel II. **Semester Hours: 3**  
-OR-
- ENGL 4230 - The American Novel. **Semester Hours: 3**  
-OR-
- ENGL 4236 - The American Short Story. **Semester Hours: 3**

**Total: 9 Hours**

**Minor Total: 15 Hours**

# **Film Studies Minor**

The film studies minor offers students the opportunity to gain an informed understanding of the sophisticated medium of film, its language and history. Courses cover critical writing about cinema, creative screenwriting, the evolution of Hollywood movies, international cinema and film in its cultural context. The film studies minor makes a valuable complement to a range of undergraduate majors.

Students must complete a total of 15 hours for the film studies minor. None of the required 15 hours may be taken pass/fail. Only courses completed with a grade of C (2.0) or better may be counted toward the minor. A minimum of 9 hours must be taken with Downtown Campus faculty. Students are strongly advised to take ENGL 2250, Introduction to Film, before taking other film courses. Students are also advised to fulfill the liberal arts and sciences core curriculum writing requirements before enrolling in upper-division topics in film courses. No more than two online film studies courses can be counted toward the minor.

## Courses

### Required Courses

- ENGL 2250 - Introduction to Film. **Semester Hours: 3**
- ENGL 3070 - History of Silent Film. **Semester Hours: 3**  
-OR-
- ENGL 3080 - History of Sound Film. **Semester Hours: 3**

**Total: 6 Hours**

### Electives

Choose three:

- ENGL 2415 - Introduction to Movie Writing. **Semester Hours: 3**
- ENGL 3070 - History of Silent Film. **Semester Hours: 3**  
-OR-
- ENGL 3080 - History of Sound Film. **Semester Hours: 3**
- \* ENGL 3075 - Film Genres. **Semester Hours: 3**
- \* ENGL 3085 - Film Directors. **Semester Hours: 3**
- ENGL 3200 - From Literature to Film. **Semester Hours: 3**
- \* ENGL 3300-3324 - Topics in Film. **Semester Hours: 3**
- ENGL 4420 - Film Theory and Criticism. **Semester Hours: 3**
- \* ENGL 4770 - Topics in English: Film and Literature. **Semester Hours: 3** (film topics only)  
Approved film courses from another department (3 semester hours)

**Total: 9 Hours**

**Total: 15 Hours**

\* Repeatable with different topic or title.

# Literature Minor

This program is designed for students who are interested in the study of English literature but who have elected to major in another area. The recommended series of courses allows students to become acquainted with some of the methods of literary study and with a number of the most important literary works.

The literature minor allows students to complement their area of major study with systematic experience in literature.

Students minoring in literature must complete a total of 15 hours (excluding ENGL 1010, 1020, 2030). None of the required 15 hours may be taken pass/fail. Only courses completed with a grade of C (2.0) or better may be counted toward the minor. A minimum of 9 upper-division hours of work in the minor must be taken with Downtown Campus English faculty.

## Courses

### Required Courses

- ENGL 1400 - Introduction to Literary Studies. **Semester Hours: 3**
- ENGL 3001 - Critical Writing. **Semester Hours: 3**

**Total: 6 Hours**

### Electives; distribution requirements

Any three 4000-level courses, at least two of which must be from those listed as distribution requirements for the major.

**Total: 9 Hours**

### Minor Total: 15 Hours

*Restrictions:* These requirements may not be met by independent study. All upper-division courses must be taken from a member of the Downtown Campus faculty.

# Writing Minor

The writing minor allows students to complement their area of major study with systematic experience in writing.

Students minoring in writing must complete a total of 15 hours (excluding ENGL 1010, 1020, 2030). None of the required 15 hours may be taken pass/fail. Only courses completed with a grade of C (2.0) or better may be counted toward the minor. A minimum of 9 upper-division hours of work in the minor must be taken with Downtown Campus English faculty.

Students are encouraged to take ENGL 1020 and ENGL 2030 before beginning the minor. (ENGL 2154 and ENGL 2030 can be taken concurrently.)

## Courses

### Required Courses

- ENGL 2070 - Grammar, Rhetoric and Style. **Semester Hours: 3**
- ENGL 4180 - Argumentation and Logic. **Semester Hours: 3**
- ENGL 4190 - Special Topics in Rhetoric and Writing. **Semester Hours: 3**

**Total: 9 Hours**

### Distributed Course

Choose one course from the following:

- ENGL 2154 - Introduction to Creative Writing. **Semester Hours: 3**  
-OR-
- ENGL 3154 - Technical Writing. **Semester Hours: 3**  
-OR-
- ENGL 3170 - Business Writing. **Semester Hours: 3**

### Elective

One 3000-/4000-level writing course.

**Minor Total: 15 Hours**

## Master of Arts

# English MA

► Graduate School Rules apply to this program

The department offers three programs in the English MA degree: 1) the literature program increases students' knowledge of English and American literature and also their familiarity with a variety of critical methodologies; 2) the teaching of writing program introduces students to the

theory, research and pedagogy underlying contemporary instruction in secondary and college composition; 3) the applied linguistics program introduces students to the principles, practices and concerns of teaching English to adults whose first language is not English.

Students concurrently pursuing a master's in education can count up to 6 hours of education courses toward their MA in English with their English advisor's permission.

Contact the graduate director for more information on these programs.

## **Requirements for Admission**

Applicants for any of the programs described above must submit all application materials by either the spring, summer or fall deadline. The deadline for fall enrollment is April 1; the deadline for spring and summer enrollment is October 1. Complete applications for all three programs must include the following:

- a completed University of Colorado graduate application
- two copies of all graduate and undergraduate transcripts, and for any nondegree courses previously taken
- three letters of recommendation in which the recommender specifically addresses the candidate's ability to pursue successfully the program chosen
- recent scores on the GRE, including the analytical, verbal and quantitative portions. GRE score average should be 600 or higher. Analytical writing score should be 4 or higher.
- evidence of a 3.0 GPA in previous courses
- a letter of application, in which the applicant carefully describes reasons and motivation for pursuing the program chosen, and career aspirations upon completing the degree
- 10-page critical writing sample

In addition to these requirements, applicants for the MA in literature must have successfully completed 24 semester hours in English courses (graduate or undergraduate), excluding courses in composition, creative writing or speech. At least 15 of these semester hours must be at the upper-division level.

## **Transfer of Credits from Other CU Campuses**

Students admitted to graduate study in English may complete all of their course requirements for the MA degree at UC Denver. Up to 12 semester hours (total) may be transferred from the University of Colorado-Boulder, University of Colorado-Colorado Springs or other graduate program; however, such transfer requires the written approval of the specific program coordinator. Only 12 semester hours of courses at UC Denver can be counted toward the degree before acceptance into the program. Further, work already applied toward a graduate degree received at the University of Colorado or at another institution cannot be transferred toward another graduate degree of the same level at UC Denver. (For other rules concerning transfer of graduate credits, see the Graduate School Rules available from the Graduate School Web site.) For more information, contact the director of graduate studies at 303-556-4648.

## **Degree Requirements**

Two of the three programs above require a total of 30 semester hours. The literature program requires 33 semester hours. Each program also has a different capstone requirement, e.g., a thesis, a comprehensive examination or a project. Students must receive a *B-* or above in all courses counted toward the MA degree.

**For complete information about the graduate programs in English, go to the master of arts in English Web**

**site: <http://thunder1.cudenver.edu/clas/english/MA.html>.**

## **Ethnic Studies**

**Director:** Donna Langston

**Program Assistant:** Jennifer Williams

**Office:** Lawrence Street Center, 480

**Telephone:** 303-556-2700

**Fax:** 303-556-3611

**Web site:** [www.cudenver.edu/ethnic/](http://www.cudenver.edu/ethnic/)

## **Faculty**

### **Professor:**

Donna Langston, PhD, University of Washington

### **Assistant Professor:**

Faye Caronan, PhD, University of California

Paula Espinoza, PhD, University of Colorado

Rachel E. Harding, PhD, University of Colorado

### **Senior Instructors:**

Paul Encinias

Dennis Green

### **Lecturers:**

Jackie Benton

Khushnur Dadabhoy

Peggy Lore

Danny Martinez

Omar Montgomery

Brittany Vuong-Sandoval

Elyse Yamauchi

The ethnic studies minor is designed to help students majoring in the liberal arts and sciences develop a sophisticated and broad understanding of ethnicity and its role in contemporary American society. It provides students with the theories and concepts needed to comprehend and interpret relations between and among ethnic groups in the United States. Students are better prepared to live and work in a pluralistic society when educational institutions foster a positive learning environment in which differences contained within various U.S. communities can be studied not as a social problem, as is often the case, but for their history of struggles and contributions.

The interdisciplinary nature of the ethnic studies program curriculum provides students the opportunity, through academic investigation, to develop a greater understanding of the cultural pluralism of the present day United States and to acquire skills needed in professional and social service fields. This multidisciplinary, comparative approach to contemporary and historical research methodologies provides the basis for students to analyze the diverse social, economic, political and cultural facets of ethnic groups in the United States. Special emphasis is given to new perspectives that recover the history, creative expression and voices previously excluded by the traditional approaches to higher education.

Courses offered under the minor reflect prevailing thought in ethnic studies, draw parallels between various groups in the United States and link the studies of their country of origin with current and historical research on race and ethnic relations in the United States. These courses reflect critical analyses of the dominant perspectives through which ethnic groups have been described and perceived. Also investigated are the intersections of ethnicity with structures of political, educational, gender, business and economic, social and cultural power, all of which are emphasized through the study of materials and works by and about previously excluded groups. The cultural processes through which ethnic groups have sustained or altered their cultural identities are emphasized, as well as the pressures faced by members of various ethnic groups to maintain traditional values and conform to mainstream U.S. society.

## **REQUIREMENTS FOR THE MINOR**

### **UNDERGRADUATE CERTIFICATE IN CULTURAL DIVERSITY STUDIES**

## **Certificate**

# Cultural Diversity Studies

## Undergraduate Certificate

The undergraduate certificate in cultural diversity studies is designed to appeal to undergraduate students with a background in any major. It will allow students to demonstrate to potential employers that they possess the multicultural skills and knowledge necessary to succeed in the workplace. Students will enroll in department courses that focus on the historical context in which race and culture have emerged in the United States.

This certificate is also targeted to nondegree-seeking professionals who seek to acquire multicultural knowledge and the skills necessary to ensure their success in professional environments. Students will be encouraged to think critically about race and race relations. Their expanded understandings of the implications of race and culture in work environments will ensure employers that they offer the highest quality employees opportunities in employment or advancement.

A certificate in cultural diversity studies offers students an enduring intellectual value based on classic articles, book excerpts and scholars who have shaped the study and understanding of race and ethnicity in contemporary society. Our courses provide the opportunity for students to encounter many of the greatest thinkers in race and ethnicity firsthand. Course curriculum includes carefully edited selections from the works of the most distinguished observers of race and ethnicity, past and present. Students will appreciate the broad range of coverage, the logic of course organization and the accessibility of material covered.

The undergraduate certificate in cultural diversity studies requires 12 semester hours (four courses).

## Certificate Requirements

### Required Course

- ETST 2000 - Introduction to Ethnic Studies: SS3. **Semester Hours: 3**

**Total: 3 Hours**

### Electives

Choose three courses from any ethnic studies department courses, including the following:

- ETST 2155 - African American History: HI1. **Semester Hours: 3**
- ETST 2294 - Race and the Media. **Semester Hours: 3**
- ETST 3254 - Race and Ethnicity in the Inner City. **Semester Hours: 3**
- ETST 3297 - Social History of Asian Americans. **Semester Hours: 3**
- ETST 3396 - History of the American Indian. **Semester Hours: 3**

- ETST 3704 - Culture, Racism and Alienation. **Semester Hours: 3**
- ETST 4558 - Chicano and Latino Politics. **Semester Hours: 3**

**Total: 9 Hours**

## **Certificate Total: 12 Hours**

There are crosslisted courses in a variety of departments, including history, political science and sociology. Any crosslisted course is acceptable. You must register for it under ETST numbers. A complete listing of department offerings and crosslisted courses can be obtained every semester from the ethnic studies department Web page or by calling our office at 303-556-2700 for a copy.

A minimum grade of *B-* must be earned in each of the four courses completed as part of the certificate. All credits for the certificate must be earned at the Downtown Campus.

Additional information about the undergraduate certificate in cultural diversity studies may be obtained from ethnic studies Director Donna Langston, Lawrence Street Center, 480, 303-556-2726, Donna.Langston@ucdenver.edu.

## **Non Degree**

# **Ethnic Studies Minor**

## **Requirements for the Minor**

The minor in ethnic studies offers students the opportunity to enhance and broaden the body of knowledge acquired in their chosen majors and to apply it in a variety of careers involving intercultural relations. Students are required to complete 18 semester hours (6 courses) in ethnic studies with a grade of *C* or better. These hours are to be taken with UC Denver faculty (any exception needs to be approved by the ethnic studies advisor). At least 9 of the required 18 hours must be in courses numbered 3000 or above.

The 18 hours required for the minor must be distributed as follows:

## **Core Courses**

- ETST 2000 - Introduction to Ethnic Studies: SS3. **Semester Hours: 3**

**Total: 3 Hours**

## **Additional Courses**

Select four upper- or lower-division ETST courses from the following four focal U.S. racial/ethnic groups

Asian-Americans  
African-Americans  
American Indians  
Chicanos/as and Latinos/as

**Total: 12 Hours**

## **Elective**

ETST elective course of your choice.

**Total: 3 Hours**

**Total: 18 Hours**

## **Geography and Environmental Sciences**

**Chairs:** Brian Page

**Program Assistant:** Sue Eddleman

**Office:** North Classroom, 3621

**Telephone:** 303-556-2276

**Fax:** 303-556-6197

**Web site:** [www.cudenver.edu/ges/](http://www.cudenver.edu/ges/)

## **Faculty**

### **Professors:**

Martin G. Lockley, PhD, University of Birmingham (England)

### **Professor Emeritus:**

Wesley E. Le Masurier, PhD, Stanford University

John G. Weihaupt, PhD, University of Wisconsin, Milwaukee

### **Associate Professors:**

Frederick B. Chambers, PhD, Arizona State University, Tempe

Brian Page, PhD, University of California, Berkeley

Deborah S. K. Thomas, PhD, University of South Carolina

John W. Wyckoff, PhD, University of Utah

**Assistant Professors:**

Casey Allen, PhD, Arizona State University

Peter Anthamatten, PhD, University of Minnesota

Rafael Moreno-Sanchez, PhD, Colorado State University

Bryan S. Wee, PhD, Purdue University

**Senior Instructors:**

Jon Barbour, PhD, University of California, Davis

Rudi Hartmann, PhD, Technical University of Munich

Philip Riggs, PhD, Colorado State University

**Instructors:**

Amanda Weaver, MA, University of Texas, Austin

Ryan Sincavage, MS, University of Colorado

**Lecturers:**

Jeanne Mayne

Peter Timm

## **Undergraduate**

Geography is a science that focuses on the spatial analysis of human/physical patterns and processes. Geographers attempt to identify the factors affecting the distribution of people and their activities on the surface of the earth and to provide meaningful solutions to problems faced by societies. This discipline is an ideal major for the liberal arts student, providing exposure to the concepts and techniques utilized in investigating the physical sciences, environmental and sustainability issues, socioeconomic problems and planning policies.

The program offers a distinctive curriculum that combines a broad and integrative scientific education with state-of-the-art training in geo-spatial analysis (e.g., computer mapping, GIS, remote sensing). The program is designed to provide the student interested in physical, social or environmental geography with the background necessary for obtaining a rewarding career in government (federal, state, local) or private industry, as well as preparing students for graduate study.

## **REQUIREMENTS FOR GEOGRAPHY MAJOR**

### **Certificate**

#### **GEOGRAPHIC INFORMATION SCIENCE CERTIFICATE**

### **Departmental Honors**

The criteria for *cum laude* shall be a GPA of 3.6 in all courses on the Downtown Campus (a minimum of 30 semester hours for transfer students) and an honors thesis that demonstrates independent research skills. The criteria for *magna cum laude* shall be a GPA of 3.75 in all Downtown Campus courses and a superior honors thesis. The criteria for *summa cum laude* shall be a GPA of 3.9 in all Downtown Campus courses and a truly exceptional honors thesis. The GPA alone shall serve only as a minimum criterion for each of the three levels of honors. Evaluation of the honors thesis shall be the deciding criterion for the level that is granted. The department expects that the award of *summa cum laude* would be a rare occurrence reserved for students who demonstrate extraordinary academic promise.

Admission to the honors program and the awarding of departmental honors shall be subject to faculty approval.

### **Minors**

#### **REQUIREMENTS FOR ENVIRONMENTAL SCIENCES MINOR**

#### **REQUIREMENTS FOR GEOGRAPHY MINOR**

#### **REQUIREMENTS FOR GEOLOGY MINOR**

#### **REQUIREMENTS FOR URBAN AND REGIONAL PLANNING MINOR**

### **Graduate**

#### **MASTER OF SCIENCE IN ENVIRONMENTAL SCIENCES**

### **Certificate**

#### **GRADUATE CERTIFICATE IN ENVIRONMENTAL SCIENCES**

## Bachelor of Arts

# Geography BA

## Requirements for Major in Geography

Students must declare a major by the time they have completed 60 semester hours of course work. The geography program (within the Department of Geography and Environmental Sciences) offers a BA degree that includes a full range of courses in the fundamentals of geography taught mainly by full-time faculty. Five degree options are available for the major in geography: general, environmental science, environmental studies, urban studies and planning and earth science. Total semester-hour requirements vary among the five options, but all options require a minimum of 24 hours of upper-division credit. In addition, for each option, at least 15 semester hours must be taken at the Downtown Campus.

- Option 1—General Geography
- Option 2—Environmental Science
- Option 3—Environmental Studies
- Option 4—Urban Studies and Planning
- Option 5—Earth Science

## Option 1—General Geography

**Option Advisors:** Frederick B. Chambers and Brian Page

### OPTION 1 REQUIREMENTS

#### Lower division

- GEOG 1202 - Introduction to Physical Geography: SC2. **Semester Hours: 3**
- GEOG 1302 - Introduction to Human Geography. **Semester Hours: 3**

#### Upper division

- GEOG 3080 - Introduction to Mapping and Map Analysis. **Semester Hours: 3**
- GEOG 3232 - Weather and Climate. **Semester Hours: 3**
- GEOG 3411 - Globalization and Regional Development. **Semester Hours: 3**
  
- GEOG 4080 - Introduction to GIS. **Semester Hours: 3**
- OR-
- GEOG 5080 - Introduction to GIS. **Semester Hours: 3**

**Total: 18 Hours**

## ADDITIONAL REQUIREMENTS

Choose six additional courses, including at least one course from each of the following subfields:

### Physical Geography

- GEOG 3240 - Colorado Climates. **Semester Hours: 3**
- GEOG 4020 - Earth Environments and Human Impacts. **Semester Hours: 3**
- GEOG 4240 - Principles of Geomorphology. **Semester Hours: 3**
- GEOG 4270 - Glacial Geomorphology. **Semester Hours: 3**

### Human Geography

- ENVS 1342 - Introduction to Environment and Society: SS2. **Semester Hours: 3**
- GEOG 1602 - Introduction to Urban Studies: SS2. **Semester Hours: 3**
- GEOG 2202 - Natural Hazards: SS2. **Semester Hours: 3**
- GEOG 3430 - Geography of Tourism. **Semester Hours: 3**
- GEOG 3501 - Geography of Health. **Semester Hours: 3**
- GEOG 4265 - Sustainability in Resources Management. **Semester Hours: 3**
- OR-
- GEOG 5265 - Sustainability in Resources Management. **Semester Hours: 3**
- GEOG 4335 - Contemporary Environmental Issues. **Semester Hours: 3**
- OR-
- GEOG 5335 - Contemporary Environmental Issues. **Semester Hours: 3**
- GEOG 4350 - Environment and Society in the American Past. **Semester Hours: 3**
- OR-
- GEOG 5350 - Environment and Society in the American Past. **Semester Hours: 3**
- GEOG 4640 - Urban Geography: Denver and the U.S.. **Semester Hours: 3**
- OR-
- GEOG 5640 - Urban Geography: Denver and the U.S.. **Semester Hours: 3**

### Regional Geography

- GEOG 1102 - World Regional Geography: SS2. **Semester Hours: 3**
- GEOG 3100 - Geography of Colorado. **Semester Hours: 3**
- GEOG 3120 - Geography of Europe. **Semester Hours: 3**
- GEOG 3130 - Central America and the Caribbean. **Semester Hours: 3**
- GEOG 3140 - Geography of South America. **Semester Hours: 3**
- GEOG 3150 - Middle East. **Semester Hours: 3**
- GEOG 3160 - Geography of China. **Semester Hours: 3**

### Techniques for Geographical Analysis

- GEOG 4060 - Remote Sensing I: Introduction to Environmental Remote Sensing. **Semester Hours: 3**  
-OR-
- GEOG 5060 - Remote Sensing I: Introduction to Environmental Remote Sensing. **Semester Hours: 3**
- GEOG 4070 - Remote Sensing II: Advanced Remote Sensing. **Semester Hours: 3**  
-OR-
- GEOG 5070 - Remote Sensing II: Advanced Remote Sensing. **Semester Hours: 3**
- GEOG 4081 - Introduction to Cartography and Computer Mapping. **Semester Hours: 3**
- GEOG 4085 - GIS Applications for the Urban Environment. **Semester Hours: 3**  
-OR-
- GEOG 5085 - GIS Applications for the Urban Environment. **Semester Hours: 3**
- GEOG 4090 - Environmental Modeling with Geographic Information Systems. **Semester Hours: 3**  
-OR-
- GEOG 5090 - Environmental Modeling with Geographic Information Systems. **Semester Hours: 3**
- GEOG 4095 - Deploying GIS Functionality on the Web. **Semester Hours: 3**  
-OR-
- GEOG 5095 - Deploying GIS Functionality on the Web. **Semester Hours: 3**
- GEOG 4220 - Environmental Impact Assessment. **Semester Hours: 3**  
-OR-
- GEOG 5220 - Environmental Impact Assessment. **Semester Hours: 3**
- GEOG 4230 - Hazard Mitigation and Vulnerability Assessment. **Semester Hours: 3**  
-OR-
- GEOG 5230 - Hazard Mitigation and Vulnerability Assessment. **Semester Hours: 3**
- GEOG 4235 - GIS Applications in the Health Sciences. **Semester Hours: 3**  
-OR-
- GEOG 5235 - GIS Applications in the Health Sciences. **Semester Hours: 3**
- GEOG 4770 - Applied Statistics for the Natural Sciences. **Semester Hours: 3**

**Total: 18 Hours**

**OPTION TOTAL: 36 HOURS**

## **Option 2—Environmental Science**

**Option Advisor:** Frederick B. Chambers

Option 2 allows geography majors to concentrate on course work in environmental science.

### **ANCILLARY COURSES**

Option 2 students must take either a general biology sequence OR a general chemistry sequence, and an introductory statistics course to develop their science disciplinary skills.

- BIOL 2051 - General Biology I: SC1. **Semester Hours: 3**
- *and* BIOL 2071 - General Biology Laboratory I: SC1. **Semester Hours: 1**  
(4 semester hours total), followed by:
- BIOL 2061 - General Biology II: SC1. **Semester Hours: 3**
- *and* BIOL 2081 - General Biology Laboratory II: SC1. **Semester Hours: 1**  
(4 semester hours total)

**-OR-**

- CHEM 2031 - General Chemistry I: SC1. **Semester Hours: 3**
- *and* CHEM 2038 - General Chemistry Laboratory I: SC1. **Semester Hours: 1**  
(4 semester hours total), followed by:
- CHEM 2061 - General Chemistry II: SC1. **Semester Hours: 3**
- *and* CHEM 2068 - General Chemistry Laboratory II: SC1. **Semester Hours: 2**  
(5 semester hours total)

**-AND-**

One introductory statistics course (3 semester hours). Suitable courses include:

- MATH 2830 - Introductory Statistics: MA1. **Semester Hours: 3**
- PSY 2090 - Statistics and Research Methods. **Semester Hours: 4**
- SOC 3121 - Statistics. **Semester Hours: 4**

## OPTION 2 REQUIREMENTS

### Lower division

- ENVS 1042 - Introduction to Environmental Sciences: SC1. **Semester Hours: 4**
  - GEOG 1202 - Introduction to Physical Geography: SC2. **Semester Hours: 3**
  - GEOG 1302 - Introduction to Human Geography. **Semester Hours: 3**
- OR-**
- ENVS 1342 - Introduction to Environment and Society: SS2. **Semester Hours: 3**

### Upper division

- GEOG 3080 - Introduction to Mapping and Map Analysis. **Semester Hours: 3**
  - GEOG 3232 - Weather and Climate. **Semester Hours: 3**
  - GEOG 3411 - Globalization and Regional Development. **Semester Hours: 3**
- OR-**
- GEOG 4335 - Contemporary Environmental Issues. **Semester Hours: 3**
- OR-**
- GEOG 5335 - Contemporary Environmental Issues. **Semester Hours: 3**
  - GEOG 4080 - Introduction to GIS. **Semester Hours: 3**
- OR-**
- GEOG 5080 - Introduction to GIS. **Semester Hours: 3**

**Total: 22 Hours**

## **ADDITIONAL REQUIREMENTS**

Choose six additional courses:

### **Environmental Science**

- GEOG 4020 - Earth Environments and Human Impacts. **Semester Hours: 3**
- GEOG 4265 - Sustainability in Resources Management. **Semester Hours: 3**  
-OR-
- GEOG 5265 - Sustainability in Resources Management. **Semester Hours: 3**

**Plus one class from the following list:**

- ENVS 3082 - Energy and the Environment. **Semester Hours: 3**
- ENVS 5030 - Environmental Geology. **Semester Hours: 3**
- GEOG 3240 - Colorado Climates. **Semester Hours: 3**
- GEOG 4010 - Biogeochemical Cycles. **Semester Hours: 3**
- GEOG 4240 - Principles of Geomorphology. **Semester Hours: 3**
- GEOG 4270 - Glacial Geomorphology. **Semester Hours: 3**

### **Upper-Division Environmental-Oriented Biology or Chemistry (3 Hours)**

One upper-division biology or chemistry course related to the student's environmental science interest must be taken as part of the environmental science option.

### **Techniques for Environmental Analysis**

#### **Quantitative methods (one course):**

- GEOG 4770 - Applied Statistics for the Natural Sciences. **Semester Hours: 3**  
-OR-
- GEOL 4770 - Applied Statistics for the Natural Sciences. **Semester Hours: 3**

#### **Geo-Spatial Analysis (one course):**

- GEOG 4060 - Remote Sensing I: Introduction to Environmental Remote Sensing. **Semester Hours: 3**  
-OR-
- GEOG 5060 - Remote Sensing I: Introduction to Environmental Remote Sensing. **Semester Hours: 3**
- GEOG 4085 - GIS Applications for the Urban Environment. **Semester Hours: 3**  
-OR-
- GEOG 5085 - GIS Applications for the Urban Environment. **Semester Hours: 3**

- GEOG 4090 - Environmental Modeling with Geographic Information Systems. **Semester Hours: 3**  
-OR-
- GEOG 5090 - Environmental Modeling with Geographic Information Systems. **Semester Hours: 3**
- GEOG 4230 - Hazard Mitigation and Vulnerability Assessment. **Semester Hours: 3**  
-OR-
- GEOG 5230 - Hazard Mitigation and Vulnerability Assessment. **Semester Hours: 3**
- GEOG 4235 - GIS Applications in the Health Sciences. **Semester Hours: 3**  
-OR-
- GEOG 5235 - GIS Applications in the Health Sciences. **Semester Hours: 3**

**Total: 18 Hours**

## **OPTION TOTAL: 40 HOURS**

### **Option 3—Environmental Studies**

**Option Advisors:** Rafael Moreno and Deborah Thomas

Option 3 gives geography majors the opportunity to concentrate on the topic of human-environmental interaction, emphasizing environmental policy, sustainability and social issues.

### **OPTION 3 REQUIREMENTS**

#### **Lower division**

- ENVS 1042 - Introduction to Environmental Sciences: SC1. **Semester Hours: 4**
- ENVS 1342 - Introduction to Environment and Society: SS2. **Semester Hours: 3**
- GEOG 1302 - Introduction to Human Geography. **Semester Hours: 3**

#### **Upper division**

- GEOG 3080 - Introduction to Mapping and Map Analysis. **Semester Hours: 3**
- GEOG 3232 - Weather and Climate. **Semester Hours: 3**
- GEOG 3411 - Globalization and Regional Development. **Semester Hours: 3**
- GEOG 4080 - Introduction to GIS. **Semester Hours: 3**  
-OR-
- GEOG 5080 - Introduction to GIS. **Semester Hours: 3**

**Total: 22 Hours**

### **ADDITIONAL REQUIREMENTS**

Choose six additional courses:

### **Environmental Studies**

- GEOG 4265 - Sustainability in Resources Management. **Semester Hours: 3**  
-OR-
- GEOG 5265 - Sustainability in Resources Management. **Semester Hours: 3**
- GEOG 4335 - Contemporary Environmental Issues. **Semester Hours: 3**  
-OR-
- GEOG 5335 - Contemporary Environmental Issues. **Semester Hours: 3**

**Plus one course from the following list:**

- GEOG 3302 - Water Resources. **Semester Hours: 3**
- GEOG 3430 - Geography of Tourism. **Semester Hours: 3**
- GEOG 3501 - Geography of Health. **Semester Hours: 3**
- GEOG 4350 - Environment and Society in the American Past. **Semester Hours: 3**  
-OR-
- GEOG 5350 - Environment and Society in the American Past. **Semester Hours: 3**

### **Environmental Policy and Planning**

Choose one:

- GEOG 4220 - Environmental Impact Assessment. **Semester Hours: 3**  
-OR-
- GEOG 5220 - Environmental Impact Assessment. **Semester Hours: 3**
- GEOG 4230 - Hazard Mitigation and Vulnerability Assessment. **Semester Hours: 3**  
-OR-
- GEOG 5230 - Hazard Mitigation and Vulnerability Assessment. **Semester Hours: 3**
- GEOG 4260 - Natural Resource Planning and Management. **Semester Hours: 3**  
-OR-
- P AD 5631 - Seminar in Environmental Politics and Policy. **Semester Hours: 3**
- P AD 5633 - Seminar in Natural Resource and Environmental Health Law. **Semester Hours: 3**
- P SC 4354 - Environmental Politics. **Semester Hours: 3**

### **Techniques for Environmental Analysis**

Choose two:

- GEOG 4060 - Remote Sensing I: Introduction to Environmental Remote Sensing. **Semester Hours: 3**  
-OR-
- GEOG 5060 - Remote Sensing I: Introduction to Environmental Remote Sensing. **Semester Hours: 3**

- GEOG 4070 - Remote Sensing II: Advanced Remote Sensing. **Semester Hours: 3**  
-OR-
- GEOG 5070 - Remote Sensing II: Advanced Remote Sensing. **Semester Hours: 3**
- GEOG 4081 - Introduction to Cartography and Computer Mapping. **Semester Hours: 3**
- GEOG 4085 - GIS Applications for the Urban Environment. **Semester Hours: 3**  
-OR-
- GEOG 5085 - GIS Applications for the Urban Environment. **Semester Hours: 3**
- GEOG 4090 - Environmental Modeling with Geographic Information Systems. **Semester Hours: 3**  
-OR-
- GEOG 5090 - Environmental Modeling with Geographic Information Systems. **Semester Hours: 3**
- GEOG 4095 - Deploying GIS Functionality on the Web. **Semester Hours: 3**  
-OR-
- GEOG 5095 - Deploying GIS Functionality on the Web. **Semester Hours: 3**
- GEOG 4235 - GIS Applications in the Health Sciences. **Semester Hours: 3**  
-OR-
- GEOG 5235 - GIS Applications in the Health Sciences. **Semester Hours: 3**
- GEOG 4770 - Applied Statistics for the Natural Sciences. **Semester Hours: 3**

### **Community/Professional Experience**

(optional but highly recommended)

- GEOG 3939 - Internship/Cooperative Education. **Semester Hours: 1 to 3**

**Total: 18 Hours**

### **OPTION TOTAL: 40 HOURS**

*Note:* Up to 4 semester hours of honors thesis course work or up to 3 semester hours of internships may be counted toward the 18 hours of additional requirements. Such substitutions must be approved by a program option advisor.

## **Option 4—Urban Studies and Planning**

**Option Advisors:** Brian Page and Amanda Weaver

Option 4 allows geography majors to concentrate on social and spatial aspects of metropolitan growth and change. Students are given the opportunity to take advanced planning courses in their junior and senior years.

### **OPTION 4 REQUIREMENTS**

**Lower Division**

- GEOG 1202 - Introduction to Physical Geography: SC2. **Semester Hours: 3**
- GEOG 1302 - Introduction to Human Geography. **Semester Hours: 3**
- GEOG 1602 - Introduction to Urban Studies: SS2. **Semester Hours: 3**

### Upper division

- GEOG 3080 - Introduction to Mapping and Map Analysis. **Semester Hours: 3**
- GEOG 3232 - Weather and Climate. **Semester Hours: 3**
- GEOG 3411 - Globalization and Regional Development. **Semester Hours: 3**
- GEOG 4080 - Introduction to GIS. **Semester Hours: 3**
- OR-
- GEOG 5080 - Introduction to GIS. **Semester Hours: 3**

**Total: 21 Hours**

## ADDITIONAL REQUIREMENTS

Choose six additional courses:

### Urban Studies and Planning

- GEOG 4640 - Urban Geography: Denver and the U.S.. **Semester Hours: 3**
- OR-
- GEOG 5640 - Urban Geography: Denver and the U.S.. **Semester Hours: 3**
- URP 5501 - Planning Issues and Processes. **Semester Hours: 3**

**Plus two courses from the following list:**

- GEOG 4220 - Environmental Impact Assessment. **Semester Hours: 3**
- OR-
- GEOG 5220 - Environmental Impact Assessment. **Semester Hours: 3**
- GEOG 4230 - Hazard Mitigation and Vulnerability Assessment. **Semester Hours: 3**
- OR-
- GEOG 5230 - Hazard Mitigation and Vulnerability Assessment. **Semester Hours: 3**
- GEOG 4260 - Natural Resource Planning and Management. **Semester Hours: 3**
- OR-
- URP 6653 - Natural Resource Planning and Management. **Semester Hours: 3**
- GEOG 4265 - Sustainability in Resources Management. **Semester Hours: 3**
- OR-
- GEOG 5265 - Sustainability in Resources Management. **Semester Hours: 3**
- GEOG 4400 - Regional Economic Development. **Semester Hours: 3**
- OR-
- URP 6671 - Regional Economic Development. **Semester Hours: 3**

- GEOG 4630 - Transportation Planning I: Transport Network Analysis. **Semester Hours: 3**  
-OR-
- URP 6673 - Transportation Planning I: Land Use and Transport. **Semester Hours: 3**
- GEOG 4670 - Transportation Planning II: Urban Transportation Planning. **Semester Hours: 3**  
-OR-
- URP 6674 - Transportation Planning II. **Semester Hours: 3**

### Techniques for Urban Analysis

Choose two:

- GEOG 4060 - Remote Sensing I: Introduction to Environmental Remote Sensing. **Semester Hours: 3**  
-OR-
- GEOG 5060 - Remote Sensing I: Introduction to Environmental Remote Sensing. **Semester Hours: 3**
- GEOG 4070 - Remote Sensing II: Advanced Remote Sensing. **Semester Hours: 3**  
-OR-
- GEOG 5070 - Remote Sensing II: Advanced Remote Sensing. **Semester Hours: 3**
- GEOG 4081 - Introduction to Cartography and Computer Mapping. **Semester Hours: 3**
- GEOG 4085 - GIS Applications for the Urban Environment. **Semester Hours: 3**  
-OR-
- GEOG 5085 - GIS Applications for the Urban Environment. **Semester Hours: 3**
- GEOG 4090 - Environmental Modeling with Geographic Information Systems. **Semester Hours: 3**  
-OR-
- GEOG 5090 - Environmental Modeling with Geographic Information Systems. **Semester Hours: 3**
- GEOG 4095 - Deploying GIS Functionality on the Web. **Semester Hours: 3**  
-OR-
- GEOG 5095 - Deploying GIS Functionality on the Web. **Semester Hours: 3**
- GEOG 4235 - GIS Applications in the Health Sciences. **Semester Hours: 3**  
-OR-
- GEOG 5235 - GIS Applications in the Health Sciences. **Semester Hours: 3**

### Community/Professional Experience

(optional but highly recommended)

- GEOG 3939 - Internship/Cooperative Education. **Semester Hours: 1 to 3**

**Total: 18 Hours**

## OPTION TOTAL: 39 HOURS

*Note:* Up to 4 semester hours of honors thesis course work or up to 3 semester hours of internship may be counted toward the 18 hours of additional requirements. Such substitutions must be approved by a program option advisor.

## Option 5—Earth Science

**Option Advisor:** Ryan Sincavage

Option 5 allows geography majors to concentrate on studying natural and physical processes within and on the surface of the planet.

## OPTION 5 REQUIREMENTS

### Lower division

- ENVS 1342 - Introduction to Environment and Society: SS2. **Semester Hours: 3**  
-OR-
- GEOG 1302 - Introduction to Human Geography. **Semester Hours: 3**
- GEOL 1072 - Physical Geology: Surface Processes: SC1. **Semester Hours: 4**
- GEOL 1082 - Physical Geology: Internal Processes: SC1. **Semester Hours: 4**

### Upper division

- GEOG 3080 - Introduction to Mapping and Map Analysis. **Semester Hours: 3**
- GEOG 3411 - Globalization and Regional Development. **Semester Hours: 3**  
-OR-
- GEOG 4335 - Contemporary Environmental Issues. **Semester Hours: 3**  
-OR-
- GEOG 5335 - Contemporary Environmental Issues. **Semester Hours: 3**
- GEOG 4080 - Introduction to GIS. **Semester Hours: 3**  
-OR-
- GEOG 5080 - Introduction to GIS. **Semester Hours: 3**

**Total: 20 Hours**

## ADDITIONAL REQUIREMENTS

Choose six additional courses:

### Earth Science

- GEOG 3232 - Weather and Climate. **Semester Hours: 3**
- GEOL 3011 - Mineralogy. **Semester Hours: 4**

- GEOL 3421 - Sedimentation and Stratigraphy. **Semester Hours: 4**

**Plus two of the following courses:**

- GEOG 3240 - Colorado Climates. **Semester Hours: 3**
- GEOG 4010 - Biogeochemical Cycles. **Semester Hours: 3**
- GEOG 4020 - Earth Environments and Human Impacts. **Semester Hours: 3**
- GEOG 4240 - Principles of Geomorphology. **Semester Hours: 3**
- GEOG 4270 - Glacial Geomorphology. **Semester Hours: 3**
- ENVS 5030 - Environmental Geology. **Semester Hours: 3**

**Techniques for Earth Science Analysis**

Choose one:

- GEOG 4060 - Remote Sensing I: Introduction to Environmental Remote Sensing. **Semester Hours: 3**  
-OR-
- GEOG 5060 - Remote Sensing I: Introduction to Environmental Remote Sensing. **Semester Hours: 3**
- GEOG 4090 - Environmental Modeling with Geographic Information Systems. **Semester Hours: 3**  
-OR-
- GEOG 5090 - Environmental Modeling with Geographic Information Systems. **Semester Hours: 3**
- GEOG 4770 - Applied Statistics for the Natural Sciences. **Semester Hours: 3**  
-OR-
- GEOL 4770 - Applied Statistics for the Natural Sciences. **Semester Hours: 3**

**Total: 20 Hours**

**OPTION TOTAL: 40 HOURS**

## **Senior Exit Examination**

*All majors are required to take a senior exit examination based on required courses in the discipline.*

## **Certificate**

# **Environmental Sciences Graduate Certificate**

The graduate-level certificate in environmental sciences has six options: air quality, ecosystems, environmental health, geospatial analysis, hazardous waste and water quality. Each option comprises four courses and is designed to approach an environmental issue from various disciplines. To earn a certificate, students are required to satisfactorily complete the courses in the option of their interest. These courses may be taken as electives within an MS degree program or through nondegree admission. Students must have the prerequisites for each course and must meet the requirements listed. Contact the option advisor for the particular option of interest before starting. A certificate will be issued upon proof of satisfactory completion of the courses. For an MS degree, students must coordinate the option courses with electives in their program. The listings of courses in each option are in the electives section of the master's program information.

In addition to the master of science in environmental sciences, the department also participates in the master of integrated science (MIS) degree program. For more information, see the MIS program description under CLAS degree programs.

## **Geographic Information Science Undergraduate Certificate**

The intention of this certificate is to provide undergraduates with a mechanism for demonstrating capabilities in spatial techniques in the social and/or physical sciences. The focus of this certificate is on a broad array of geotechniques, including geographic information systems, remote sensing, cartography and statistics, which give students additional analytical skills to take into the workplace or on to graduate school. This certificate is designed for geography majors as well as nonmajors.

Upon successful completion of the certificate, students will be able to:

- understand basic theoretical underpinnings of spatial analysis
- apply geo-spatial technologies to real-world problems
- have a basic knowledge of how to operate at least three types of software used for spatial analysis

### **Curriculum**

To obtain the certificate, students must complete four core courses, one elective, and a 1-hour independent study, totaling 16 hours. Although the four core courses may be taken in any order, it is advisable to begin with GEOG 3080, Introduction to Mapping and Map Analysis, since this course familiarizes students with many key concepts used in the other classes. All core courses are offered on a yearly basis. See department Web site for details ([www.cudenver.edu/ges](http://www.cudenver.edu/ges)).

### **Non Degree**

# Environmental Sciences Minor

The environmental sciences minor offers students exposure to the breadth of environmental issues. Students may emphasize the natural/physical sciences, the social sciences and humanities or structure their own mixed emphasis.

## Program Requirements

### Lecture/Laboratory Courses

Choose two lecture/laboratory courses (see Note 2):

- BIOL 2051 - General Biology I: SC1. **Semester Hours: 3**
- *and* BIOL 2071 - General Biology Laboratory I: SC1. **Semester Hours: 1**
- BIOL 2061 - General Biology II: SC1. **Semester Hours: 3**
- *and* BIOL 2081 - General Biology Laboratory II: SC1. **Semester Hours: 1**
- CHEM 2031 - General Chemistry I: SC1. **Semester Hours: 3**
- *and* CHEM 2038 - General Chemistry Laboratory I: SC1. **Semester Hours: 1**
- CHEM 2061 - General Chemistry II: SC1. **Semester Hours: 3**
- *and* CHEM 2068 - General Chemistry Laboratory II: SC1. **Semester Hours: 2**
- ENVS 1042 - Introduction to Environmental Sciences: SC1. **Semester Hours: 4**
- GEOL 1072 - Physical Geology: Surface Processes: SC1. **Semester Hours: 4**
- GEOL 1082 - Physical Geology: Internal Processes: SC1. **Semester Hours: 4**
- PHYS 2010 - College Physics I. **Semester Hours: 4**
- *and* PHYS 2030 - College Physics Lab I: SC1. **Semester Hours: 1**
- PHYS 2020 - College Physics II: SC1. **Semester Hours: 4**
- *and* PHYS 2040 - College Physics Lab II: SC1. **Semester Hours: 1**

**Total: 8-10 Hours**

## Upper-division Courses

Choose three upper-division courses outside of the student's major discipline from the following list (see Notes 5 and 6):

- ANTH 4010 - Global Health Studies I: The Biocultural Basis of Health. **Semester Hours: 3**
  - BIOL 3411 - Principles of Ecology. **Semester Hours: 3**
  - CHEM 4700 - Environmental Chemistry. **Semester Hours: 3**  
(see note 4)
  - ECON 4540 - Environmental Economics. **Semester Hours: 3**
  - ENVS 3082 - Energy and the Environment. **Semester Hours: 3**
- OR-

- PHYS 3082 - Energy and the Environment. **Semester Hours: 3**
- GEOG 3232 - Weather and Climate. **Semester Hours: 3**
- GEOG 3240 - Colorado Climates. **Semester Hours: 3**
- GEOG 4020 - Earth Environments and Human Impacts. **Semester Hours: 3**
- OR-
- ENVS 5020 - Earth Environments and Human Impacts. **Semester Hours: 3**
- GEOG 4060 - Remote Sensing I: Introduction to Environmental Remote Sensing. **Semester Hours: 3**
- OR-
- GEOG 5060 - Remote Sensing I: Introduction to Environmental Remote Sensing. **Semester Hours: 3**
- GEOG 4080 - Introduction to GIS. **Semester Hours: 3**
- OR-
- GEOG 5080 - Introduction to GIS. **Semester Hours: 3**
- GEOG 4090 - Environmental Modeling with Geographic Information Systems. **Semester Hours: 3**
- OR-
- GEOG 5090 - Environmental Modeling with Geographic Information Systems. **Semester Hours: 3**
- GEOG 4220 - Environmental Impact Assessment. **Semester Hours: 3**
- OR-
- GEOG 5220 - Environmental Impact Assessment. **Semester Hours: 3**
- GEOG 4230 - Hazard Mitigation and Vulnerability Assessment. **Semester Hours: 3**
- OR-
- GEOG 5230 - Hazard Mitigation and Vulnerability Assessment. **Semester Hours: 3**
- GEOG 4240 - Principles of Geomorphology. **Semester Hours: 3**
- GEOG 4265 - Sustainability in Resources Management. **Semester Hours: 3**
- OR-
- GEOG 5265 - Sustainability in Resources Management. **Semester Hours: 3**
- GEOG 4270 - Glacial Geomorphology. **Semester Hours: 3**
- GEOG 4335 - Contemporary Environmental Issues. **Semester Hours: 3**
- OR-
- GEOG 5335 - Contemporary Environmental Issues. **Semester Hours: 3**
- GEOG 4350 - Environment and Society in the American Past. **Semester Hours: 3**
- OR-
- GEOG 5350 - Environment and Society in the American Past. **Semester Hours: 3**
- GEOL 4030 - Environmental Geology. **Semester Hours: 3**
- HIST 4232 - Historic Preservation. **Semester Hours: 3**
- HIST 4810 - Special Topics. **Semester Hours: 3**
- PHIL 4510 - Philosophy of Nature. **Semester Hours: 3**
- P SC 4354 - Environmental Politics. **Semester Hours: 3**

**Total: 9 Hours**

## Minor Total: 17-19 Hours

### Notes:

1. All work submitted for an environmental sciences minor must have a grade of C (2.0) or above.
2. The lecture/laboratory sequence can be part of the requirements for the major, but not in the student's major department (i.e., a biology major cannot use the general biology sequence, but could use the general chemistry sequence, which is also required for the biology major).
3. Students must take a minimum of 9 hours of the upper-division courses at the Downtown Campus.
4. If the student plans to go on to the MS in environmental sciences program, he/she should choose courses other than CHEM 4700. This is a core course in the MS in environmental sciences program.
5. Many of the upper-division courses have prerequisites; the student must check the catalog for prerequisite requirements for these courses.
6. The four upper-division elective courses for the environmental sciences minor cannot be from the student's major discipline, even if the particular course is not counted toward the major.

## Geography Minor

Students must complete 15 semester hours in geography, including at least 6 semester hours of upper-division courses. Students must achieve a grade of C (2.0) or above on required courses. At least 9 semester hours of upper-division geography courses must be completed at the Downtown Campus.

## Geology Minor

At least two of the upper-division requirements must be completed at UC Denver. Transfer students who have earned the equivalent of all these courses elsewhere must complete a minimum of two of the required upper-division courses at UC Denver. No grade below a C (2.0) will be counted toward the minor requirements.

### Required Courses

- GEOL 1072 - Physical Geology: Surface Processes: SC1. **Semester Hours:** 4
- GEOL 1082 - Physical Geology: Internal Processes: SC1. **Semester Hours:** 4

**Choose at least two of the following courses:**

- GEOL 3011 - Mineralogy. **Semester Hours: 4**
- GEOL 3421 - Sedimentation and Stratigraphy. **Semester Hours: 4**
- GEOL 4030 - Environmental Geology. **Semester Hours: 3**

**Minor Total: 15-16 Hours**

## Urban and Regional Planning Minor

The undergraduate planning minor in the Department of Geography and Environmental Sciences provides nongeography undergraduate students the opportunity to pursue studies in the professional field of planning. Geography majors can pursue the urban studies option, so this minor would not be available to these majors.

Geography and urban and regional planning share a common concern for the spatial configuration of the places that we inhabit and enjoy. In recognition of this close association, there is currently an articulation agreement between the Department of Geography and Environmental Sciences and the College of Architecture and Planning that provides students with a mechanism for acceleration through the master of urban and regional planning (MURP) degree program, if accepted into that graduate program. Those students completing the requirements for an undergraduate planning minor may also be eligible to pursue an accelerated MURP degree.

To meet the requirements for this minor, students must complete three core requirements and two electives, totaling 15 semester hours. Although the three core courses may be taken in any order, it is advisable to begin with GEOG 1602, since this course familiarize students with many key concepts used in other classes. All core courses are offered on a yearly basis.

### Program Requirements

#### Required Core

- GEOG 1602 - Introduction to Urban Studies: SS2. **Semester Hours: 3**
- GEOG 4640 - Urban Geography: Denver and the U.S.. **Semester Hours: 3**
- URP 5501 - Planning Issues and Processes. **Semester Hours: 3**

**Total: 9 Hours**

#### Electives

Choose two:

- GEOG 4060 - Remote Sensing I: Introduction to Environmental Remote Sensing.  
**Semester Hours: 3**
- OR-

- GEOG 5060 - Remote Sensing I: Introduction to Environmental Remote Sensing. **Semester Hours: 3**
- GEOG 4080 - Introduction to GIS. **Semester Hours: 3**  
-OR-
- GEOG 5080 - Introduction to GIS. **Semester Hours: 3**
- GEOG 4085 - GIS Applications for the Urban Environment. **Semester Hours: 3**  
-OR-
- GEOG 5085 - GIS Applications for the Urban Environment. **Semester Hours: 3**
- GEOG 4090 - Environmental Modeling with Geographic Information Systems. **Semester Hours: 3**  
-OR-
- GEOG 5090 - Environmental Modeling with Geographic Information Systems. **Semester Hours: 3**
- GEOG 4095 - Deploying GIS Functionality on the Web. **Semester Hours: 3**  
-OR-
- GEOG 5095 - Deploying GIS Functionality on the Web. **Semester Hours: 3**
- GEOG 4230 - Hazard Mitigation and Vulnerability Assessment. **Semester Hours: 3**  
-OR-
- GEOG 5230 - Hazard Mitigation and Vulnerability Assessment. **Semester Hours: 3**
- GEOG 4235 - GIS Applications in the Health Sciences. **Semester Hours: 3**  
-OR-
- GEOG 5235 - GIS Applications in the Health Sciences. **Semester Hours: 3**
- GEOG 4400 - Regional Economic Development. **Semester Hours: 3**
- GEOG 4630 - Transportation Planning I: Transport Network Analysis. **Semester Hours: 3**
- GEOG 4990 - Special Topics. **Semester Hours: 3**

**Total: 6 Hours**

**Minor Total: 15 Hours**

## **Entrance Requirements**

All undergraduate students, except geography majors, are eligible for this minor.

## **Performance Requirements**

Students must complete 15 semester hours in geography and/or planning. Because of the professional nature of this minor and the potential for fast-tracking in the MURP program, 12 semester hours of upper-division courses are required. Students must achieve a grade of C (2.0) or higher in required courses. All upper-division courses must be completed at the Downtown Campus and a minimum of 9 semester hours must be completed in CLAS (geography) to satisfy residency requirements.

## Master of Science

# Environmental Sciences MS

- ▶ Graduate School Rules apply to this program

**Program Director:** John Wyckoff

**Associate Program Director:** Jon Barbour

**Office:** North Classroom, 3622

**Telephone:** 303-556-4520

**Fax:** 303-556-6197

**E-mail:** Jon.Barbour@ucdenver.edu

**Web site:** [www.cudenver.edu/ges/mses.html](http://www.cudenver.edu/ges/mses.html)

## Faculty (Concurrently Appointed)

### Professors:

Larry Anderson, chemistry

Lloyd Burton, School of Public Affairs

Lynn Johnson, civil engineering

John Lanning, chemistry

Martin Lockley, geography and environmental science

Diana Tomback, biology

### Associate Professors:

Leo Bruederle, biology

Frederick Chambers, geography and environmental science

Greg Cronin, biology

Brian Page, geography and environmental science

Anu Ramaswami, civil engineering

Timberly Roane, biology

Deborah Thomas, geography and environmental science

John Wyckoff, geography and environmental science

### Assistant Professors:

Michael Green, biology

Rafael Moreno, geography and environmental science

Brian Muller, planning and design

Bryan S. Wee, geography and environmental science

Environmental sciences is a multidisciplinary study of the environment, housed in the Department of Geography and Environmental Sciences. The academic fields involved in environmental sciences include chemistry, biology and ecology, physics, geology, geography, anthropology, engineering, political science, law, economics and the health sciences. Students planning to pursue the MS in environmental sciences must either have earned a bachelor's

degree or have taken significant course work in the natural/physical sciences or engineering and completed several other prerequisites (see the following graduate information). Graduate-level certificates in environmental sciences are also offered. The certificates may be earned stand-alone or as options in the MS in environmental sciences.

Environmental careers encompass a broad range of professions, from those with a strong foundation in the natural/physical sciences or engineering to those based in the social sciences and/or humanities. Students interested in environmental issues and careers should investigate the whole field before deciding which course to follow. At the Downtown Campus, the MS in environmental sciences emphasizes the natural/physical sciences and engineering with the addition of the social sciences and humanities.

The MS in environmental sciences degree is designed to provide training in engineering, natural/physical sciences and socioeconomic analysis. The goals of the program are to (1) enhance the interdisciplinary communication and analytical skills of the student, and (2) provide a multidisciplinary approach for more intensive study of a particular environmental issue. Students will receive instruction in the physical and biological dynamics of various ecosystems, environmental engineering and socioeconomic issues associated with environmental analysis.

Graduates of the environmental sciences program are involved in many different areas, such as reviewing environmental impact statements, monitoring groundwater quality and communicating with the public. Many students have found employment in various agencies (U.S. Environmental Protection Agency, U.S. Geological Survey, Colorado State Department of Public Health and Environment) and private-sector environmental and engineering firms.

## Requirements for Admission

The program is for students who either have baccalaureate degrees or significant background in one of the natural/physical sciences or engineering. In addition, minimum undergraduate science and math requirements are:

- one semester of calculus and one semester of upper-division statistics (*if applicant is missing the statistics course, he/she can be admitted but must take ENVS 5600, Applied Statistics, or an approved statistics course as an elective before receiving the MS in environmental sciences degree*)
- two semesters general chemistry with lab
- one semester physics
- two semesters general biology with lab

If only two semesters of the six prerequisite courses are lacking, students may be admitted, but must take them in the first year in the program. Applicants who have fulfilled all prerequisites have a better chance of acceptance. Applicants may be required to take additional prerequisite courses (necessary for completing particular core or elective courses). The prerequisite courses will not count toward the MS environmental sciences degree. As part of the admission review process, applicants are required to submit a graduate application, a minimum of three letters of recommendation, transcripts from all institutions previously attended, and general GRE scores. UC Denver has a minimum requirement of a 3.0 undergraduate GPA for applicants to the

Graduate School. The program admits new students for the fall semester and the number of students admitted to the program depends, in part, on space availability. **Applicants must submit all materials by the April 1 deadline.**

## **Financial Aid**

There are three kinds of financial aid available: tuition assistance; research assistantship positions funded by grants to specific program faculty; and the regular package of financial aid (primarily loans) available through the financial aid office on the Downtown Campus. Incoming students will be automatically considered for program-distributed tuition assistance at the time of admission to the program. Continuing students will be regularly apprised of available aid and positions. Students interested in research assistantships should consult individual faculty with whom they wish to work regarding potential assistantship positions. All other aid should be requested through the UC Denver Financial Aid Office, North Classroom, 1030, Campus Box 125, P.O. Box 173364, Denver, CO 80217-3364. Telephone: 303-556-2886.

## **Internships**

Students in the MS in environmental sciences program are strongly encouraged to contact the Experiential Learning Center for internships and paid positions related to environmental sciences. The Experiential Learning Center is located in the Tivoli Student Union, Suite 260. Telephone: 303-556-2250. Many students have had internships in federal agencies, such as the U.S. Environmental Protection Agency and the U.S. Geological Survey.

## **Master's International Program**

The master's international (MI) program is a cooperative effort between the U.S. Peace Corps and UC Denver that provides students with the opportunity to earn a master of science in environmental sciences degree and at the same time gain a Peace Corps experience. The objective of the program is to have students interested in international environmental issues gain firsthand overseas experiences and earn credit toward their degree.

To qualify for the program, students must meet the admissions requirements for the university master's degree program and the requirements established by the Peace Corps for volunteer service. In some cases, enrolled students will be able to apply to the Peace Corps as a program applicant during their first semester of graduate study. Students in the MI program must complete the same degree requirements as non-MI students in the MS in environmental sciences program. A diverse pool of applicants and participants to the program will be encouraged.

MI program participants entering the Peace Corps will complete approximately 12 weeks of preservice training. Upon successful completion of training, program participants will become Peace Corps volunteers and begin a two-year tour of service in their country of assignment. Before beginning their Peace Corps assignments, program participants will be expected to meet academic requirements of the program. The program will be designed to prepare them for Peace Corps service and volunteer activities generally.

## Program Requirements

The MS in environmental sciences is a 39-hour program that provides students with two alternate plans: Plan I requires a thesis, while Plan II is a nonthesis program. General requirements for the program include: a set of core courses (15 semester hours), the MS in environmental sciences seminar course (ENVS 6002, 3 semester hours), an environmental policy course (3 semester hours), and elective courses (12 semester hours minimum). Students choosing Plan I must also complete 6 hours of thesis, while those choosing Plan II must complete 6 hours of additional elective course work. Students opting for Plan II are encouraged to enroll in 3 hours of independent study (ENVS 6840) as one of their electives.

The degree is offered through the College of Liberal Arts and Sciences with the cooperation of the College of Engineering and Applied Science. In addition, some courses offered by the College of Architecture and Planning, the School of Public Affairs and the Business School are relevant and applicable to the program.

## Required Core Courses

### Fall

- C E 5401 - Introduction to Environmental Engineering. **Semester Hours: 3**
- ENVS 5030 - Environmental Geology. **Semester Hours: 3**
- ENVS 6200 - Risk Assessment. **Semester Hours: 3**

### Spring

- BIOL 5445 - Applied Environmental Biology. **Semester Hours: 3**
- CHEM 5700 - Environmental Chemistry. **Semester Hours: 3**

**Total: 15 Hours**

**The core courses are to be taken first upon entry into the program. They are the foundation for other courses in environmental sciences.**

## Seminar Course

Students are required to register for ENVS 6002, Environmental Sciences Seminar, in the first semester they are enrolled in the MS in environmental sciences program. The seminar serves as an introduction to the program and helps students to develop research skills and further their professional development.

- ENVS 6002 - Environmental Sciences Seminar. **Semester Hours: 3**

## Policy Courses

Students are required to enroll in at least one course (3 semester hours) that deals with environmental policy. The environmental policy requirement of the master's program is intended to expose students whose background is largely in the natural sciences or engineering to the legal, political and social aspects of environmental issues. To satisfy this requirement, students must enroll in one of the following courses (other courses may be acceptable if approved by the program director):

Choose one:

- GEOG 5265 - Sustainability in Resources Management. **Semester Hours: 3**
- P AD 5631 - Seminar in Environmental Politics and Policy. **Semester Hours: 3**
- P AD 5633 - Seminar in Natural Resource and Environmental Health Law. **Semester Hours: 3**
- P SC 4354 - Environmental Politics. **Semester Hours: 3**
- URP 6651 - Environmental Impact Assessment. **Semester Hours: 3**

**Total: 3 Hours**

## **Elective Courses**

(See the MS in Environmental Sciences Web site for a complete list of elective courses for the MS in environmental sciences program.)

Students, with the coordinator and/or an advisor, will complete a program plan that will include 12-21 semester hours of elective requirements that will meet their interests. Students may choose to use four of the electives to fulfill one of the following options offered in environmental sciences: air quality, ecosystems, environmental health, geospatial analysis, hazardous waste and water quality. Students must have the prerequisites for each course and must meet the requirements listed in the notes below. Contact the option advisor for the particular option of interest before starting. Upon graduation, the option will be noted on the student's transcript.

**Following are the requirements for each environmental sciences option:**

### **AIR QUALITY OPTION**

**Option Advisor:** Larry Anderson

**Telephone:** 303-556-2963

**E-mail:** Larry.Anderson@ucdenver.edu

#### **Required Courses**

- CHEM 5710 - Air Pollution Chemistry. **Semester Hours: 3**
- ENVS 5730 - Air Quality Modeling and Analysis. **Semester Hours: 3**

**Total: 6 Hours**

#### **Electives**

Choose two:

- C E 5800-583X - Special Topics. **Semester Hours:** 1 to 6  
(when Air Pollution Control is the topic)
- CHEM 5720 - Atmospheric Sampling and Analysis. **Semester Hours:** 3
- URP 6686 - Special Topics in Urban and Regional Planning. **Semester Hours:** 1 to 3  
(when Air Quality Planning and Policy is the topic)

**Total: 6 Hours**

**Option Total: 12 Hours**

## **ECOSYSTEMS OPTION\***

**Option Advisor:** Gregory Cronin

**Telephone:** 303-556-6036

**E-mail:** Gregory.Cronin@ucdenver.edu

### **Required Courses**

- BIOL 5415 - Microbial Ecology. **Semester Hours:** 3
- ENVS 5000 - Biogeochemical Cycles. **Semester Hours:** 3

**Total: 6 Hours**

### **Electives**

Choose two:

- BIOL 5050 - Advanced Biology Topics. **Semester Hours:** 1 to 8
- BIOL 5154 - Conservation Biology. **Semester Hours:** 3
- ENVS 6220 - Toxicology. **Semester Hours:** 3  
(see Note 2)
- GEOG 5060 - Remote Sensing I: Introduction to Environmental Remote Sensing.  
**Semester Hours:** 3

**Total: 6 Hours**

**Option Total: 12 Hours**

\* BIOL 5445, Applied Environmental Biology, required as a prerequisite for the ecosystems option.

## **ENVIRONMENTAL HEALTH OPTION\***

**Option Advisor:** Deborah Thomas  
**Telephone:** 303-556-5292  
**E-mail:** Deborah.Thomas@ucdenver.edu

### **Required Courses**

- ENVS 6220 - Toxicology. **Semester Hours:** 3  
(see Note 2) (fall, even years)
- ENVS 6230 - Environmental Epidemiology. **Semester Hours:** 3  
(spring, even years)

**Total: 6 Hours**

### **Electives**

Choose two:

- ANTH 4010 - Global Health Studies I: The Biocultural Basis of Health. **Semester Hours:** 3
- ENVS 6210 - Human Health and Environmental Pollution. **Semester Hours:** 3  
(spring, odd years)
- P AD 5633 - Seminar in Natural Resource and Environmental Health Law. **Semester Hours:** 3

**Total: 6 Hours**

**Option Total: 12 Hours**

\* ENVS 6200, Risk Assessment, required as a prerequisite for the environmental health option.

## **GEOSPATIAL ANALYSIS OPTION\***

**Option Advisor:** Rafael Moreno  
**Telephone:** 303-556-3762  
**E-mail:** Rafael.Moreno@ucdenver.edu

### **Required Courses**

- GEOG 5080 - Introduction to GIS. **Semester Hours:** 3
- GEOG 5090 - Environmental Modeling with Geographic Information Systems. **Semester Hours:** 3

**Total: 6 Hours**

### **Electives**

Choose two:

- C E 5382 - GIS Spatial Database Development. **Semester Hours: 3**
- C E 5385 - GIS Relational Database Systems. **Semester Hours: 3**
- C E 5386 - GIS Laboratory. **Semester Hours: 3**

**Total: 6 Hours**

**Option Total: 12 Hours**

\* GEOG 3080, Introduction to Mapping and Map Analysis, is required as a prerequisite of the geospatial analysis option.

For more information, contact the option advisor or Jon Barbour at 303-556-4520, Jon.Barbour@ucdenver.edu.

## **HAZARDOUS WASTE OPTION\***

**Option Advisor:** Anu Ramaswami

**Telephone:** 303-556-4734

**E-mail:** Anu.Ramaswami@ucdenver.edu

### **Required Courses**

- C E 5480 - Hazardous Wastes and Site Remediation. **Semester Hours: 3**
- C E 5800-583X - Special Topics. **Semester Hours: 1 to 6**  
(when Hazardous Waste Regulations is the topic)

**Total: 6 Hours**

### **Electives**

Choose two:

- BIOL 5051 - Advanced Topics In Microbiology. **Semester Hours: 3**
- C E 5402 - Environmental and Water Quality Modeling. **Semester Hours: 3**
- ENVS 5403 - Unsaturated Zone Hydrology. **Semester Hours: 3**

**Total: 6 Hours**

**Option Total: 12 Hours**

\*C E 5401, Introduction to Environmental Engineering, required as a prerequisite for the hazardous waste option.

## **WATER QUALITY OPTION\***

**Option Advisor:** John Wyckoff  
**Telephone:** 303-556-2590  
**E-mail:** John.Wyckoff@ucdenver.edu

### **Required Courses**

- BIOL 5416 - Aquatic Ecology. **Semester Hours:** 3
- ENVS 5410 - Aquatic Chemistry. **Semester Hours:** 3

**Total: 6 Hours**

### **Electives**

Choose two:

- C E 5333 - Applied Hydrology. **Semester Hours:** 3
- C E 5393 - Water Resources Development and Management. **Semester Hours:** 3
- ENVS 5403 - Unsaturated Zone Hydrology. **Semester Hours:** 3

**Total: 6 Hours**

### **Option Total: 12 Hours**

\*CHEM 5700, Environmental Chemistry, is required as a prerequisite of the water quality option.

### **Notes:**

1. Many of the courses have prerequisites; student must check the catalog for prerequisite requirements for these courses. Some options have a prerequisite course requirement.
2. One course may not be used for more than one option, even if it is listed in several options. Other courses may be offered that will be acceptable as electives with approval of the option advisor and the director of the program.
3. No more than three courses may be from any one discipline (excluding ENVS); i.e., chemistry, biology, civil engineering.
4. Courses used by the student to fulfill a core requirement may not be used to fulfill the options.
5. All work submitted for the environmental sciences options must have a grade of *B* (3.0) or better.
6. All courses for the environmental sciences options must be completed at the Downtown Campus.
7. Courses applied to either a certificate\* or an MS degree may later be applied toward the other if all pertinent course work is completed within a five-year time period.

\* The above options of the program may be taken to earn a corresponding environmental sciences certificate. However, certificates may be earned without entrance into the MS in environmental sciences program. (See the Environmental Sciences Graduate Certificate description).

# Health and Behavioral Sciences

**Director:** Richard Miech

**Program Assistant:** Abby Fitch

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**Telephone:** 303-556-4300

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## Faculty

### Professors:

Stephen Koester, PhD, University of Colorado

Deborah Main, PhD, University of Colorado

### Associate Professors:

Sheana Bull, PhD, Georgia State University

Richard Miech, PhD, University of North Carolina

David Tracer, PhD, University of Michigan

### Assistant Professors:

Ronica Rooks, PhD, University of Maryland College Park

Sara Yeatman, PhD, University of Texas Austin

### Research Faculty:

Susan Dreisbach, PhD, University of Colorado

Sharry Erzinger, DrPH, University of California Berkeley

Jean Scandlyn, PhD, Columbia University

### Adjunct Faculty:

John Brett

Lucinda Bryant

Lauren Clark

Mary Coussons-Read

Estevan Flores

Karen Gottlieb

Cornelius Rietmeijer

The mission of the health and behavioral sciences (HBSC) program is to apply social science theory and innovative research methods to critically address emerging issues in health. The program trains students to confront issues affecting the health of communities and populations by focusing on social determinants of health and diseases. These determinants can be more influential on population health than the health care system.

The program's overarching framework integrates social, cultural and biomedical perspectives to understand the underpinnings of health and the conditions essential for its creation and maintenance. Students and faculty conduct interdisciplinary research on topics including emerging diseases, maternal/child health, substance abuse, health disparities and global health. Graduates are innovative researchers, effective educators and leaders directly engaged in the practice of public health.

## **Undergraduate Program in Community Health Science**

The health and behavioral sciences program is committed to the principle that understanding the basic social, cultural and biological dimensions of health is fundamental to a solid liberal arts and sciences undergraduate education. HBSC has developed a minor in community health science that provides undergraduates with the basic intellectual and methodological tools needed to understand the societal contexts of health, health care and public health. We expect that graduates with a minor in community health science will be successful in their pursuit of graduate degrees in a broad range of fields including the biomedical sciences, social and behavioral sciences, public health, law, medicine, dentistry, pharmacy, business administration and health services research. The program is especially appropriate for students who intend to pursue careers in public health as well as medicine, nursing, health policy and administration. Students seeking the minor should contact CLAS advising and the health and behavioral sciences program with specific questions.

A major is not currently available, but students may complete an individually structured major (ISM) that combines course work in HBS with that of related fields such as anthropology, biology and psychology. Students should consult the Individually Structured Major section in this catalog for a description of ISM programs and with CLAS Advising or the HBSC program regarding specific questions.

### **REQUIREMENTS FOR THE MINOR**

## **PhD Program in Health and Behavioral Sciences**

The doctor of philosophy degree in health and behavioral sciences is rooted in the realization that our ability as a global society to overcome some of the most significant and intractable public health problems today rests on the willingness of biomedical and social science researchers to innovate across traditional disciplinary boundaries. Students are trained in theory from multiple disciplines and in both quantitative and qualitative research methods.

Although a master's degree is not provided by the health and behavioral sciences department, two relevant master's programs currently exist at UC Denver, as described in the PhD program requirements for admission.

A student's particular research focus constitutes a key part of his or her doctoral program. A range of possible foci exists, given the particular student's interest and faculty expertise.

Examples of HBSC research foci include:

- *Social determinants of health.* Such research interests include studies on the health-related influences of socioeconomic position, social and economic inequality, discrimination, social networks and support, social capital, work conditions and psychological states including stress.
- *Community health.* This area of research involves community health assessment; program design and evaluation; translation of evidence-based interventions to diverse populations and communities; participatory research and community mobilization; policy analysis and advocacy for health-related problems.
- *Biosocial ecology.* Within this area are studies of the interplay of biological (including physiological, genetic or others of the biomedical health sciences), social, cultural and environmental characteristics influencing maternal/infant health, exercise performance or susceptibility to disease.
- *Global health* topics include social, cultural and biomedical factors influencing transmission of disease and health disparities on an international (as well as national) scale.

Recent student research exemplifying such foci includes:

- social factors affecting newly emerging diseases in the American Southwest
- factors that contribute to positive perceived health in the older-aged population
- ethnic group differences in weight gain and cardiovascular disease
- the impact of natural hazards and risk management strategies on health among pastoral herders in Mongolia
- adolescent sexual risk behaviors in the context of social networks and cultural norms
- disease incidence patterns and environmental contamination in north Casper, Wyoming

Graduates of the HBSC program acquire skills that situate them for leadership roles in public health. Depending upon a student's concentration, the successful graduate will gain expertise in research design and methods; social, cultural and biobehavioral determinants of health and disease; the structure and organization of health care systems; the contribution of individual, social and cultural factors for deciding health behaviors; and how guided change in health care systems may enhance quality, efficacy and access. The significance of these skills in addressing current complex health issues ensures that graduates will be in demand in a number of employment sectors ranging from community and public health organizations, to academic institutions, to nonprofit research organizations and to private health care settings.

## PhD PROGRAM REQUIREMENTS

### Non Degree

# Community Health Science Minor

To earn a minor in community health science, a minimum of 18 semester hours are required, of which 12 must be upper-division. Students must achieve no less than a C (2.0) in each course applied toward minor requirements. At least 12 semester hours must be taken from the Downtown Campus faculty. Note that additional HBSC courses are currently being developed to provide additional choices. As they are approved, these courses will appear on the HBS Web site, the online course descriptions and term schedule planner. (Note: HBS courses, in general, are 3 semester hours under the prefix HBSC.)

## Program Requirements

### Community Health Science Courses

Choose two:

- HBSC 2001 - Introduction to Community and Population Health Science: SS3. **Semester Hours: 3**
- HBSC 3021 - Fundamentals of Health Promotion. **Semester Hours: 3**
- HBSC 3031 - Health, Human Biology and Behavior. **Semester Hours: 3**
- HBSC 3041 - Health, Culture and Society. **Semester Hours: 3**

**Total: 6 Hours**

### Methods Courses

Choose at least two:

- GEOG 4235 - GIS Applications in the Health Sciences. **Semester Hours: 3**
- HBSC 4001 - Introduction to Epidemiology. **Semester Hours: 3**
- HBSC 4021 - Community Health Assessment. **Semester Hours: 3**

**Total: 6 Hours**

### Community Health Emphasis Courses

Choose at least two:

- ANTH 4040 - Anthropology of Food and Nutrition. **Semester Hours: 3**

- ANTH 4060 - Evolutionary Medicine. **Semester Hours: 3**
- ANTH 4090 - Political Economy of Drug Culture. **Semester Hours: 3**
- ANTH 4260 - Human Reproductive Ecology. **Semester Hours: 3**
- ANTH 4560 - Human Ecology. **Semester Hours: 3**
- CMMU 4500 - Health Communication. **Semester Hours: 3**
- CMMU 4620 - Health Risk Communication. **Semester Hours: 3**
- GEOG 4020 - Earth Environments and Human Impacts. **Semester Hours: 3**
- GEOG 4230 - Hazard Mitigation and Vulnerability Assessment. **Semester Hours: 3**
- HBSC 3010 - Evolution of Human Sexuality. **Semester Hours: 3**
- HBSC 4010 - Global Health Studies I: The Biocultural Basis of Health. **Semester Hours: 3**
- HBSC 4020 - Global Health Studies II: Comparative Health Systems. **Semester Hours: 3**
- HBSC 4080 - Global Health Practice. **Semester Hours: 3**
- HBSC 4200 - The Global HIV/AIDS Epidemic. **Semester Hours: 3**
- HIST 4345 - Gender, Science, and Medicine: 1600 to the Present. **Semester Hours: 3**
- HIST 4346 - Medicine and Society: the Ancients to the Present. **Semester Hours: 3**
- HIST 4503 - Topics in History of Science. **Semester Hours: 3**
- PSY 3235 - Human Sexuality. **Semester Hours: 3**
- PSY 3262 - Health Psychology. **Semester Hours: 3**

**Total: 6 Hours**

**Total: 18 Hours**

Check the department Web site for additional course offerings.

## Doctor of Philosophy

# Health and Behavioral Sciences PhD

► Graduate School Rules apply to this program

## Requirements for Admission

A master's or equivalent graduate degree is required for admission to the PhD program. In addition, we encourage prior graduate training in the areas noted below. Students applying without prerequisites may be admitted, but will be required to complete appropriate courses before being permitted to complete the core curriculum. The program currently works with two master's-level programs to provide articulated master's-PhD training, as described below.

In addition to the general admission requirements of the Graduate School, the specific admission requirements for the PhD in health and behavioral sciences are as follows:

1. Knowledge from prior course work or vocational experience at the equivalent of college senior or graduate level in each of the following areas.

*Social or behavioral sciences (15 semester hours minimum):* knowledge of essential facts and concepts concerning the relationship among individuals and society, social organization, individual psychology and the relationship among culture, belief and behavior. This could be satisfied by course work in psychology, sociology and anthropology.

*Human biology or physiology (6 semester hours minimum):* familiarity with the functioning of the human body in health and disease states, including an understanding of cellular and organ system processes; an appreciation of evolutionary theory and the mechanisms by which evolution operates on both cellular and population levels; and an understanding of the interplay between the evolution of disease and host response. This could be satisfied by course work in human biology, physiology, pathophysiology or biological anthropology.

*Statistics (3 semester hours minimum):* prior course work and current familiarity with statistics including probability theory, parametric and nonparametric methods and acquaintance with basic multivariate techniques.

*Epidemiology (3 semester hours minimum):* prior course work at the advanced undergraduate or graduate level with the basic concepts and methods of epidemiology including measures of risk, mortality, distribution of disease, role of bias and confounders and study design.

2. Demonstrated academic excellence as evidenced by an undergraduate GPA of 3.25 (out of a possible 4.0 points) or better, a graduate GPA of 3.5 or better, and scores in the top 30th percentile (averaged) of the GRE. Admission to the program is highly competitive; minimum GPAs and GRE scores for acceptance in any given year may be higher than the minimum levels indicated here.

The applicability of a student's prior course work will be decided by the program executive committee after reviewing the student's transcript and additional materials. If the student does not have the requisite educational background or GPA, the student may be admitted on a conditional or provisional basis and additional course work required in accordance with Graduate School Rules.

Prospective students should not be dissuaded from applying to the program if they do not meet all of the requirements for admission. In some cases, employment experience may be counted toward meeting a requirement. In other cases, students may be admitted conditionally upon their completion of a list of prerequisite courses that will be established at the time of admission. Students should be sure to address this issue in completing the graduate application by specifying the academic and vocational experience they possess that meets, in part or full, the admission requirements described above.

## **MASTER'S LEVEL PREPARATION FOR THE DOCTORAL PROGRAM IN HEALTH AND BEHAVIORAL SCIENCES**

The program does not currently offer master's-level training in HBSC. Instead, we urge interested applicants to pursue relevant master's degree training in one of the social, behavioral or health sciences disciplines. In addition, we work closely with two master's programs at UC Denver. These are the concentrations in medical anthropology within the anthropology MA program offered by the anthropology department and the master of public health offered by the Colorado School of Public Health. Contact the respective programs for more information on these degree options and our program for how their requirements articulate with those for the health and behavioral sciences PhD.

## TO APPLY FOR ADMISSION

At the UC Denver Downtown Campus, all graduate applications are now submitted electronically. To begin the application process, go to the online admissions Web site: [https://hydra.cusys.edu/admapp/cgi-bin/sisadm.cgi?sys\\_template=mtaplgn&sys\\_logon=1](https://hydra.cusys.edu/admapp/cgi-bin/sisadm.cgi?sys_template=mtaplgn&sys_logon=1). If you have any difficulties, call the program assistant at 303-556-4300. The program admits students only for the fall semester, which typically begins in mid- to late August. The deadline for the receipt of all application materials is **February 15** for admission the following August.

Applicants should invest considerable thought and effort in preparing their application. For instance, in the essay (Part II, question six) applicants should provide information on: (a) their academic training and any employment related to public health or health care; (b) their experiences with inter- and multidisciplinary perspectives, and (c) how they envision using their doctoral degree to improve the health status of human populations and individuals. Students should also indicate the kinds of research *foci* that interest them the most.

In addition to the required recommendation form, letters of recommendation are required from at least three individuals in a position to judge the applicant's ability to complete the program. Recommenders may be employers, colleagues or professors; however, the applicant should be sure that the letters address the quality of and aptitude for academic work as well as personal characteristics and qualities.

## Financial Aid

There are four kinds of financial aid available: graduate student stipends/fellowships; tuition assistance; research assistantship positions funded by grants to specific program faculty; and the regular package of financial aid (primarily loans) available through the financial aid office.

Newly admitted, out-of-state and students demonstrating outstanding scholastic achievement receive priority when assigning departmental sources of funding. Students interested in research assistantships should contact the individual faculty member with whom they wish to work regarding potential assistantship positions.

All other aid should be requested through the UC Denver Financial Aid Office, North Classroom, 1030, Campus Box 125, P.O. Box 173364, Denver, CO 80217-3364. Telephone: 303-556-2886.

# Program Requirements

There are three dimensions to the required curriculum:

- a. A core curriculum that focuses on problem-oriented, interdisciplinary approaches to theory and method
- b. Elective course work intended to provide the student with a solid base from which to launch the dissertation research
- c. Dissertation research and writing

The core curriculum is subject to change. What appears below is intended to give students a general idea of the extent, shape and content of the core curriculum. Students should check with the program office for up-to-date information on specific course requirements and scheduling.

## The Core Curriculum

The core curriculum should be completed by students by the end of their second year of full-time study. It consists of the following series of courses which, together, constitute 26 semester hours:

### I. Health and Behavioral Sciences Colloquium

Each fall, the HBSC program will organize a series of presentations by scholars working in the health and behavioral sciences. The presentations provide students with the most current science and theory in the field. Required of all first- and second-year students, who must take at least two times.

- HBSC 7001 - Colloquium Series in the Health and Behavioral Sciences. **Semester Hours: 1**

**Total: 2 Hours**

### II. Theoretical Perspectives in the Health and Behavioral Sciences

This series is designed to give students a thorough background in how the principles of the social and behavioral sciences have been applied to health issues. Topics include: the interplay between structure and agency in creating and maintaining health; social epidemiology; critical theory and social determinants of health; issues affecting Western biomedicine and public health systems; diffusion of healthy behavioral change among populations; social construction of health and illness; health policy and bioethics; social networks; and stress.

- HBSC 7011 - Theoretical Perspectives in Health and Behavioral Science I. **Semester Hours: 3**
- HBSC 7021 - Theoretical Perspectives in Health and Behavioral Science II. **Semester Hours: 3**

- HBSC 7071 - Social and Behavioral Determinants of Health and Disease. **Semester Hours: 3**

**Total: 9 Hours**

### **III. Human Ecology and Environmental Adaptation**

This course will emphasize the biological/physiological dimensions of human health and disease.

- HBSC 7031 - Human Ecology and Environmental Adaptation. **Semester Hours: 3**

**Total: 3 Hours**

### **IV. Research Design and Methods in the Health and Behavioral Sciences**

Two HBSC core research design and methods courses, plus one additional advanced methods course of student's choosing. This series covers the philosophy of science and the structure of scientific inquiry, procedures for hypothesis-testing, quantitative and qualitative methodological strategies commonly employed in the field, epidemiology and program evaluation. Students must further develop specialized methodological skills by completing an independent study (HBSC 6840) or taking one additional course in advanced epidemiology, advanced biostatistics, health economics, survey research design or qualitative methods and data analysis. This requirement will be tailored specifically to the student's particular interests by his/her advisor.

- HBSC 7041 - Research Design and Methods in the Health and Behavioral Sciences I. **Semester Hours: 3**
- HBSC 7051 - Qualitative Research Design and Methods. **Semester Hours: 3**  
One elective course in advanced methods: **3 semester hours**

**Total: 9 Hours**

### **V. Applications of the Health and Behavioral Sciences**

This course offers students the opportunity to focus on individual research interests with guidance from faculty and input from peers.

- HBSC 7111 - Applications of the Health and Behavioral Sciences. **Semester Hours: 3**

**Total: 3 Hours**

**TOTAL CORE: 26 Hours**

## **Elective Courses**

Elective course work together constitutes 26 semester hours, of which a minimum of 6 hours can be drawn from the large number of offerings in the health and behavioral sciences at UC Denver. A full listing of elective courses is available in the program office and online on the HBSC Web site. Students will be expected to fulfill the necessary prerequisites for taking these courses, and final authority as to whether a student may enroll in the course will rest with the department in which the course is offered.

**TOTAL ELECTIVES: 26 Hours**

## **Doctoral Dissertation Research**

The doctoral dissertation research topic is chosen by the student. The student is expected to define a research question in health and behavioral science, identify the research strategy to be used for answering the question, conduct the research required and document the project in the form of a doctoral dissertation. The student will be guided in this process by a doctoral dissertation advisor and the additional members who comprise the student's doctoral dissertation committee (see below). A minimum of 30 semester hours of dissertation work is required. Students must register for a minimum of 5 dissertation credits each semester of their dissertation work. Students may not take more than a year's leave of absence or fail to enroll for semester hours more than three semesters before they are dropped from the program.

## **Advisors**

Upon admission to the program, each student will be assigned a first-year advisor. The student or the faculty will then choose the faculty advisor who will guide the student through the core and elective course work. The faculty advisor may or may not be the chair of the student's dissertation committee. The student selects his or her chair and three additional committee members who oversee the student's comprehensive examination and dissertation research.

## **Formal Review**

A formal review of each student's first-year progress will be undertaken at the end of the first year of study. A student may not take any additional courses in the program until this review is completed. Students who are deemed not to be making satisfactory progress will be informed in writing as to the nature and final result of the review before the end of June in the first year of study.

## **The Dissertation Prospectus and the Comprehensive Examination**

Before a student advances to candidacy, she/he must complete a dissertation prospectus and defend it successfully in the context of an oral comprehensive examination. The dissertation

prospectus is a complete description of the question or hypothesis that the student wishes to research for the dissertation project, the research design and study techniques and an assessment of the proposed project's contribution to the field. It will include a comprehensive review of the relevant literature. If the student chooses to undertake research in a particular ethnic or cultural community, she/he must also demonstrate sufficient understanding of that setting including adequate knowledge of the language. This prospectus must be approved by the student's advisor prior to scheduling the comprehensive examination.

The comprehensive examination will be an oral format based in part on, but not restricted to, the material presented in the dissertation prospectus. This exam *must* take place before the student's advancement to candidacy and will typically occur by the end of the third year of study. A committee comprising the chair and three faculty members will supervise the completion of the dissertation prospectus. This committee will conduct the oral examination and will recommend to the executive committee by a majority vote whether or not the student should be advanced to candidacy.

## **The Doctoral Dissertation and Final Exam**

After advancement to candidacy, the student in consultation with his or her advisor will appoint a dissertation committee comprising the chair and three faculty members. The chair and composition of the committee will be subject to approval by the program executive committee. The chair and two other members must have been present at the student's comprehensive examination and will be responsible for overseeing the research and writing of the doctoral dissertation. The committee will review drafts of the dissertation and, when the dissertation is completed to its satisfaction, will conduct the final exam, which will be based on the doctoral dissertation and related materials. The final examination will be open to the public.

## **Dissertation Total: 30 Hours minimum**

### **History**

**Chair:** Marjorie Levine-Clark

**Program Assistant:** Tabitha Fitzpatrick

**Undergraduate Advisor:** Myra L. Rich

**Graduate Advisor:** Pamela Laird

**Office:** King Center, 562

**Telephone:** 303-556-4830

**Fax:** 303-556-6037

**Web site:** [www.cudenver.edu/history/](http://www.cudenver.edu/history/)

### **Faculty**

#### **Professors:**

Pamela W. Laird, PhD, Boston University

Thomas J. Noel, PhD, University of Colorado

**Associate Professors:**

Michael T. Ducey, PhD, University of Chicago

Gabriel Finkelstein, PhD, Princeton University

Marjorie Levine-Clark, PhD, University of Iowa

Carl E. Pletsch, PhD, University of Chicago

Myra L. Rich, PhD, Yale University

James B. Whiteside, PhD, University of Colorado

**Assistant Professors:**

Thomas G. Andrews, PhD, University of Wisconsin

Xiaoja Hou, PhD, Cornell University

Alison M. Shah, PhD, University of Pennsylvania

**Senior Instructors:**

James E. Fell Jr.

Marilyn Hitchens

Rebecca Hunt

Richard D. Smith

James P. Walsh

John G. Whitesides

**Emeritus Professors:**

Frederick S. Allen, PhD, Harvard University

Mary S. Conroy, PhD, Indiana University

Mark S. Foster, PhD, University of Southern California

James B. Wolf, PhD, University of California, Los Angeles

History constitutes an intellectual challenge because its special responsibility, understanding the past, requires the student to master considerable information and to integrate many branches of knowledge. Perhaps more important to the history student than learning what has happened is understanding the process of change. By comparing the state of humankind over time, the history student identifies fundamental social trends and analyzes causes. The student also develops research, analytical and writing skills necessary not only for work, but for living.

The bachelor's degree in history provides preparation for immediate postgraduate careers or advanced training in the social sciences. History majors frequently choose careers in teaching, government service, business and other fields where critical-thinking skills are valued. History is traditionally a valued background for law school and graduate schools of business administration. An attraction of the major in history is its generality, making it an excellent choice for those with flexible career goals.

## **Undergraduate**

### **REQUIREMENTS FOR THE MAJOR**

### **REQUIREMENTS FOR THE MINOR**

## **Internships**

Students may qualify for internships with the Colorado State Historical Society, Historic Denver, Denver Museum of Nature and Science, the National Park Service and other agencies to earn credit and experience. Students must have a minimum 2.75 cumulative GPA in at least 15 semester hours of University of Colorado course work to take an internship. Three hours of internship can be taken in one semester.

## **Honors Program**

Students with a cumulative GPA of 3.5 or higher may compete for a degree in history awarded with Latin praise of *cum laude*, *magna cum laude* or *summa cum laude*. A cumulative GPA of 3.5-3.69 is required for *cum laude*, 3.7-3.89 for *magna cum laude*, and 3.9-4.0 for *summa cum laude*. Students must enroll for HIST 4849, in which they will prepare and submit a research paper for honors review by a faculty committee.

## **Downtown Campus Historical Studies Journal**

Since 1983, Downtown Campus graduate students have published this illustrated journal showcasing the most outstanding original research done each year by history students.

## **Independent Study**

Students may take up to 9 semester hours of courses in independent study or internships (no more than 6 hours per semester), with permission of the concerned instructors and an undergraduate advisor.

## **Graduate**

### **REQUIREMENTS FOR MA IN HISTORY**

#### **PUBLIC HISTORY MA MAJOR PROGRAM**

## **Certificate in Historic Preservation**

The history department also offers a certificate in historic preservation in conjunction with the College of Architecture and Planning. History students pursuing the certificate should consult the Web site for this program as well as their history advisor to determine appropriate course work.

## **Bachelor of Arts**

# **History BA**

Students must declare a major by the time they have completed 60 semester hours of course work. For the BA in history, a minimum of 36 semester hours of history course work is required. Majors must complete at least 18 upper-division hours at the University of Colorado Denver. Not more than 48 hours of history will be counted toward graduation requirements. No grade below a C (2.0) will count toward major requirements to graduate.

## **Course Requirements**

### **Required History Courses**

- HIST 3031 - Theory and Practice of History: An Introduction to the Major. **Semester Hours: 3**
- HIST 4839 - History Seminar. **Semester Hours: 3**

**Total: 6 Hours**

### **Distribution Requirement**

A minimum of 6 semester hours in each of the following areas: United States, Europe and world. At least 3 semester hours in each area must be upper-division.

**Total: 18 Hours**

## **Electives**

The degree requires a minimum of 12 additional semester hours of electives, which can be satisfied by a combination of additional history courses, internships or honors independent study for eligible students (see below for more information).

**Total: 12 Hours**

**Major Total: 36 Hours**

## **BA in History with Secondary Licensure**

Students seeking secondary social studies teacher licensure may pursue a BA in history. This option enables them to complete their history major as well as fulfill requirements for licensure at the undergraduate level. Call 303-556-8316 for more information or see the Web site at: <http://thunder1.cudenver.edu/clas/history/BAteaching.html>

## **Non Degree**

## **History Minor**

Students interested in a minor in history are required to complete 18 hours of course work. At least 12 semester hours must be completed at the Downtown Campus. No grade below a C (2.0) will count toward the minor.

## **Course Requirements**

### **Required Course**

- HIST 3031 - Theory and Practice of History: An Introduction to the Major. **Semester Hours: 3**

**Total: 3 Hours**

### **Distribution Requirement**

A minimum of 3 semester hours must be taken in each of the following areas: United States, Europe and World.

**Total: 9 Hours**

## **Electives**

Choose at least 6 hours of elective upper-division history credit.

**Total: 6 Hours**

**Minor Total: 18 Hours**

## **Master of Arts**

# **History MA**

► Graduate School Rules apply to this program

The master of arts in history requires 36 semester hours (12 courses). Students applying for admission to the program should have some background in history, though not necessarily a BA in the subject. The department encourages applications from individuals of any age interested in resuming their education. Graduate students in history develop skills in critical thinking, writing and independent research. Our program prepares students for a wide variety of professions, including teaching, government service, museum and archive management and historic preservation, as well as further degree work in history, law, librarianship and business. The department expects that students graduating with an MA in history will master the following general skills for their degrees:

- The ability to pursue independent historical research projects
- The ability to analyze historiographical arguments
- The ability to analyze primary documents and develop arguments from them
- The ability to create bibliographies using archival, library and Internet resources
- The ability to write in a variety of formats, including historiographical essays, book reviews and research papers

Students will also master knowledge of the basic historical content of both their major and minor fields, and an understanding of the historiographies and historical methods in their major and minor fields.

## **Admission Requirements**

- In addition to the general admission requirements of the Graduate School, the Department of History requires an undergraduate GPA of at least 3.25.
- All applicants to the history program must take the GRE. GRE scores form a part of the department's consideration of students' qualifications.

- Applicants are required to submit a sample of written work, usually a term paper or project of similar length.
- Applicants should address any gaps, weaknesses or special circumstances in their academic records in the statement of purpose portion of the application. In special circumstances, the department may modify its admission standards.

### **APPLICATION DEADLINES**

**April 1**            **Fall admission**  
**October 1**        **Spring admission**

Admission decisions are made by a graduate committee comprising the graduate advisor and faculty representing fields in U.S., European, global and public history.

## **Graduate School Policies**

All history MA students are subject to Graduate School policies related to graduate study, as well as to all relevant university policies. These policies cover such topics as time limits on degree completion, changing degree programs, incomplete grades, and more. Further information on these policies can be found in the Graduate School section of this online catalog.

## **Transfer Credits**

With approval from the graduate advisor and the appropriate faculty, students may transfer twelve graduate-level credits accrued before enrollment in the UC Denver MA history degree program, provided that they earned a grade of *B+* or better in these courses. Students must submit a syllabus for each course they wish to transfer, and faculty may require students to complete additional assignments to meet the expectations of the department. The department will not accept transfer of courses comparable to HIST 6013. Introduction to the Professional Study of History.

## **Grade Requirements**

A minimum grade of *B-* (2.7) is required in all UC Denver history courses applied toward the degree. Students who earn less than a *B-* in HIST 6013 must retake the class.

## **Residency Requirements**

The history department requires a residency of at least one academic year for the degree.

## **Graduate Advising**

Upon admission, students will sign a check list indicating their understanding and acceptance of the department's expectations. Early in their first semester students should contact a history

department graduate advisor to discuss their path through the program and to receive advice regarding the selection of major and minor fields.

## **Degree Tracking Responsibility**

Although faculty will provide reasonable guidance, it is up to students to monitor their own progress through the program in consultation with the graduate advisor and their major advisor; this includes knowledge and understanding of application and graduate deadlines, degree requirements, thesis guidelines, etc.

## **Choosing Advisors and Fields of Study**

All history MA candidates choose a major and minor field. Students will take courses in these fields (see Degree Requirements below) and will be tested in these fields (see Comprehensive Examinations). As soon as possible after consulting with the graduate advisor, students are responsible for contacting two field advisors, one to oversee their progress in the major field, the other to oversee their minor field. All students should have chosen a major field and major advisor by the beginning of their second semester.

## **Major Fields, Minor Fields and Concentrations**

The MA in history seeks to provide students with a balance of breadth and depth in the study of history. Major fields are broad areas of study within which students gain a general picture of historical processes. Concentrations provide focus for developing expertise within the major, either regionally or thematically. Minor fields provide a complementary or comparative area and must be from outside the major field.

Advisors and students together will work out Plans of Study, which indicate the courses students intend to take to meet their requirements, based on their selection of major and minor fields. *Students should make every effort to enroll in courses which best fit their major field, major concentration and minor field.*

Students can choose to major in one of the following four fields:

- European History
- Global History
- Public History
- U.S. History

The department has compiled a core readings list for each of these major fields. Students will draw on the core lists for their comprehensive exams. Core lists contain a number of themes with bibliographies for each theme. In consultation with their major advisor, students choose at least two books from each theme; for some themes, students will read more than two books.

### **Major Field Concentrations**

Students work with advisors to select one of the major field concentrations listed above. Concentrations provide thematic or regional focus to a broad geographical major (e.g. for the

global history major, students could concentrate on trade, borders, imperialism, etc. or any of the areas of regional expertise of our faculty). Readings for the major field concentration are in addition to the core reading list.

### **Minor Fields**

Students choose minor fields from the list of major fields or the list of major field concentrations. They choose their minor field list in consultation with the minor field advisor.

## **Degree Requirements**

All history MA students must have a major field and a minor field, and they must complete half of their course work at the 6000 level.

### **Required Introductory Course: 3 Semester Hours**

- HIST 6013 - Introduction to the Professional Study of History. **Semester Hours: 3**

### **Major Field: 18 Semester Hours**

#### **Core course in Major Field (3 semester hours)**

Each major field has a core course covering major approaches and themes. The core course familiarizes students with the field in a broad sense.

#### **Research Seminars (3-6 semester hours)**

Research seminars focus on students' development of an original, primary research paper. One 3-semester-hour research seminar is required of all students. A second research seminar is required for students not pursuing an extended research option; the second 3 semester hours can be taken within the major or minor field.

#### **Major electives (9-12 semester hours)**

Electives are made up of courses in the major and concentration, including readings courses, which address specific field historiographies, and optional extended research credits. Students who choose to do a thesis may apply 6 thesis semester hours (HIST 6950) toward the major electives requirement.

### **Minor Field: 12 Semester Hours**

#### **Minor Electives**

Electives are made up of courses in the minor field, including readings courses, which address specific field historiographies, or research seminars.

### **Open Elective: 3 Semester Hours**

Students may use the open elective to explore a course outside their major or minor or to do extra course work in one of their fields.

## **Total: 36 Semester Hours**

### **PUBLIC HISTORY MA MAJOR PROGRAM**

#### **INDEPENDENT STUDIES AND/OR INTERNSHIPS**

Candidates may register for up to 6 hours of internships or independent study, only one of which may be at the 6000-level. Only in exceptional circumstances will students be allowed to satisfy the research seminar requirement via independent study. Any independent study at the 6000-level needs the permission of the graduate advisor. Students interested in pursuing an independent study must find a faculty member willing to oversee their work, and they should expect the workload for an independent study to equal or exceed that required for other courses at the same level.

- HIST 5840 - Independent Study. **Semester Hours:** 1 to 3
- HIST 6840 - Independent Study. **Semester Hours:** 1 to 3
- HIST 6939 - Cooperative Education. **Semester Hours:** 1 to 6

#### **COMPREHENSIVE EXAMINATIONS**

All history MA candidates must pass a comprehensive examination in the major and minor fields after the completion of course work and before embarking on a thesis, curriculum project or public history project. The comprehensive exam evaluates students' knowledge of their course work and their reading lists for their major, minor and concentration. The exam consists of a take-home written section, with broad essay questions in both the major and minor fields; this is followed by an oral exam with the student's faculty committee. In answering their exam questions, students are expected to construct arguments and to show mastery of the historiographies, narratives and historical content in their fields. The comprehensive exam is administered and evaluated by a committee of the major advisor, the minor advisor and an outside reader from the history faculty.

#### **Master's Degree Extended Research Options**

The MA program in history offers a set of courses in which students can develop extended research interests. Students must select an advisor and develop a proposal for a specific research agenda in the semester before beginning work on a project.

##### **REQUIRED PUBLIC HISTORY THESIS (HIST 6950) OR PROJECT (HIST 6952)**

Students majoring in public history must complete either a thesis (6 semester hours) or a project (3 semester hours).

##### **OPTIONAL THESIS FOR STUDENTS IN U.S., GLOBAL AND EUROPEAN HISTORY (HIST 6950)**

Students majoring in U.S., global or European history can choose to write a thesis (6 semester hours in their major field).

### **OPTIONAL ADVANCED HISTORY CURRICULUM DEVELOPMENT (HIST 6951)**

Students who undertake their master's program when they are already teachers can choose to construct curriculum projects relevant to their teaching practice. See the separate section below on "Opportunities for Teachers and Teachers-in-Training."

- HIST 6950 - Master's Thesis. **Semester Hours:** 1 to 6
- HIST 6951 - Masters Project: Advanced History Curriculum Development. **Semester Hours:** 1 to 6

## **Thesis Requirements**

Students writing theses are expected to develop an original research agenda resulting in an extended paper. Students work with their major field advisor, who will help guide them through the process of research and writing. Students are expected to take no less than two semesters (enrolled in HIST 6950) to complete their theses. Before registering for HIST 6950, students must have a thesis proposal and initial bibliography approved by their advisor. The first semester of the thesis course is organized as a seminar in which students meet regularly with a department member and other thesis writers.

A thesis is evaluated by a committee of three, including the major advisor and two other faculty members chosen by the student in consultation with the major advisor. Upon completion of the thesis, the student meets with the committee members, who ask questions about the research and conclusions which the student must defend. In many instances, the committee will require further revisions, sometimes major in scope, before the thesis is accepted and cleared for submission to the Graduate School in fulfillment of degree requirements.

## **Project Requirements**

In lieu of a thesis, public history majors may choose to enroll in one semester of HIST 6952 to complete a public history project. Projects, which are usually conducted in collaboration with a public history organization, can entail creating an exhibit, organizing a museum or archival collection, conducting a preservation survey or similar activities. Students are required to prepare a paper describing the process and results of their project.

## **Opportunities for Teachers and Teachers-in-Training**

### **Curriculum Projects**

Licensed teachers enrolled in the history graduate program may choose to complete a curriculum development project. Students arrange curriculum development projects with a sponsoring faculty member. Generally, students are expected to develop and submit a complete course curriculum plan for each 3-semester-hour project. Projects need to show evidence of familiarity with the relevant historiographies and primary sources. Students may apply the hours

from HIST 6951 to either the major field or the minor field, depending on the project subjects. Curriculum plans must meet minimum criteria established by the history department in the document “Advanced History Curriculum Development Projects.”

- HIST 6951 - Masters Project: Advanced History Curriculum Development. **Semester Hours:** 1 to 6  
(3 or 6 semester hours in their major field, or 3 semester hours in their major and 3 semester hours in their minor)

## Secondary Teacher Licensure

Students interested in becoming secondary history and social studies teachers may choose to earn both the MA in history and secondary teacher licensure. For detailed information, see the following URL: <http://thunder1.cudenver.edu/clas/history/maPlanV.html>

We strongly encourage students to complete the School of Education & Human Development's initial professional teacher education (IPTE) program before enrolling in the history MA program; the history graduate program and the IPTE program require separate admission. Students complete 36 semester hours in history and 37 semester hours in the IPTE program . For the history degree, students take 18 semester hours in their major field, 12 semester hours in their minor field and 6 semester hours in curriculum and methods course work, which apply both to the IPTE program and the MA in history:

- HIST 5464 - Problems and Methods in Teaching History and Social Studies I. **Semester Hours:** 3
- and-
- HIST 5465 - Problems and Methods in Teaching History and Social Studies II. **Semester Hours:** 3

## Public History, MA in History

The MA program in history offers graduate-level major and minor fields in public history. Public history is a field of study that applies historical methods to the public sphere. This graduate major does not require a concentration, but students can choose to concentrate in museum studies or historic preservation. Public history majors can minor in any subspecialty the department currently offers. Students majoring in U.S., European or global history can also minor in public history.

**Admission Requirements—See History MA**

## Degree Requirements

### Required Introductory Course: 3 Hours

- HIST 6013 - Introduction to the Professional Study of History. **Semester Hours: 3**

### Major Courses: 18 Hours

- HIST 5234 - Introduction to Public History. **Semester Hours: 3**

#### Concentration Requirement (optional)

Students who choose to concentrate in museum studies or historic preservation must take either

- HIST 5231 - History in Museums. **Semester Hours: 3**  
-OR-
- HIST 5232 - Historic Preservation. **Semester Hours: 3**

#### Research Seminar (3 hours)

Research seminars focus on students' development of an original, primary research paper.

#### Major Electives (9-12 hours)

Electives are made up of courses in public history, which focus on methodology and practice and thesis or project credits. These courses include:

- HIST 5133 - Management of Material Culture and Museum Collections. **Semester Hours: 3**
- HIST 5228 - Western Art and Architecture. **Semester Hours: 3**
- HIST 5229 - Colorado Historic Places. **Semester Hours: 3**
- HIST 5240 - National Parks History. **Semester Hours: 3**
- HIST 5242 - Oral History. **Semester Hours: 3**
- HIST 5243 - Public History Administration. **Semester Hours: 3**
- HIST 5244 - Interpretation of History in Museums: Exhibits and Education. **Semester Hours: 3**
- HIST 5245 - Heritage Tourism. **Semester Hours: 3**
- HIST 6645 - Archival Management. **Semester Hours: 3**
- HIST 6992 - Seminar: Colorado Studies. **Semester Hours: 3**

Additionally, special topics courses may be offered in such areas as historic reenactments, monuments and memory and recreating historic house interiors. Students who didn't take HIST 5231 or HIST 5232 as their concentration requirement may use these courses toward their elective requirements.

## Minor Electives: 12 Hours

Electives are made up of courses in the minor field, including readings courses, which address specific field historiographies, or research seminars.

## Open Elective: 3 Hours

Students may use the open elective to explore a course outside their major or minor or to do extra course work in one of their fields.

## Total: 36 Hours

### INDEPENDENT STUDIES AND/OR INTERNSHIPS

Candidates may register for up to 6 hours of internships or independent study, only one of which may be at the 6000-level. Only in exceptional circumstances will students be allowed to satisfy the research seminar requirement via independent study. *Any independent study at the 6000-level needs the permission of the graduate advisor.* Students interested in pursuing an independent study must find a faculty member willing to oversee their work, and they should expect the workload for an independent study to equal or exceed that required for other courses at the same level.

- HIST 5840 - Independent Study. **Semester Hours:** 1 to 3
- HIST 6840 - Independent Study. **Semester Hours:** 1 to 3
- HIST 6939 - Cooperative Education. **Semester Hours:** 1 to 6

### COMPREHENSIVE EXAMINATIONS

All history MA candidates must pass a comprehensive examination in the major and minor fields after the completion of course work and before embarking on a thesis, curriculum project or public history project. The comprehensive exam evaluates students' knowledge of their course work and their reading lists for their major, minor and concentration. In answering their exam questions, students are expected to construct arguments and to show mastery of the historiographies, narratives and historical content in their fields. The comprehensive exam is administered and evaluated by a committee of the major advisor, the minor advisor and an outside reader from the history faculty.

## Master's Degree Extended Research Options

The MA program in history offers a set of courses in which students can develop extended research interests. Students must select an advisor and develop a proposal for a specific research agenda in the semester before beginning work on a project.

### **REQUIRED PUBLIC HISTORY THESIS (HIST 6950) OR PROJECT (HIST 6952)**

Students majoring in public history must complete either a thesis (6 semester hours) or a project (3 semester hours).

### **OPTIONAL ADVANCED HISTORY CURRICULUM DEVELOPMENT (HIST 6951)**

Students who undertake their master's program when they are already teachers can choose to construct curriculum projects relevant to their teaching practice. See the separate section below on "Opportunities for Teachers and Teachers-in-Training."

- HIST 6950 - Master's Thesis. **Semester Hours:** 1 to 6
- HIST 6951 - Masters Project: Advanced History Curriculum Development. **Semester Hours:** 1 to 6

## **Thesis Requirements**

Students writing theses are expected to develop an original research agenda resulting in an extended paper. Students work with their major field advisor, who will help guide them through the process of research and writing. Students are expected to take no less than two semesters (enrolled in HIST 6950) to complete their theses. Before registering for HIST 6950, students must have a thesis proposal and initial bibliography approved by their advisor. The first semester of the thesis course is organized as a seminar in which students meet regularly with a department member and other thesis writers.

A thesis is evaluated by a committee of three, including the major advisor and two other faculty members chosen by the student in consultation with the major advisor. Upon completion of the thesis, the student meets with the committee members, who ask questions about the research and conclusions which the student must defend. In many instances, the committee will require further revisions, sometimes major in scope, before the thesis is accepted and cleared for submission to the Graduate School in fulfillment of degree requirements.

## **Project Requirements**

In lieu of a thesis, public history majors may choose to enroll in one semester of HIST 6952 to complete a public history project. Projects, which are usually conducted in collaboration with a public history organization, can entail creating an exhibit, organizing a museum or archival collection, conducting a preservation survey, or similar activities. Students are required to prepare a paper describing the process and results of their project.

## **Opportunities for Teachers and Teachers-in-Training**

### **Curriculum Projects**

Licensed teachers enrolled in the history graduate program may choose to complete a curriculum development project. Students arrange curriculum development projects with a sponsoring faculty member. Generally, students are expected to develop and submit a complete course curriculum plan for each 3-semester-hour project. Projects need to show evidence of familiarity with the relevant historiographies and primary sources. Students may apply the credits from HIST 6951 to either the major field or the minor field, depending on the project subjects. Curriculum plans must meet minimum criteria established by the history department in the document "Advanced History Curriculum Development Projects" section.

- HIST 6951 - Masters Project: Advanced History Curriculum Development. **Semester Hours:** 1 to 6  
(3 or 6 semester hours in their major field, or 3 semester hours in their major and 3 semester hours in their minor)

## Secondary Teacher Licensure

Students interested in becoming secondary history and social studies teachers may choose to earn both the MA in history and secondary teacher licensure. For detailed information, see the following URL: <http://thunder1.cudenver.edu/clas/history/maPlanV.html>

We strongly encourage students to complete the School of Education & Human Development's initial professional teacher education (IPTE) program before enrolling in the history MA program; the history graduate program and the IPTE program require separate admission. Students complete 36 semester hours in history and 37 semester hours in the IPTE program. For the history degree, students take 18 semester hours in their major field, 12 semester hours in their minor field and 6 semester hours in curriculum and methods course work, which apply both to the IPTE program and the MA in history:

- HIST 5464 - Problems and Methods in Teaching History and Social Studies I. **Semester Hours:** 3
- and-
- HIST 5465 - Problems and Methods in Teaching History and Social Studies II. **Semester Hours:** 3

## Certificate in Historic Preservation

The history department also offers a certificate in historic preservation in conjunction with the College of Architecture and Planning. History students pursuing the certificate should consult the Web page for this program as well as their history advisor to determine appropriate course work.

**History MA**

## Humanities, Master of

**Director:** Myra Bookman  
**Assistant Director:** Margaret Woodhull  
**Office:** Modular #1, MO-01 (east of Tivoli Student Union)  
**Telephone:** 303-556-2305  
**Fax:** 303-352-3872  
**E-mail:** masterhs@ucdenver.edu  
**Web site:** [www.cudenver.edu/ict/index.html](http://www.cudenver.edu/ict/index.html)

## Faculty

### Senior Instructors:

Myra Bookman, PhD, University of Colorado  
Margaret Woodhull, PhD, University of Texas, Austin

The master of humanities offers graduate interdisciplinary studies designed for recent university graduates or those who have graduated earlier and are now seeking intellectual enrichment, career change or preparation for a PhD or professional school. Some students are teachers or other professionals seeking additional training to expand their expertise. Many enroll in the program for the sheer satisfaction of intellectual enrichment. It is ideal for students whose professional and personal obligations require flexibility and accessibility, whether they are part-time or full-time students. Students are able to pursue their interests across disciplinary boundaries and enroll in courses from a number of departments. Students who pursue the master of humanities will take courses from disciplines traditionally included in the category of liberal arts, such as literature, philosophy, history, communication, fine arts, art history, theatre and music. But they may also include appropriate course work from the social sciences or other areas. Each student's program is supervised by a faculty advisor.

### MH REQUIREMENTS

## Master of Humanities

# Humanities MH

► Graduate School Rules apply to this program

## Requirements for Admission

In addition to the general requirements of the Graduate School governing acceptance to a master's degree program, applicants must submit the following:

- a bachelor's degree
- two official copies of all transcripts, with an overall GPA of at least 3.0 out of 4.0
- a writing sample
- three letters of recommendation (at least two from academic sources)

- appropriate undergraduate training or professional background, or indicators that supply evidence of ability to pursue the MH degree
- a typed statement specifying the goal of advanced study in the humanities expressed in clear, correct and effective English
- standardized test scores are not required, but will be considered if submitted

After meeting all other requirements for admission, applicants may be required to have an interview to discuss their interest in the program and their plans for study. For out-of-state applicants, an appropriate substitute for the interview may be determined by the director.

*Provisional admission:*

Applicants may be admitted as provisional-status graduate students if their complete record indicates a high probability of success.

*Nondegree students:*

Potential applicants may take graduate-level courses as nondegree students (unclassified student with a bachelor's degree) if they:

1. Wish to strengthen their record in order to demonstrate that they can successfully complete courses in the program
- or-
2. Wish to start courses in the program prior to completing their application.

Up to 12 semester hours taken as a nondegree student may be accepted by the program once a student has been admitted to the program (the 12-hour limit also includes graduate work from another university).

*International Students:*

International students must also meet UC Denver requirements for international admission. See the Information for International Students section of this catalog or call 303-315-2230 for further information.

## **Degree Requirements**

Thirty-six semester hours are required for Track I and 39 semester hours are required for Track II. All courses credited toward the MH degree must be taken at UC Denver over a period not exceeding five years (a maximum of 12 graduate semester hours may be transferred from other institutions). At least a *B* average (3.0) must be maintained. A grade of *B-* or below will not be counted toward the degree. Each student's program is supervised by a faculty advisor. All independent study contracts must be approved in advance by one of the program directors. A total of two independent study courses and two 4000-level undergraduate courses may count toward the degree. The rest must be 5000/6000-level courses offered through various departments. All students must pass an oral comprehensive exam in order to graduate.

The master of humanities offers two general plans of study: Track I (individualized program) and Track II (cultural studies in interdisciplinary cluster areas).

# TRACK I (Individualized Program) Requirements—Thesis or Project Option

Students in Track I have the opportunity to fashion a course of study based on their individual interests and goals. In consultation with a faculty advisor, students choose two or three academic disciplines as areas of concentration. Students who select a thesis (6 semester hours) will submit a thesis proposal after completing 30 hours of course work. In the case of a project (3 semester hours), students will submit a project proposal after 33 hours.

## TRACK I REQUIREMENTS:

### Three interdisciplinary seminars

- HUM 5025 - Methods and Texts of the Humanities. **Semester Hours: 3**  
(Must be taken during the first year of entrance into the program.)

**Mid-Program Seminar**, an interdisciplinary seminar with a HUM prefix, which is approved for the student's program by one of the program directors (note that a Mid-Program Seminar **must** have a HUM prefix).

- HUM 5924 - Directed Research and Reading in Interdisciplinary Humanities. **Semester Hours: 3**  
(A final seminar that provides background reading, theory and research approaches for students to develop a thesis or project.)

### Electives

21-24 elective semester hours, depending on whether the student chooses the thesis or project option.

### Thesis or Project

A thesis (6 semester hours) or a final project (3 semester hours), which must include a substantial scholarly paper and may include a creative exercise involving at least two disciplines. In order to proceed with a thesis or project, all students must submit a proposal approved by three faculty members (and approved by one of the program directors in cases where one of the directors is not serving on the committee).

- HUM 5950 - Master's Thesis. **Semester Hours: 1 to 8**
- HUM 5960 - Master's Project. **Semester Hours: 1 to 8**

### Oral Exam

An oral exam before a committee of three faculty members in order to graduate.

## **Track I Total: 36 Hours**

## **TRACK II (Cultural Studies)—Non-thesis or Project Option**

This track is somewhat more structured than Track I, but does not require a thesis or a project. In consultation with a faculty advisor, students choose from courses organized into eight interdisciplinary clusters:

- classics
- identity and gender
- meaning and values
- philosophy and theory
- self, society and community
- social and political thought
- technology and culture
- understanding America/understanding the world

### **TRACK II REQUIREMENTS:**

#### **Core cluster courses**

Complete 15 semester hours in one of the above clusters.

#### **Three required interdisciplinary seminars**

- HUM 5025 - Methods and Texts of the Humanities. **Semester Hours: 3**  
(Must be taken during the first year of entrance into the program.)

**Mid-Program Seminar**, an interdisciplinary seminar with a HUM prefix, which is approved for the student's program by one of the program directors (note that a Mid-Program Seminar **must** have a HUM prefix).

- HUM 5924 - Directed Research and Reading in Interdisciplinary Humanities. **Semester Hours: 3**  
(A final seminar that provides background reading, theory and research approaches for students to develop a theme for the oral exam.)

#### **Electives**

15 additional elective semester hours (students retain considerable flexibility in selecting these hours).

### **Comprehensive Exam**

A comprehensive oral exam and a brief paper (15-20 pages) presented before a committee of three faculty members in order to graduate.

## **Track II Total: 39 Hours**

### **Individually Structured Major**

**Contact:** CLAS Advising Office, North Classroom, 4002

**Telephone:** 303-556-2555

**Web site:** [thunder1.cudenver.edu/clas/ISMmajor.html](http://thunder1.cudenver.edu/clas/ISMmajor.html)

The individually structured major (ISM) is an interdisciplinary major based on an individual contract rather than a preset list of courses. The flexibility of designing your own major affords liberal arts students an opportunity to pursue academic interests that cross traditional department or college boundaries. The ISM is attractive to students who have specific educational and career goals not satisfied with a traditional major or to students interested in a K–12 teaching career where breadth more than depth is valued to meet licensure requirements.

Students interested in the individually structured major work with faculty advisors in each discipline to create a program plan or contract to define the individually structured major. The ISM program plan must have an academic or career theme that ties course work together. Students are encouraged to complete the program plan before the end of the sophomore year.

Upon completion of graduation requirements, students in the individually structured major program will receive a diploma that will read “Bachelor of Arts, Individually Structured.” The University of Colorado transcript will read “Bachelor of Arts, Major: Individually Structured, Area:” (ISM title selected by student and approved as part of the ISM program plan).

### **REQUIREMENTS FOR THE MAJOR**

### **Honors**

Liberal arts students interested in graduating with Latin honors in the individually structured major program should meet with the assistant dean in the CLAS Advising Office to verify they meet eligibility requirements and to modify the program plan for the honors project. Students who successfully complete the ISM honors program will have the appropriate Latin honor designation placed on the University of Colorado diploma and transcript.

To participate in the ISM honors program, CLAS students must meet each of the following eligibility requirements:

- have a declared ISM major with an approved ISM contract
- possess a minimum 3.2 cumulative University of Colorado GPA
- possess a minimum 3.5 GPA on all completed University of Colorado course work in the ISM contract

Eligible ISM students must complete an undergraduate research project and present the results to a faculty honors committee. The level of Latin honors awarded is determined by the faculty honors committee. ISM students are to complete 3 to 6 semester hours of undergraduate independent study over a period of two semesters in one of the disciplines that constitute the ISM contract. The faculty sponsor from the project discipline will serve as honors committee chair. The independent study research project is to produce a thesis-quality report to be presented orally to a three-member interdisciplinary faculty honors committee representing the disciplines in the ISM contract. Upon completion of the research report and oral presentation to the honors committee, the level of Latin honors will be determined by the following criteria:

*cum laude*—awarded upon completion of written report and oral presentation

*magna cum laude*—awarded by honors committee based on successful written report and oral presentation

*summa cum laude*—awarded by honors committee based on excellence in written report and oral presentation

## **Bachelor of Arts**

# **Individually Structured Major BA**

## **Requirements for the Major**

The ISM program plan requires course work over two or three disciplines. A discipline is defined as a single department or program such as biology, ethnic studies or math. The ISM program plan must comply with the following policies:

- Between 48 and 54 semester hours are allowed for the program plan.
- A minimum of 16 semester hours must be upper-division credit.
- Each discipline requires a minimum of 15 semester hours, of which at least 3 must be upper-division hours.
- A minimum of 6 semester hours in each discipline must be taken from Downtown Campus faculty.
- A maximum of one discipline may be outside CLAS.
- A third optional discipline may be a mixture of course work, excluding courses from the first and second disciplines.
- An ISM title must be consistent with the academic theme and disciplines in the program plan.

The ISM program plan contract is approved by faculty for each discipline and submitted to the CLAS Advising Office, North Classroom, 4002, for college approval by the associate dean. The

ISM program plan must be approved before one-third of the ISM course work is completed. Typically, a maximum of 18-21 hours of previously completed courses is allowed.

Graduation requirements for ISM students include a minimum 2.0 GPA for all ISM course work, a minimum 2.0 GPA in each discipline in the program plan and a minimum of 24 hours of course work taken from Downtown Campus faculty.

## **Integrated Sciences, Master of**

**Director:** Mary Coussons-Read

**Office:** North Classroom, 5014

**Telephone:** 303-556-6665

**Fax:** 303-556-4861

**E-mail:** mary.coussons-read@ucdenver.edu

**Web site:** [thunder1.cudenver.edu/clas/mis/index.html](http://thunder1.cudenver.edu/clas/mis/index.html)

Students in this program have the opportunity to take courses from a variety of areas in mathematics, the natural and physical sciences (biology, chemistry, geology, physics) and computer science in a program designed for professional growth in their area of interest. These areas are further explored through a required project or thesis that includes independent research into some particular area of interest.

The length of time it takes to complete the degree is determined by the student's own schedule flexibility; many finish within two years of full-time work. The program requires completion within five years or within six successive summers. Courses are offered during a wide range of times, and many MIS students complete their curriculum while working full time.

## **Requirements for Admission**

To be considered for admission to the program, students:

- must submit an application for graduate admission, an essay specifying why they wish to be admitted to the program and their career goals, and three letters of recommendation
- must have completed at least 40 semester hours in mathematics, computer science, physics, biology, chemistry and/or geology
- may be required to take the GRE if their undergraduate GPA is less than 3.0

Students are admitted for the fall and spring semesters. The deadline for a complete application for fall admission is April 15; for spring admission it is October 15.

### **DEGREE REQUIREMENTS**

## **Master of Science**

# **Integrated Sciences MIS**

- ▶ Graduate School Rules apply to this program

## **Degree Requirements**

### **Minimum Hours**

Students must complete a minimum of 30 semester hours at the 4000+ level, of which 1-4 must be project hours or 4-6 must be thesis hours. In accordance with Graduate School rules, a minimum of 18 hours must be at the 5000+ level.

### **Breadth Requirement**

Students are required to take classes in a minimum of two (2) areas and maximum of three (3) areas within the disciplines of computer science, math, chemistry, biology, physics or geology. With approval, students may take a maximum of three (3) hours at the 4000+ level in one other school or college. All classes counted toward the degree must be related to the student's stated program goal and be approved as part of a program of study by the program director. The student is responsible for insuring that all prerequisite requirements for the classes they take have been met.

### **Depth Requirement**

The student must designate a primary area (either within a department or as an interdisciplinary concentration including, but not limited to, biophysics, biochemistry and computational biology). The student must take a minimum of nine (9) semester hours in the chosen area of concentration.

### **Project or Thesis**

All students must conduct independent research that results in either a thesis or project, which is presented to their committee in written form and is subject to an oral defense.

### **Graduate Advisor and Project Committee**

All candidates for the master of integrated sciences degree must select a faculty advisor and two other faculty members to serve with the advisor as the candidate's graduate committee. The committee members must be part of the graduate faculty and approved by the program director. The name of the faculty advisor must be submitted to the MIS director no later than two semesters following full admission to the program.

### **Integrative Biology**

**Chair:** Leo P. Bruederle

**Associate Chair:** Timberley M. Roane

**Program Assistant:** Barbara Schmidt

**Administrative Assistant:** Jacki Craig  
**Undergraduate Major Advisors:** Leo P. Bruederle, Kimberley F. Regier  
**Health Careers Advisors:** Charles A. Ferguson, Kent Nofsinger  
**Graduate Coordinator:** Timberley M. Roane  
**Lab Coordinator:** James Salmen  
**Office:** North Classroom, 3014  
**Telephone:** 303-556-8440  
**Fax:** 303-556-4352  
**Web site:** [www.cudenver.edu/biology/](http://www.cudenver.edu/biology/)

Undergraduate Program

Graduate Program

## **Faculty**

### **Professors:**

Daniel J. Howard, PhD, Yale University

Roderick Nairn, PhD, University of London

Bradley J. Stith, PhD, Washington State University

Diana F. Tomback, PhD, University of California, Santa Barbara

### **Associate Professors:**

Leo P. Bruederle, PhD, Rutgers, The State University at New Jersey

Greg Cronin, PhD, University of North Carolina at Chapel Hill

Charles A. Ferguson, PhD, University of Colorado

Timberley M. Roane, PhD, University of Arizona

### **Assistant Professors:**

Michele Engel, PhD, University of California, Los Angeles

Michael J. Greene, PhD, Oregon State University

Laurel Hartley, PhD, Colorado State University

Lisa Johansen, PhD, University of Alabama at Birmingham

Michael Wunder, PhD., Colorado State University

**Senior Instructor:**

Aimee Bernard, PhD, University of Rochester

**Instructors:**

Tod Duncan, PhD, University College, London (U.K.)

Cheri A. Jones, PhD, University of Florida

Kent Nofsinger, MD, University of Kansas School of Medicine

Kimberly F. Regier, MA, University of Colorado

**Adjoint Faculty:**

Rich Reading, PhD, Yale University

**Adjunct Faculty:**

Marc L. Goalstone, PhD, University of Denver

Jennifer Ramp Neale, PhD, University of Colorado, Boulder

**Emeritus Faculty:**

Gerald Audesirk, PhD, California Institute of Technology

Teresa E. Audesirk, PhD, University of Southern California

Linda K. Dixon, PhD, University of Illinois

Georgia E. Lesh-Laurie, PhD, Case Western Reserve University

## **Undergraduate**

Biology is the study of life. Our program teaches students about the diversity of life from the scale of the molecule to the biosphere. By studying the different fields of biology, the student

gains an appreciation for the characteristics of life and the remarkable evolutionary history leading to the present forms, and to applying biological knowledge and technology that are transforming our society and health. Knowledge of the interrelationships between populations and their habitats lead to respect, concern, and a sense of responsibility for our environment.

The curriculum is designed to provide a firm foundation in integrative biology. As such, graduates are well prepared for graduate study in biology, professional schools in the health careers, a variety of biologically oriented jobs in government and industry, teaching at various educational levels, and as with any liberal arts major, life itself. Students planning on a teaching career should consult the Teacher Education Program description in the School of Education & Human Development for information on teaching licensure.

## **REQUIREMENTS FOR MAJOR**

### **Additional Information**

Students with transfer credits in biology from other institutions should consult an undergraduate major advisor in the department for transfer credit and/or proper placement. Transfer credit from community college courses will not fulfill the requirements for upper-division semester hours or electives. However, students who have taken both semesters of anatomy and physiology at a community college *may* be given credit for having satisfied the structure/ function requirement for the major. Biology students seeking credit through AP (Advanced Placement), CLEP (College Level Examination Program) and/or IB (International Baccalaureate, Diploma Programme) should refer to the transfer tables (AP , CLEP , IB ) in the Information for Undergraduate Students chapter of this catalog, as well as consult an undergraduate major advisor in the department for proper placement.

*Departmental Honors.* Departmental honors will be awarded to students based on their GPA in classes taken from Downtown Campus faculty. The following minimum GPA must be met both for all courses taken at UC Denver (overall GPA) and for biology courses alone (biology GPA): *cum laude*, 3.5; *magna cum laude*, 3.7; *summa cum laude*, 3.9.

*Biology Research Scholars.* The biology faculty encourages students to pursue research as part of their undergraduate education. Students who excel in both course work and research will be recognized as UC Denver biology research scholars. To qualify as biology research scholars, students must fulfill all of the following requirements: (1) achieve a minimum GPA of 3.5 in courses taken from Downtown Campus faculty; (2) participate in a research project consisting of a minimum of 6 semester hours of independent study, taken over at least two semesters; (3) write a paper describing the rationale, methodology and results of their research; and (4) present a seminar or poster based on their research. Students who wish to become involved in research should contact Michele Engel no later than their junior year.

## **REQUIREMENTS FOR MINOR**

### **BIOTECHNOLOGY CERTIFICATE**

## **Graduate**

The master's program in biology is designed to prepare graduates for research and teaching positions, employment in business and industry, advanced training as secondary school science teachers and for graduate work at the doctoral level. The MS in biology may be obtained with an emphasis in ecology, genetics, plant systematics, evolutionary biology, neurobiology, microbiology, animal behavior, cell biology or molecular biology.

## **BIOLOGY MS**

### **Bachelor of Science**

# **Biology BS**

Biology students must declare their major by the time they have taken 60 semester hours. A minimum of 36 hours of biology must be completed, of which 18 hours are at the upper-division level and taken in residence with UC Denver Downtown Campus biology faculty. Included in the 36 hours are 22 semester hours of biology core courses, required of all majors. At least 14 hours of upper-division biology elective courses beyond the core are required to fulfill the remaining hours, including one 4000-level lecture course. A maximum of 6 semester hours of independent study (BIOL 3840/4840) **or** a combined maximum total of 6 hours of independent study (3 hours) and internship/cooperative education (BIOL 3939) (3 hours) can be counted toward the 14 hours of upper-division electives in biology. The minimum grade in each UC Denver biology course is C- (1.7). However, a GPA of 2.5 in biology courses taken at UC Denver is required to graduate. To ensure a proper background for the study of biology, majors are required to pass 31 hours of course work in ancillary disciplines, including two semesters of general chemistry laboratory, for which the minimum grade is C- (1.7). MATH 2830 and MATH 4830 may substitute for Calculus I (MATH 1401). All biology courses applied to the undergraduate biology major must be completed within 10 years of graduation. The following biology and ancillary courses are required and must be completed with a letter grade of C- (1.7) or higher:

## **Requirements for the Major**

### **Biology Core Courses**

- BIOL 2051 - General Biology I: SC1. **Semester Hours: 3**
- BIOL 2071 - General Biology Laboratory I: SC1. **Semester Hours: 1**
- BIOL 2061 - General Biology II: SC1. **Semester Hours: 3**
- BIOL 2081 - General Biology Laboratory II: SC1. **Semester Hours: 1**
- BIOL 3411 - Principles of Ecology. **Semester Hours: 3**
- OR-
- BIOL 3412 - Fundamentals of Applied Ecology. **Semester Hours: 3**
- BIOL 3611 - General Cell Biology. **Semester Hours: 3**
- BIOL 3832 - General Genetics. **Semester Hours: 4**

## One of the following structure/function courses:

- BIOL 3225 - Human Physiology. **Semester Hours: 4**
- BIOL 3244 - Human Anatomy. **Semester Hours: 4**
- BIOL 3654 - General Microbiology. **Semester Hours: 4**
- BIOL 4335 - Plant Science. **Semester Hours: 4**

## Total Biology Core: 22 Hours

## Biology Electives

*Biology elective courses (3000 or 4000 level) \**

## Total Electives: 14 Hours

## Biology (core and electives) Total: 36 Hours

## Ancillary Core Courses

- CHEM 2031 - General Chemistry I: SC1. **Semester Hours: 3**
- CHEM 2038 - General Chemistry Laboratory I: SC1. **Semester Hours: 1**
- CHEM 2061 - General Chemistry II: SC1. **Semester Hours: 3**
- CHEM 2068 - General Chemistry Laboratory II: SC1. **Semester Hours: 2**
- CHEM 3411 - Organic Chemistry I. **Semester Hours: 4**
- CHEM 3421 - Organic Chemistry II. **Semester Hours: 4**
- OR-
- CHEM 3810 - Biochemistry. **Semester Hours: 4**
- MATH 1401 - Calculus I: MA1. **Semester Hours: 4**
- OR-
- MATH 2830 - Introductory Statistics: MA1. **Semester Hours: 3**
- *and* MATH 4830 - Applied Statistics. **Semester Hours: 3**
- PHYS 2010 - College Physics I. **Semester Hours: 4**
- PHYS 2030 - College Physics Lab I: SC1. **Semester Hours: 1**
- PHYS 2020 - College Physics II: SC1. **Semester Hours: 4**
- PHYS 2040 - College Physics Lab II: SC1. **Semester Hours: 1**

## Total Ancillary Core: 31-33 Hours

The following courses will **not** count toward the BS in biology:

- BIOL 1136 - Human Biology. **Semester Hours: 3**
- BIOL 1550 - Basic Biology: Ecology and the Diversity of Life: SC1. **Semester Hours: 4**
- BIOL 1560 - Basic Biology: From Cells to Organisms: SC1. **Semester Hours: 4**

- BIOL 3122 - Natural History of Colorado. **Semester Hours:** 3

## \* **Biochemistry as a Biology Elective**

Students who have taken both semesters of organic chemistry (CHEM 3411 and CHEM 3421) may use either biochemistry (CHEM 3810) or 4 hours of the general biochemistry series (CHEM 4810 and 4820 combined) as one of their required upper-division biology electives.

## **Organismic Track**

The organismic track was developed for biology majors interested in an integrative and holistic background in biology, which includes the diversity of organisms, how they evolved, how they function and how they interact with their environment. In addition to the core requirements for the biology major, students are expected to select one course from each of four knowledge areas when completing their upper-division electives. These areas are: (1) molecular biology and heredity, (2) cell biology, (3) diversity of form and function and (4) ecology and evolution. This track is particularly valuable for students who want to pursue advanced degrees in the biological sciences or want to teach biology. Interested students should contact an undergraduate major advisor in the department for additional information and guidelines.

## **Certificate**

# **Biotechnology Certificate**

To serve the needs of students who wish to obtain recognition for the acquisition of specialized skills in biology and to prepare students for graduate school, health careers and jobs in industry, the Department of Integrative Biology offers a certificate program in biotechnology. Upon completion of the required courses (21 to 22 semester hours), including independent study or internship, the student will be awarded a certificate and receive the biotechnology certificate on their transcript. The certificate may be completed in addition to an undergraduate or graduate degree or as a stand-alone certificate. A complete description of the biotechnology certificate can be found on the biology Web site: [www.cudenver.edu/biology/bioTechCert.html](http://www.cudenver.edu/biology/bioTechCert.html).

## **Non Degree**

# **Biology Minor**

For a biology minor, students must complete all biology core requirements (22 hours), of which a minimum of 9 hours must be completed in residence on the UC Denver Downtown Campus. The minimum grade in each UC Denver course is C- (1.7); however, a GPA of 2.5 is required in biology courses taken at UC Denver to complete the minor. In addition, students must complete one year of general chemistry including laboratory with a grade of C- (1.7) or higher.

## Master of Science

# Biology MS

► Graduate School Rules apply to this program.

## Requirements for Admission

Applicants must hold a baccalaureate degree from an accredited college or university, awarded within the preceding nine years. Students whose biology degree was awarded 10 or more years prior to entrance to the UC Denver program will be expected to retake or show competence in the biology core courses. Successful applicants generally have earned an overall GPA of 3.0 or better. Most applicants have an undergraduate major in biology or a related field. Students entering the master's program in biology must have completed the equivalent of a minor in biology (see above). Although a deficit of one course is allowed, this must be completed within the first semester of entering the master's program and will not apply toward the degree. Both the general GRE and biology subject GRE are required of all applicants, with scores above the 50th percentile required on all parts. The graduate application form is submitted online to UC Denver graduate admissions. The biology supplemental application form is also required and is submitted directly to the biology program. Application information can be found at: <http://thunder1.cudenver.edu/clas/biology/gradAdmission.html>

## Degree Requirements

All course work taken within the Department of Integrative Biology and applied toward the degree must be 5000 level or above. There is no core of required courses. A course plan is developed by the student and major advisor and is approved by the student's graduate committee. With the advisor's and/or graduate committee's approval, a maximum of 6 semester hours of course work at the 4000 level taken outside the department may be applied toward the degree. At least 18 semester hours must be taken from faculty in the Department of Integrative Biology at UC Denver. Upon approval from the Department of Integrative Biology, no more than 12 semester hours may be transferred into the program. Two types of degree plans are offered:

### Plan I (with thesis)

Requires 30 semester hours including required thesis hours and two semesters of:

- BIOL 6655 - Seminar. **Semester Hours:** 1

### Plan II (without thesis)

Requires 32 semester hours including two semesters of:

- BIOL 6655 - Seminar. **Semester Hours: 1**

## Additional Information

The student is referred to the MS in Biology Web site for more detailed information. Specific questions relating to the student's background and specific program needs should be directed to the biology graduate coordinator.

## Interdisciplinary Programs

Most of the individual departments represented in the College of Liberal Arts and Sciences have numerous links with other disciplines; consequently, many faculty members encourage students to take courses in related disciplines. Students will often find opportunities to explore relationships among different disciplines while studying *within* traditional disciplines.

The college also has several established interdisciplinary programs leading to full undergraduate degrees, minors, certificates and graduate degrees. A brief description of each program follows, with a link to its respective program section.

## Undergraduate

- The **MINOR IN CHINESE STUDIES** combines studies in language, literature and social sciences for students wishing to explore the interwoven perspectives of Chinese culture.
- The **EDUCATIONAL STUDIES MINOR AND K-12 TEACHER LICENSURE PROGRAMS**, in collaboration with the School of Education & Human Development, enable students to add educational training to their liberal arts and sciences discipline studies.
- The **ENVIRONMENTAL SCIENCES MINOR** allows students to choose courses from the social sciences, physical sciences, engineering, humanities and statistics to create a unique program of study.
- The **ETHNIC STUDIES MINOR** provides students the opportunity, through academic investigation, to develop a greater understanding of the cultural pluralism of the present day United States and to acquire skills needed in professional and social service fields.
- Students in the **COMMUNITY HEALTH SCIENCE MINOR** program focus on the social determinants of health and disease as they prepare for careers in public health and medicine.
- The **INDIVIDUALLY STRUCTURED MAJOR (ISM)** provides liberal arts and sciences students the freedom to create their own interdisciplinary major centered around an academic or career theme.
- The **INTERNATIONAL STUDIES MAJOR** affords students the opportunity to learn about diverse cultures as they acquire the methodological tools to analyze the world from different academic disciplines. Study abroad experiences are strongly encouraged in this major.

- The **LAW STUDIES MINOR** introduces the study of law in relation to social and political discourse, and provides preparation for students contemplating application to law school.
- The **MINOR IN RELIGIOUS STUDIES** gives students a grounding in religious traditions through such interrelated disciplines as anthropology, literature, philosophy and psychology.
- The **MINOR IN SOCIAL JUSTICE** invites students to consider social justice as a goal of every healthy society and the best guarantee for sustaining peace. Two components of social justice are *civic engagement* and *critical consumption*, around which students create an interdisciplinary course of study.
- Students in the **MINOR IN SUSTAINABILITY** are encouraged to integrate approaches from different disciplines to problems related to sustainability, including sustainable ecology, environmental ethics, sustainable food production, critical consumerism and environmental policymaking.
- The **WOMEN'S AND GENDER STUDIES MINOR** focuses on the ways in which gender and sexuality help us to understand our past and present worlds, combining course work from humanities and social sciences disciplines.

## Graduate

- The **MS IN ENVIRONMENTAL SCIENCE** combines environmental courses from the social sciences, physical sciences, engineering, humanities and statistics. A graduate certificate is also available.
- **PhD IN HEALTH AND BEHAVIORAL SCIENCES** students integrate social, cultural and biomedical perspectives to understand the underpinnings of health and the conditions essential for its creation and maintenance.
- Students interested in synthesizing curricula in the arts, communication, history, literature, philosophy and theatre at the graduate level may be interested in the **MASTER OF HUMANITIES (MH)** degree.
- The **MASTER OF INTEGRATED SCIENCES (MIS)** degree enables students to combine course work and independent research within the disciplines of computer science, math, chemistry, biology, physics or geology.
- Students in the **MASTER OF SOCIAL SCIENCE (MSS)** degree program develop their own interdisciplinary curriculum in the social sciences (anthropology, economics, geography, history, political science, psychology and sociology), as well as related disciplines (such as English, philosophy, education, public affairs and architecture).

## International Studies

**Interim Director:** Christoph H. Stefes (political science)

**Office:** King Center, 514

**Telephone:** 303-556-2748

**E-mail:** christoph.stefes@ucdenver.edu

**Web site:** www.ucdenver.edu/ints/

## **Faculty**

The international studies program is an interdisciplinary major with faculty drawn from several independent academic departments.

## **Undergraduate Major**

In a world where global commerce and politics have emerged as driving forces, the international studies major provides students with global perspectives. This interdisciplinary liberal arts degree is designed to offer a thorough education in international issues in preparation for international careers. This major offers students the opportunity to develop a deeper understanding of complex international issues and the forces shaping our world. Increasingly, government and the private sector seek graduates familiar with differing perspectives and cultures and willing to adapt to the rapidly changing workplace.

The international studies major not only introduces students to diverse cultures, but also gives them the methodological tools to analyze the world from different academic disciplines. The program requires students to take courses from a wide array of departments: anthropology, economics, geography, history, modern languages, political science, religious studies and the Business School. The program is designed to give students both a broad understanding of different methods and approaches to international problems and ensure that students come out of the program with a deeper understanding of one world region.

While the major does not require study abroad or an international internship, we encourage students to pursue such opportunities. The major is committed to supporting students who wish to take advantage of the numerous international education opportunities available through the UC Denver Office of International Affairs.

### **REQUIREMENTS FOR THE MAJOR**

## **Regional Specialization**

Within the courses taken to fulfill the three different thematic concentrations and introductory courses, students must specialize in a single region. Students should consult with the major advisor to confirm which courses fulfill the regional requirement. At least 15 hours of courses must focus on one of the following world regions:

**Asia**

**Europe**

**Latin America**

**Middle East or Islamic World**

**Sub-Saharan Africa**

Majors may use any of the courses taken to fulfill the introductory or concentration requirements for the regional specialization. Language courses may be used to fulfill the regional requirement. Wherever possible, students must fulfill their language requirement with a language applicable to the region they study. (No semester hours are required beyond those needed to fulfill the introductory courses and thematic concentrations).

## Honors

Students with a cumulative GPA of 3.5 or above in all UC Denver courses may compete for a degree in international studies awarded with Latin praise of *cum laude*, *magna cum laude* or *summa cum laude*. Students with a GPA of 3.5 in their international courses are eligible for the award of *cum laude*, those with 3.7 are eligible for *magna cum laude*, and those with 3.9 or above may be awarded *summa cum laude*. In addition to a high GPA, candidates for honors must submit a research paper prepared under the supervision of a Downtown Campus faculty member for review by an honors examination committee. The committee will consist of three faculty members drawn from departments participating in the program.

## Study Abroad

Students are encouraged to participate in a study abroad program in the region they choose as their specialization. Please note that the major advisor must approve the study program in advance, and no more than 18 semester hours from a study abroad program can apply to the major. The courses applied to the major must also be approved by their respective disciplines. Travel-study courses that are University of Colorado resident courses will not count against the residency requirement for the major. Students should contact the Office of International Affairs for more information concerning study abroad opportunities (located at the Lawrence Street Center, 932, 303-315-2230).

## Internships

Students may use up to 6 internship semester hours toward international studies graduation requirements. The internship must have a CLAS faculty sponsor who teaches courses applicable to the international studies degree. The internship must have an international element to count toward the degree. Students should seek the approval of the international studies program director for all internships. Students must fulfill the CLAS requirements to participate in an internship: junior standing and a minimum 2.75 GPA. Students must maintain communication with their faculty advisors on the progress they make during the internship if they expect to receive credit toward the major. For further information regarding internships, students should contact the Experiential Learning Center in Tivoli 260, 303-556-2250.

## Independent Study

Students may apply up to 6 semester hours of independent study toward international studies graduation requirements. All independent studies require students to work closely with a faculty member to carry out a research project. Under the supervision of a faculty member, students

must prepare a serious research proposal to guide their project during the semester. Students participating in these courses must have completed at least 18 hours of the international studies major to participate in independent study. Students who participate in independent study must have an overall UC Denver GPA of 2.5. All independent studies are subject to approval of the dean's office.

## **Bachelor of Arts**

# **International Studies BA**

## **Program Requirements**

The major consists of 48 to 51 semester hours, structured as follows:

- complete 9 semester hours from a list of introductory courses listed below
- choose three thematic concentrations from the following five:  
language and culture, international relations and comparative politics, economics and development, international commerce, and regional societies and history. Majors complete 12 hours in each theme (except international commerce, which requires 15). Below is a list of preapproved courses in each concentration. Students wishing to apply courses not on the list may do so with the approval of the program director.
- a capstone seminar (3 semester hours) for students in their last year
- the major is interdisciplinary, and students must take classes in at least three different disciplines (anthropology, economics, geography, history, international commerce/business, modern languages, political science or religious studies). No more than 18 hours in any one discipline will be accepted toward the major.
- students are expected to develop a regional specialization. They must choose courses from the introductory and thematic concentration lists that contribute to an understanding of a world region.
- all international studies majors must demonstrate a proficiency in a language other than English. This may be fulfilled with the fourth semester of a foreign language course sequence. Students must receive a grade of C or better in all language courses; they also have the option of testing out of this requirement.
- majors must complete at least half (24 hours) of the semester hours at the Downtown Campus. A cumulative GPA of 2.5 or better is required, with a minimum grade of C- earned in all major courses to graduate.

## **Required Courses**

### **Introductory Courses**

Choose one course from each of the following three groups:

### **Choose one:**

- ECON 2012 - Principles of Economics: Macroeconomics: SS1. **Semester Hours: 3**
- GEOG 1102 - World Regional Geography: SS2. **Semester Hours: 3**

### **Choose one:**

- P SC 3022 - Introduction to Comparative Politics. **Semester Hours: 3**
- P SC 3042 - Introduction to International Relations. **Semester Hours: 3**

### **Choose one:**

- ANTH 2102 - Culture and the Human Experience: SS3. **Semester Hours: 3**
- HIST 3451 - Introduction to African History. **Semester Hours: 3**
- HIST 3460 - Introduction to Latin American History. **Semester Hours: 3**
- HIST 3470 - Introduction to Asian History. **Semester Hours: 3**
- HIST 3480 - Introduction to European History. **Semester Hours: 3**
- HIST 3483 - Introduction to Modern South Asia. **Semester Hours: 3**
- RLST 2660 - World Religions: AH3. **Semester Hours: 3**

**Total: 9 Hours**

## **Thematic Concentrations**

Students must take a minimum of four upper-division courses in each of three of the following five concentrations, for a total of 36 semester hours (12 hours in each concentration). Please note that the concentration in international commerce requires five courses rather than four, for a total of 39 semester hours. The list below does not include all the international courses applicable to the major, only the ones frequently taught. It is expected to change as departments develop new courses and hire new faculty in different areas.

*Note:* Concentrations are interdisciplinary and are not the same as academic departments. Students must take courses in at least three different academic departments and no more than 18 semester hours in any one department.

## **Language, Culture and Literature**

This concentration aims at deepening the student's understanding of the cultural underpinnings and worldviews of different societies.

Modern languages: any upper-division courses in the Department of Modern Languages except Methods of Teaching French/German/Spanish. We have not listed the courses individually because there are so many upper-division courses on world literature and culture available in modern languages.

- ANTH 3121 - Language and Communication. **Semester Hours: 3**
- ANTH 4130 - Comparative Religious Systems. **Semester Hours: 3**  
-OR-
- RLST 4010 - Comparative Religious Systems. **Semester Hours: 3**
- PHIL 4650 - Differing Concepts of God. **Semester Hours: 3**  
-OR-
- RLST 4400 - Differing Concepts of God. **Semester Hours: 3**

## International Relations and Comparative Politics

Courses in this concentration stress comparative approaches, diplomacy and conflict resolution. Students will have an understanding of how different societies make decisions and manage international relations. How do other cultures conceive of and practice power?

- ANTH 4180 - The Nature of Power. **Semester Hours: 3**
- HIST 3121 - The World at War, 1914-1945. **Semester Hours: 3**
- HIST 4032 - Globalization in World History Since 1945. **Semester Hours: 3**
- HIST 4220 - U.S. Foreign Policy Since 1912. **Semester Hours: 3**
- HIST 4412 - Mexico and the United States: People and Politics on the Border. **Semester Hours: 3**
- HIST 4471 - The Second World War. **Semester Hours: 3**
- HIST 4475 - The Vietnam War. **Semester Hours: 3**
- \* P SC 3022 - Introduction to Comparative Politics. **Semester Hours: 3**
- \* P SC 3042 - Introduction to International Relations. **Semester Hours: 3**
- P SC 4057 - Religion and Politics. **Semester Hours: 3**  
-OR-
- RLST 4500 - Religion and Politics. **Semester Hours: 3**
- P SC 4105 - Comparative Politics: Europe. **Semester Hours: 3**
- P SC 4146 - Indigenous Politics. **Semester Hours: 3**
- P SC 4156 - The Arab-Israeli Peace Process. **Semester Hours: 3**
- P SC 4185 - Corruption in the U.S. and Abroad. **Semester Hours: 3**
- P SC 4216 - International Politics: Human Rights. **Semester Hours: 3**
- P SC 4217 - Human Rights in Theory and Practice. **Semester Hours: 3**
- P SC 4225 - Democracy and Democratization. **Semester Hours: 3**
- P SC 4226 - The United Nations in World Affairs. **Semester Hours: 3**
- P SC 4236 - American Foreign Policy. **Semester Hours: 3**
- P SC 4266 - International Law. **Semester Hours: 3**
- P SC 4286 - International Relations: War or Peace? **Semester Hours: 3**
- P SC 4726 - Russian and Chinese Foreign Policy. **Semester Hours: 3**
- P SC 4736 - The Middle East in World Affairs. **Semester Hours: 3**
- P SC 4807 - Revolution and Political Violence. **Semester Hours: 3**
- P SC 4995 - Travel Study Topics. **Semester Hours: 1 to 3**

\* If not taken to fulfill the introductory major requirements.

## Economics, Development and Environment

Students taking this concentration will develop an understanding of economic processes in an international context. The courses offer comparative approaches and cultural perspectives on development and environment.

*Note:* Students in this concentration must take ECON 2012 - Principles of Economics: Macroeconomics as one of their three introductory courses.

### Required economics course

- ECON 2022 - Principles of Economics: Microeconomics: SS1. **Semester Hours: 3**

### Choose three upper division courses from the following:

- ANTH 4010 - Global Health Studies I: The Biocultural Basis of Health. **Semester Hours: 3**
- ANTH 4070 - Culture of Development and Globalization. **Semester Hours: 3**
- ANTH 4140 - Principles of Economic Anthropology. **Semester Hours: 3**
- ANTH 4170 - Culture and the Environment. **Semester Hours: 3**
- ANTH 4390 - Laboratory Methods in Archaeology. **Semester Hours: 3**
- ECON 4081 - Intermediate Macroeconomic Theory. **Semester Hours: 3**
- ECON 4230 - Law and Economics. **Semester Hours: 3**
- ECON 4410 - International Trade. **Semester Hours: 3**
- ECON 4420 - International Finance. **Semester Hours: 3**
- ECON 4540 - Environmental Economics. **Semester Hours: 3**
- ECON 4770 - Economic Development--Theory and Problems. **Semester Hours: 3**
- GEOG 3411 - Globalization and Regional Development. **Semester Hours: 3**
- GEOG 3430 - Geography of Tourism. **Semester Hours: 3**
- GEOG 4265 - Sustainability in Resources Management. **Semester Hours: 3**
- P SC 4085 - Comparative Public Policy. **Semester Hours: 3**
- P SC 4126 - Introduction to International Political Economy. **Semester Hours: 3**
- P SC 4235 - Politics and Markets in Latin America. **Semester Hours: 3**
- P SC 4248 - Gender, Globalization and Development. **Semester Hours: 3**
- P SC 4326 - Advanced International Political Economy: Globalization. **Semester Hours: 3**
- P SC 4365 - Global Ecological Crises. **Semester Hours: 3**
- P SC 4555 - International Women's Resistance. **Semester Hours: 3**

## International Commerce

The objective of this concentration is to give students an introduction to international business practices.

ECON 2012 and ECON 2022 are prerequisites for most of these courses. Note that the first three courses are prerequisites for MGMT 4400 and MKTG 4200. Students opting for this concentration must take both MGMT 4400 and MKTG 4200. Students must meet Business School entrance requirements for the international commerce concentration, with a 3.0 GPA overall or in the last 24 hours.

*Note:* This concentration requires 15 hours, not 12.

- ACCT 2200 - Financial Accounting and Financial Statement Analysis. **Semester Hours:** 3  
(MATH 1070 or MATH 1110 prerequisite and sophomore standing).
- \* MGMT 3000 - Managing Individuals and Teams. **Semester Hours:** 3
- \* MKTG 3000 - Principles of Marketing. **Semester Hours:** 3
- \* MGMT 4400 - Environments of International Business. **Semester Hours:** 3
- \* MKTG 4200 - International Marketing. **Semester Hours:** 3

\* Students must have junior standing to take the 3000-level courses and must be formally to the international studies program to take the 4000-level courses.

## Regional Societies and History

Students in this concentration are expected to develop a historical understanding of how nations and political systems develop. To understand why international actors behave in a given way, one needs to understand the historical background of those actors; this concentration will familiarize students with that background.

- ANTH 4220 - Community in Global Context. **Semester Hours:** 3
- ANTH 4250 - Culture Change in the Modern World. **Semester Hours:** 3
- ANTH 4740 - Ethnography of Mexico and Central America. **Semester Hours:** 3
- ANTH 4995 - Travel Study. **Semester Hours:** 3 to 9
- GEOG 3120 - Geography of Europe. **Semester Hours:** 3
- GEOG 3130 - Central America and the Caribbean. **Semester Hours:** 3
- GEOG 3140 - Geography of South America. **Semester Hours:** 3
- GEOG 3150 - Middle East. **Semester Hours:** 3
- HIST 3350 - Colonial Latin America. **Semester Hours:** 3
- HIST 3500 - African History in Novels and Films. **Semester Hours:** 3
- HIST 3995 - Travel Study Topics. **Semester Hours:** 1 to 15
- HIST 4024 - Nineteenth Century Europe. **Semester Hours:** 3
- HIST 4025 - Twentieth Century Europe. **Semester Hours:** 3
- HIST 4027 - The Enlightenment: Eighteenth Century Intellectual History. **Semester Hours:** 3
- HIST 4028 - After the Revolution: Nineteenth Century Intellectual History. **Semester Hours:** 3

- HIST 4029 - Fin de Siecle: Late Nineteenth and Early Twentieth Century Intellectual History. **Semester Hours: 3**
- HIST 4046 - Victorians and Victorianism. **Semester Hours: 3**
- HIST 4051 - Great Britain: 1760-1914. **Semester Hours: 3**
- HIST 4062 - Modern France, 1789 to the Present. **Semester Hours: 3**
- HIST 4071 - Modern Germany. **Semester Hours: 3**
- HIST 4074 - Post-War Germany. **Semester Hours: 3**
- HIST 4082 - Reform and Revolution in Russia: The 1860s to 1917. **Semester Hours: 3**
- HIST 4083 - Russia Since 1917. **Semester Hours: 3**
- HIST 4086 - Eastern Europe. **Semester Hours: 3**
- HIST 4303 - Sex and Gender in Modern Britain. **Semester Hours: 3**
- HIST 4411 - Modern Mexico. **Semester Hours: 3**
- HIST 4414 - Nationalism and State Building in Latin America, 1750-1850. **Semester Hours: 3**
- HIST 4415 - Social Revolutions in Latin America. **Semester Hours: 3**
- HIST 4421 - Modern China. **Semester Hours: 3**
- HIST 4451 - Southern Africa. **Semester Hours: 3**
- HIST 4455 - African Struggle for Independence. **Semester Hours: 3**
- HIST 4460 - The Islamic Golden Age. **Semester Hours: 3**
- OR-
- HIST 4461 - The Modern Middle East. **Semester Hours: 3**
- HIST 4621 - Explorers and Exploration. **Semester Hours: 3**
- P SC 3125 - Introduction to Latin American Society. **Semester Hours: 3**
- P SC 4155 - Political Systems of the Middle East and North Africa. **Semester Hours: 3**
- P SC 4165 - Islamic Politics and Culture. **Semester Hours: 3**
- OR-
- RLST 3100 - Islamic Politics and Culture. **Semester Hours: 3**
- P SC 4175 - Politics and Governments of the Pacific Rim. **Semester Hours: 3**
- P SC 4505 - The Post-Soviet World: Origins and Present Condition. **Semester Hours: 3**
- P SC 4554 - Chicano and Latino Politics. **Semester Hours: 3**
- P SC 4615 - Politics and Government of China. **Semester Hours: 3**
- RLST 3400 - Asian Philosophies and Religions. **Semester Hours: 3**
- OR-
- PHIL 3666 - Asian Philosophies and Religions. **Semester Hours: 3**
- RLST 3500 - Religions of India. **Semester Hours: 3**
- RLST 3660 - Chinese Philosophy and Culture. **Semester Hours: 3**
- OR-
- PHIL 3981 - Chinese Philosophy and Culture. **Semester Hours: 3**

## International Studies Capstone Course

All majors must take a 3-semester-hour seminar focusing on a global issue. Currently the designated capstone courses are:

- HIST 4417 - Commodities and Globalization: Dessert in World History. **Semester Hours: 3**
- P SC 4126 - Introduction to International Political Economy. **Semester Hours: 3**

## Law Studies

**Coordinator:** Omar Swartz (communication), JD, Duke University; PhD, Purdue University

**Telephone:** 303-556-5660

**E-mail:** Omar.Swartz@ucdenver.edu

**Additional Advisor:** Glenn Morris (political science), JD, Harvard University School of Law

**Telephone:** 303-556-6243

**E-mail:** Glenn.Morris@ucdenver.edu

**Web site:** [www.ucdenver.edu/communication/undergradMinors.html#Law](http://www.ucdenver.edu/communication/undergradMinors.html#Law)

The law studies minor at UC Denver is an interdisciplinary course of studies intended to help students become intelligent and critical scholars of legal and political discourse. While the minor may be useful for students contemplating law school, it is also intended to appeal to a wider group of students interested in issues relating to law and society and careers in public policy-related fields. The minor is designed to achieve the following three interrelated goals:

- to introduce students to the major areas of law that affect life in the United States and important legal issues that influence current events
- to enable students to become familiar and fluent with a legal vocabulary and legal reasoning
- to better prepare students with the analytical and conceptual tools to be critical citizens in our constitutional democracy

In addition to these goals, students who complete the minor with the intention of attending law school may find themselves more prepared than they otherwise would be for the often mystifying and rigorous first year. To help these students, the program contains an advising component which assists students who are contemplating law school to provide them with a realistic appraisal of law school and of the legal profession. The counselors will aid students with the law school application process.

### REQUIREMENTS FOR THE MINOR

## Non Degree

# Law Studies Minor

## Program Requirements

A total of 18 semester hours must be completed for the law studies minor. The five required courses (15 semester hours) must be taken in residence at UC Denver. A minimum grade of C is required in each course and students must maintain a GPA of 3.0 in courses taken toward the minor. Every course taken for the minor must be upper division, and cannot serve to fulfill requirements of the undergraduate core. Students should check with their major department to determine whether courses counted toward the law studies minor can fulfill major requirements. To apply for this minor, students must complete and submit a major/minor change declaration form to the CLAS Advising Office in North Classroom, 4002.

## Required Courses

- CMMU 4680 - Mass Communication Law and Policy. **Semester Hours: 3**  
(offered at least once a year)
- HUM 3250 - Introduction to Law Studies. **Semester Hours: 3**  
(offered every fall)
- PHIL 4260 - Philosophy of Law. **Semester Hours: 3**  
(offered every spring)

### Choose two:

- CMMU 4681 - Communication Issues in Trial Court Practices and Processes. **Semester Hours: 3**  
(offered every other year)
- CMMU 4750 - Legal Reasoning and Writing. **Semester Hours: 3**  
(offered every other year)
- P SC 3034 - Race, Gender, Law and Public Policy. **Semester Hours: 3**
- P SC 4427 - Law, Politics and Justice. **Semester Hours: 3**
- P SC 4494 - Judicial Politics. **Semester Hours: 3**

**Total: 15 Hours**

## Electives

### Choose one:

- BLAW 3000 - Legal and Ethical Environments of Business I. **Semester Hours: 3**
- CMMU 4140 - Argumentation. **Semester Hours: 3**  
(taught each summer)
- CMMU 4255 - Negotiations and Bargaining. **Semester Hours: 3**
- MUS 3720 - Law and the Music Industry. **Semester Hours: 3**
- PHIL 4812 - Special Topics in Philosophy. **Semester Hours: 3**
- P SC 3214 - Federal Law and American Indians. **Semester Hours: 3**
- P SC 4024 - Legislatures and Legislation. **Semester Hours: 3**
- P SC 4477 - Constitutional Law I. **Semester Hours: 3**

**Total: 3 Hours**

**Minor Total: 18 Hours**

The law studies program also recommends a course in informal logic to aid in preparation for the LSAT (e.g., PHIL 2441).

## **Mathematical and Statistical Sciences**

**Chair:** Michael S. Jacobson

**Associate Chair:** Lynn S. Bennethum

**Program Assistant:** Dawn Arge

**Administrative Assistant:** Angela Beale

**Office:** CU-Denver Building, 600

**Telephone:** 303-556-8442

**Fax:** 303-556-8550

**Web site:** [math.ucdenver.edu/](http://math.ucdenver.edu/)

Centers and Clinics

Undergraduate Program

Graduate Program

## **Faculty**

### **Professors:**

William E. Cherowitzo, PhD, Columbia University

Leopoldo Franca, PhD, Stanford University

Michael S. Jacobson, PhD, Emory University

Weldon A. Lodwick, PhD, Oregon State University

J. Richard Lundgren, PhD, Ohio State University

Jan Mandel, PhD (equivalent), Charles University (Czechoslovakia)

Stanley E. Payne, PhD, Florida State University

### **Associate Professors:**

Lynn Bennethum, PhD, Purdue University

Stephen Billups, PhD, University of Wisconsin-Madison

Roxanne M. Byrne, PhD, University of Colorado

Andrew Knyazev, PhD, Institute of Numerical Mathematics, Russian Academy of Sciences

Anatolii Puhalskii, PhD, Moscow Institute of Physics and Technology

Stephan R. Sain, PhD, Rice University

Stephanie A Santorico, PhD, North Carolina State University

Burton Simon, PhD, University of Michigan, Ann Arbor

**Assistant Professor:**

Steven Culpepper, PhD, University of Minnesota

Alexander Engau, PhD, Clemson University

Julien Langou, PhD, INSA, Toulouse, France

Diana White, PhD, University of Nebraska

**Adjuncts:**

Rico Argentati

Kirill Bukin

Faun Doherty

William Hart

Joan Hutchinson

Karen Kafadar

Giuseppe Lancia

Doug Nychka

Brooks Reid

John Ruge

**Emeritus Faculty:**

William Briggs, PhD, Harvard University

Kathryn L. Fraughnaugh, PhD, University of Houston

Harvey J. Greenberg, PhD, Johns Hopkins University

Zenas R. Hartvigson, PhD, Oregon State University

Sylvia Lu, PhD, Pennsylvania State University

Roland Sweet, PhD, Purdue University

The Department of Mathematical and Statistical Sciences offers courses and research opportunities with an emphasis on applied and computational mathematics. Traditional courses such as calculus, linear algebra, probability, statistics and discrete mathematics are offered regularly by the department. In addition, contemporary subjects such as continuous, probabilistic, optimization and discrete modeling; supercomputing; numerical analysis; optimization; and operations research are also well represented by course offerings and faculty interests. In all of its activities, the department embodies the outlook that mathematics is a powerful tool that can be used to solve problems of immediate and practical importance.

The study of mathematics with an emphasis on computers and applications can prepare students for careers in engineering, the sciences, business and management, actuarial science, public health and all computer-dependent disciplines.

## Center for Computational Biology

**Director:** Stephen Billups

**Telephone:** 303-556-4814

**Web site:** <http://ccb.cudenver.edu>

The Center for Computational Biology (CCB) is a multidisciplinary center focused on computational biology research and education. A complete description of the CCB is provided at the CCB Web site.

## Center for Computational Mathematics

**Director:** Jan Mandel

**Telephone:** 303-556-4475

**Web site:** <http://math.ucdenver.edu/ccm/>

The Center for Computational Mathematics is composed of faculty members who have an interest in computational mathematics, the study of solving mathematical problems with computers. The center resides in the Department of Mathematical and Statistical Sciences and includes faculty members from various other departments. The primary goal of the center is to foster research in computational mathematics and to maintain a strong educational program at all levels. It has extensive ties with industry along the Front Range and with government laboratories throughout the nation. It offers students an excellent opportunity to receive training and experience in this exciting new field. The center operates a supercomputing cluster, Beowulf.

## Math Clinic

**Web site:** <http://math.ucdenver.edu/clinic/>

Each semester, the mathematical and statistical sciences department conducts math clinics that are open to both undergraduate and graduate students. Each clinic is sponsored by a business,

government agency or research organization. The clinic sponsor provides a specific project on which students work with the supervision of a faculty member and a sponsor representative. Every clinic results in a final report to the sponsor and provides participating students with an opportunity to apply mathematics to relevant problems. Recent math clinic sponsors include Ratheon, Lockheed Martin, Xenometrix, Budget Truck Rental and Denver Water.

## Statistics Consulting Workshop

The Department of Mathematical and Statistical Sciences regularly offers a graduate course in statistics consulting in which students work on problems provided by researchers and clients at the Downtown Campus and in the Denver metropolitan area. Potential clients should contact Stephanie Santorico at stats@math.ucdenver.edu or 303-556-2547.

## Undergraduate Program

**Director:** Stan Payne

**Telephone:** 303-556-8443

The Department of Mathematical and Statistical Sciences offers a BS program that provides broad training in mathematics with the option of specializing in one of seven areas of special emphasis, or simply satisfying the requirements without specifying an area. The seven areas of emphasis are: pure mathematics, applied mathematics, computer science, discrete mathematics, probability and statistics, actuarial science and mathematics education. (Required courses for each option are given on the Requirements for Math Majors page.) Graduates typically teach, work in actuarial firms, develop software, work for engineering companies, perform statistical analysis for private and public organizations or pursue graduate work in mathematics.

## Selecting a First Mathematics Course (Mathematics Majors)

The following table is a guide for mathematics majors selecting a first mathematics course:

Previous Mathematics Courses	Recommended First Course
A. one year high school algebra and one year high school geometry	Beginning or intermediate algebra at a community college
B. two years high school algebra and one year high school geometry (i) C average (ii) at least B average	MATH 1110 - College Algebra: MA1. MATH 1120 - College Trigonometry: MA1.
C. two years high school algebra and one year high school geometry with trigonometry (i) C average (ii) at least B average	MATH 1130 - Precalculus Mathematics: MA1. MATH 1401 - Calculus I: MA1.

Students planning to take MATH 1070, MATH 1110 or MATH 1401 must take a placement exam. For more information, see the following Web site:  
<http://math.ucdenver.edu/undergraduate/prereqexams/HowTo.pdf> Students with transfer or advanced placement credit should see an academic advisor in the Department of Mathematical and Statistical Sciences.

The BS in mathematics requires a minimum of 48 semester hours in mathematics with an average of C (2.0) and with a grade of at least C in each course. At least 30 semester hours must be in upper-division courses (3000 level or above), excluding MATH 3040. To graduate, a mathematics major must have a minimum of 30 hours of resident credit (letter grades received at UC Denver). Furthermore, 21 out of the last 30 hours must be taken at UC Denver. Finally, at least 15 upper-division mathematics credits must be taken at UC Denver.

Students must declare a major in the CLAS Advising Office by the time they have completed 60 semester hours. At this time, they will also be assigned a mathematics advisor in the Department of Mathematical and Statistical Sciences, whom they should consult at least once a semester. All mathematics majors should visit the CLAS Advising Office to have graduation requirements checked.

## **REQUIREMENTS FOR MATHEMATICS MAJORS**

## **REQUIREMENTS FOR THE MATHEMATICS MINOR**

### **Applied Statistics Certificate - Undergraduate**

## **Graduation With Honors**

The mathematical and statistical sciences department recognizes students who complete the undergraduate program with distinction. To be eligible for graduation with honors (*cum laude*, *magna cum laude*, *summa cum laude*), a student must graduate with an overall GPA of 3.2 or better; must have a GPA of 3.5 or better in upper-division math courses; and must complete an honors project. Specific details may be obtained from the Department of Mathematical and Statistical Sciences. Students who wish to be considered for graduation with honors should notify a mathematics advisor as early in the program as possible.

## **Graduate Program**

**Director:** Stephen C. Billups

**Telephone:** 303-556-4814

The Department of Mathematical and Statistical Sciences offers the MS degree in applied mathematics and the PhD degree in applied mathematics. Each of these degree programs conforms to the rules and policies of the Graduate School.

Detailed descriptions of the requirements for the MS and PhD degrees are maintained in the graduate handbook, which is available at:

<http://math.ucdenver.edu/graduate/handbook.shtml>. The following is an abbreviated summary of these requirements.

## Requirements for Admission

To begin graduate work toward the MS or PhD degrees, a student should have at least the following preparation: 30 semester hours of mathematics [B- (2.7) or better], at least 24 of which are at or above the level of MATH 3000. These courses should include a full year of advanced calculus or introduction to analysis, one semester of linear algebra and one semester of either differential equations, abstract algebra, discrete mathematics or probability.

Students who do not have all the prerequisites or who have a cumulative undergraduate GPA that is less than 3.0, may be eligible for provisional admission to the master's program (see also the Graduate School admission requirements).

### Applied Statistics Certificate - Graduate

#### REQUIREMENTS FOR THE MS IN APPLIED MATHEMATICS

#### REQUIREMENTS FOR THE PhD IN APPLIED MATHEMATICS

## Bachelor of Science

# Mathematics BS

## Degree Requirements

### Required Core Courses for All Mathematics Majors

- MATH 1401 - Calculus I: MA1. **Semester Hours: 4**
- MATH 2411 - Calculus II: MA1. **Semester Hours: 4**
- MATH 2421 - Calculus III: MA1. **Semester Hours: 4**
- MATH 3000 - Introduction to Abstract Mathematics. **Semester Hours: 3**
- MATH 3191 - Applied Linear Algebra. **Semester Hours: 3**
- MATH 3200 - Elementary Differential Equations. **Semester Hours: 3**
- OR-
- MATH 4408 - Applied Graph Theory. **Semester Hours: 3**
- MATH 3250 - Problem Solving Tools. **Semester Hours: 3**
- MATH 3800 - Probability and Statistics for Engineers. **Semester Hours: 3**
- OR-
- MATH 4810 - Probability. **Semester Hours: 3**
- MATH 4779 - Math Clinic. **Semester Hours: 3**

**TOTAL REQUIRED CORE: 30 HOURS**

## Core Areas

Choose one course from each of the following three areas:

### Analysis

Choose one:

- MATH 3200 - Elementary Differential Equations. **Semester Hours: 3**
- MATH 4201 - Topology. **Semester Hours: 3**
- MATH 4310 - Introduction to Real Analysis I. **Semester Hours: 4**
- MATH 4450 - Complex Variables. **Semester Hours: 3**
- MATH 4650 - Numerical Analysis I. **Semester Hours: 3**
- MATH 4733 - Partial Differential Equations. **Semester Hours: 3**

### Modeling

Choose one:

- MATH 4387 - Regression Analysis, Modeling and Time Series. **Semester Hours: 3**
- MATH 4791 - Continuous Modeling. **Semester Hours: 3**
- MATH 4792 - Probabilistic Modeling. **Semester Hours: 3**
- MATH 4793 - Discrete Math Modeling. **Semester Hours: 3**
- MATH 4794 - Optimization Modeling. **Semester Hours: 3**

### Discrete Math

Choose one:

- MATH 3140 - Introduction to Modern Algebra. **Semester Hours: 3**
- MATH 3301 - Introduction to Operations Research I - Deterministic Systems. **Semester Hours: 3**
- MATH 4408 - Applied Graph Theory. **Semester Hours: 3**
- MATH 4409 - Applied Combinatorics. **Semester Hours: 3**

**TOTAL CORE AREAS: 9 HOURS**

## Electives Mathematics Majors Must Complete

Mathematics majors must take three upper-division mathematics courses, excluding MATH 3040, chosen to provide depth and breadth. Depth is obtained by taking a two-semester sequence of upper-division courses, one of which may be a course taken for the core area requirement.

## Portfolio, Interview, Survey

In the semester of graduation, students must:

- submit a portfolio consisting of two papers, typically written for previous courses, that demonstrate mathematical and writing proficiency
- participate in an exit interview, which may be scheduled by the department administrative assistant
- complete a senior survey, available from the department administrative assistant

## Math Majors Considering Graduate Study

Mathematics majors who are considering graduate study in mathematics should plan to take the following courses as part of their major:

- MATH 4310 - Introduction to Real Analysis I. **Semester Hours: 4**  
-and-
- MATH 4320 - Introduction to Real Analysis II. **Semester Hours: 4**

## Required Courses for Each Option

### PURE MATHEMATICS OPTION

All core courses (30 semester hours), plus the following:

- MATH 3140 - Introduction to Modern Algebra. **Semester Hours: 3**
  - MATH 4201 - Topology. **Semester Hours: 3**
  - MATH 4310 - Introduction to Real Analysis I. **Semester Hours: 4**
  - MATH 4320 - Introduction to Real Analysis II. **Semester Hours: 4**
- Two approved math electives (6 semester hours)
- Pure Mathematics Option Total: 50 Hours**

### APPLIED MATHEMATICS OPTION

All core courses with MATH 3200 and 4810 chosen (30 semester hours), plus the following:

- MATH 3301 - Introduction to Operations Research I - Deterministic Systems. **Semester Hours: 3**  
-OR-
  - MATH 4408 - Applied Graph Theory. **Semester Hours: 3**
  - MATH 4650 - Numerical Analysis I. **Semester Hours: 3**
- Two modeling courses, chosen from:
- MATH 4387 - Regression Analysis, Modeling and Time Series. **Semester Hours: 3**
  - MATH 4791 - Continuous Modeling. **Semester Hours: 3**
  - MATH 4792 - Probabilistic Modeling. **Semester Hours: 3**

- MATH 4793 - Discrete Math Modeling. **Semester Hours: 3**
  - MATH 4794 - Optimization Modeling. **Semester Hours: 3**
- Two approved math electives: **6 semester hours**  
**Applied Mathematics Option Total: 48 Hours**

## COMPUTER SCIENCE OPTION

All core courses with MATH 4408 chosen (30 semester hours), plus the following:

- C SC 2421 - Data Structures and Program Design. **Semester Hours: 3**
  - MATH 3140 - Introduction to Modern Algebra. **Semester Hours: 3**
  - MATH 4650 - Numerical Analysis I. **Semester Hours: 3**
  - MATH 4660 - Numerical Analysis II. **Semester Hours: 3**
- OR-
- MATH 4674 - Parallel Computing and Architectures. **Semester Hours: 3**
- One modeling course, chosen from:
- MATH 4387 - Regression Analysis, Modeling and Time Series. **Semester Hours: 3**
  - MATH 4791 - Continuous Modeling. **Semester Hours: 3**
  - MATH 4792 - Probabilistic Modeling. **Semester Hours: 3**
  - MATH 4793 - Discrete Math Modeling. **Semester Hours: 3**
  - MATH 4794 - Optimization Modeling. **Semester Hours: 3**
- Two approved math electives: **6 semester hours**  
**Computer Science Option Total: 51 Hours**

## DISCRETE MATHEMATICS OPTION

This option allows students and advisors to create a program that differs from the pre-approved option.

Such a program must be approved by the advisor at least one year before graduation.

- MATH 1401 - Calculus I: MA1. **Semester Hours: 4**
  - MATH 2411 - Calculus II: MA1. **Semester Hours: 4**
  - MATH 2421 - Calculus III: MA1. **Semester Hours: 4**
  - MATH 3000 - Introduction to Abstract Mathematics. **Semester Hours: 3**
  - MATH 3140 - Introduction to Modern Algebra. **Semester Hours: 3**
  - MATH 3191 - Applied Linear Algebra. **Semester Hours: 3**
  - MATH 3250 - Problem Solving Tools. **Semester Hours: 3**
  - MATH 3800 - Probability and Statistics for Engineers. **Semester Hours: 3**
- OR-
- MATH 4810 - Probability. **Semester Hours: 3**
  - MATH 4201 - Topology. **Semester Hours: 3**
- OR-
- MATH 4310 - Introduction to Real Analysis I. **Semester Hours: 4**

- MATH 4408 - Applied Graph Theory. **Semester Hours: 3**
  - MATH 4409 - Applied Combinatorics. **Semester Hours: 3**
  - MATH 4779 - Math Clinic. **Semester Hours: 3**
  - MATH 4793 - Discrete Math Modeling. **Semester Hours: 3**
  - OR-
  - MATH 4794 - Optimization Modeling. **Semester Hours: 3**
- Choose one course from the following
- MATH 3210 - Higher Geometry I. **Semester Hours: 3**
  - MATH 4110 - Theory of Numbers. **Semester Hours: 3**
  - MATH 4220 - Higher Geometry II. **Semester Hours: 3**
  - MATH 4410 - Mathematics of Coding Theory. **Semester Hours: 3**
- One math elective numbered above MATH 3000, excluding MATH 3040.
- Discrete Mathematics Option Total: 48-49 Hours**

## PROBABILITY AND STATISTICS OPTION

All core courses with MATH 3200 and 4810 chosen (30 semester hours), plus the following:

- MATH 4650 - Numerical Analysis I. **Semester Hours: 3**
  - MATH 4792 - Probabilistic Modeling. **Semester Hours: 3**
  - MATH 4820 - Statistics. **Semester Hours: 3**
- One course from the discrete mathematics area: **3 semester hours**
- Two approved math electives: **6 semester hours**
- Probability and Statistics Option Total: 48 Hours**

## ACTUARIAL SCIENCE OPTION

All core courses with MATH 3200 and 4810 chosen (30 semester hours), plus the following:

- MATH 3301 - Introduction to Operations Research I - Deterministic Systems. **Semester Hours: 3**
  - OR-
  - MATH 4408 - Applied Graph Theory. **Semester Hours: 3**
  - MATH 4387 - Regression Analysis, Modeling and Time Series. **Semester Hours: 3**
  - MATH 4650 - Numerical Analysis I. **Semester Hours: 3**
  - MATH 4820 - Statistics. **Semester Hours: 3**
- One modeling course, chosen from:
- MATH 4791 - Continuous Modeling. **Semester Hours: 3**
  - MATH 4792 - Probabilistic Modeling. **Semester Hours: 3**
  - MATH 4793 - Discrete Math Modeling. **Semester Hours: 3**
  - MATH 4794 - Optimization Modeling. **Semester Hours: 3**
- Approved math elective: **3 semester hours**
- Actuarial Science Option Total: 48 Hours**

### **Suggested minor for actuarial science major option:**

Actuaries need a background in business, particularly accounting, economics and finance. You are strongly advised to do a minor in one of these areas. Recommended classes are:

- ACCT 2200 - Financial Accounting and Financial Statement Analysis. **Semester Hours:** 3
- ECON 2012 - Principles of Economics: Macroeconomics: SS1. **Semester Hours:** 3
- ECON 2022 - Principles of Economics: Microeconomics: SS1. **Semester Hours:** 3
- FNCE 3000 - Principles of Finance. **Semester Hours:** 3

### **MATHEMATICS EDUCATION OPTION**

All core courses with MATH 3800 and 4408 chosen (30 semester hours), plus the following:

- MATH 3140 - Introduction to Modern Algebra. **Semester Hours:** 3
  - MATH 3210 - Higher Geometry I. **Semester Hours:** 3
  - MATH 4010 - History of Mathematics. **Semester Hours:** 3
  - MATH 4201 - Topology. **Semester Hours:** 3
- One modeling course, chosen from:
- MATH 4387 - Regression Analysis, Modeling and Time Series. **Semester Hours:** 3
  - MATH 4791 - Continuous Modeling. **Semester Hours:** 3
  - MATH 4792 - Probabilistic Modeling. **Semester Hours:** 3
  - MATH 4793 - Discrete Math Modeling. **Semester Hours:** 3
  - MATH 4794 - Optimization Modeling. **Semester Hours:** 3
- Approved math elective: **3 semester hours**  
**Mathematics Education Option Total: 48 Hours**

#### **Note:**

Certification by the School of Education and Human Development is required for public school teaching. Contact the school for details.

### **Certificate**

# **Applied Statistics Graduate Certificate**

**Coordinator:** Stephanie Santorico:

**Telephone:** 303-556-2547

**E-mail:** Stephanie.Santorico@ucdenver.edu

**Web site:** [http://math.ucdenver.edu/statistics/grad\\_cert.shtml](http://math.ucdenver.edu/statistics/grad_cert.shtml)

### **Entrance Requirements**

Students are expected to have a bachelor's degree and be admitted to the graduate school as either a degree-seeking or nondegree-seeking student. Students are expected to have completed an introductory statistics course (such as MATH 2830 or the equivalent) or an introductory course in probability. At least one semester of calculus and a course containing linear algebra are also recommended.

To apply, see the Department of Mathematics Web page at [http://math.ucdenver.edu/statistics/grad\\_cert.shtml](http://math.ucdenver.edu/statistics/grad_cert.shtml)

## Curriculum

There are three parts to the requirements:

### Required Courses

#### Basic methods (choose one):

- MATH 4830 - Applied Statistics. **Semester Hours: 3**  
-OR-
- MATH 4820 - Statistics. **Semester Hours: 3**  
-OR-
- MATH 5320 - Statistics. **Semester Hours: 3**  
-AND/OR-
- MATH 5387 - Regression Analysis, Modeling and Time Series. **Semester Hours: 3**  
-AND/OR-
- MATH 5394 - Experimental Designs. **Semester Hours: 3**

### Elective (choose one):

Any statistics course in the math department at the 5000 level or higher

- ECON 5150 - Economic Forecasting. **Semester Hours: 3**
- ECON 5813 - Econometrics I. **Semester Hours: 3**
- ECON 5823 - Econometrics II. **Semester Hours: 3**
- ENVS 5600 - Applied Statistics for the Natural Sciences. **Semester Hours: 3**
- GEOL 5770 - Applied Statistics for the Natural Sciences. **Semester Hours: 3**
- PSY 5713 - Advanced Statistics. **Semester Hours: 3**
- SOC 5183 - Seminar: Quantitative Data Analysis. **Semester Hours: 3**

Equivalent course pre-approved by the certificate coordinator

### Project

An independent data analysis project with a report and presentation to demonstrate proficiency with data analysis techniques and a statistical computing software package. Enroll for one hour of MATH 5840 (Independent Study) or in an equivalent course preapproved by the certificate coordinator.

## Grade Requirements

Students must maintain a 3.0 GPA in these courses with no credit given for courses with grades below *B-*.

## Residency Requirements

Since a certificate is a University of Colorado Denver certification of a student's specialized knowledge in an advanced subject area, all courses in the certificate program are expected to be taken in residency at the University of Colorado Denver.

# Applied Statistics Undergraduate Certificate

**Coordinator:** Stephanie Santorico:

**Telephone:** 303-556-2547

**E-mail:** Stephanie.Santorico@ucdenver.edu

**Web site:** [http://math.ucdenver.edu/statistics/ugrad\\_cert.shtml](http://math.ucdenver.edu/statistics/ugrad_cert.shtml)

## Entrance Requirements

All undergraduate students in good standing (including nondegree-seeking students) will be admitted to the program. For students in the College of Liberal Arts and Sciences, this requires a cumulative grade point average of 2.0. Some mathematical background (including calculus and linear algebra) is recommended.

To apply, see the Web site at: [http://math.ucdenver.edu/statistics/ugrad\\_cert.shtml](http://math.ucdenver.edu/statistics/ugrad_cert.shtml)

## Curriculum

There are three parts to the requirements:

### Required Courses

- MATH 2830 - Introductory Statistics: MA1. **Semester Hours:** 3

#### **Basic Methods (choose one):**

- MATH 4820 - Statistics. **Semester Hours:** 3
- MATH 4830 - Applied Statistics. **Semester Hours:** 3

#### **Advanced Methods (choose one):**

- MATH 4387 - Regression Analysis, Modeling and Time Series. **Semester Hours: 3**
- MATH 4394 - Experimental Designs. **Semester Hours: 3**

## Elective (choose one):

- MATH 4101 - Applied Statistics Using SAS and SPSS I. **Semester Hours: 3**  
or any statistics course in the math department at the 4000 level or higher
- ECON 4150 - Economic Forecasting. **Semester Hours: 3**
- ECON 4811 - Introduction to Econometrics. **Semester Hours: 3**
- GEOG 4770 - Applied Statistics for the Natural Sciences. **Semester Hours: 3**
- GEOL 4770 - Applied Statistics for the Natural Sciences. **Semester Hours: 3**
- SOC 5183 - Seminar: Quantitative Data Analysis. **Semester Hours: 3**  
Equivalent course pre-approved by the certificate coordinator

## Project

An independent data analysis project with a report and presentation to demonstrate proficiency with data analysis techniques and a statistical computing software package. Enroll for one hour of MATH 4840 (Independent Study) or in an equivalent course pre-approved by the certificate coordinator.

## Grade Requirements

Students must maintain a 3.0 GPA in these courses with no credit given for courses with grades below *B-*.

## Residency Requirements

Since a certificate is a University of Colorado Denver certification of a student's specialized knowledge in an advanced subject area, all courses in the certificate program are expected to be taken in residency at the University of Colorado Denver.

## Non Degree

# Mathematics Minor

## Program Requirements

- MATH 1401 - Calculus I: MA1. **Semester Hours: 4**
- MATH 2411 - Calculus II: MA1. **Semester Hours: 4**
- MATH 2421 - Calculus III: MA1. **Semester Hours: 4**

Three additional upper-division math courses (3 or more semester hours each, excluding MATH 3040): **9 semester hours**

## **Minor Total: 21 Hours**

Minimum of 21 semester hours with a C average.

*Note:* At least 6 of the upper-division semester hours must be taken at the Downtown Campus. No grade below a C- will be counted toward the minor requirements.

## **Master of Science**

# **Applied Mathematics, MS**

► Graduate School Rules apply to this program.

## **Program Requirements**

Students must present 30 hours of course work and maintain a 3.0 GPA for the MS degree. At least 24 of these hours must consist of graduate-level (numbered 5000 or higher) mathematics courses. The remaining 6 hours must be either mathematics courses numbered 5000 or above or approved courses outside the department numbered 4000 or above. Up to 12 semester hours may be transferred from other institutions.

A student may devote from 4 to 6 hours (of the 30 required hours) to the writing of a thesis. Following completion of course work, all candidates must make a one-hour oral presentation before a committee consisting of three graduate faculty members.

The MS degree is designed to prepare a candidate for a position as an applied mathematician, or a teacher, or to continue studies at the PhD level. It provides training in applied mathematics in the fields of:

- discrete mathematics
- operations research
- applied statistics
- applied probability
- numerical analysis
- mathematics of science and engineering
- mathematical foundations of computer science
- computational biology

Students must take either applied analysis or real analysis and applied linear algebra. Additionally, students must fulfill course work requirements for an area of specialization.

All master's degree students are encouraged to participate in the math clinic, a unique program in which students have an opportunity to work on real-world problems supplied by local businesses, research firms and government agencies.

For more detailed information about the applied mathematics PhD, go to Requirements for the MS Degree on the Math Graduate Handbook Web page.

## Doctor of Philosophy

# Applied Mathematics, PhD

► Graduate School Rules apply to this program.

## Program Requirements

The department of mathematical and statistical sciences also offers a PhD in applied mathematics. The degree is designed to give candidates a contemporary, comprehensive education in applied mathematics and to provide research opportunities in the special fields of discrete mathematics, optimization, operations research, applied probability, computer science, computational mathematics, applied statistics and the mathematics of science and engineering.

There are six phases of the PhD program. A candidate must fulfill course requirements, pass the preliminary examinations, establish a PhD committee, meet the academic residency requirement, pass the comprehensive examination and write and defend a dissertation.

- Students must complete 12 to 42 semester hours of nonthesis course work at the graduate level (12 hours if admitted with a master's degree in mathematics; 42 hours if admitted without a master's degree; number of hours to be determined by the graduate committee if admitted with a master's degree in another field). In addition, 30 hours of dissertation credit must be taken. The following courses are required as part of the formal course work: four PhD-level (7000 or 8000) courses (3 hours each), math clinic and three readings courses (1 semester hour each). Students must also satisfy a **breadth requirement** by completing a total of six graduate math courses from among several areas of mathematics, with no more than three of these courses from any one area. Courses used for a master's degree may be used to satisfy the breadth requirement. A 3.25 GPA must be maintained throughout all course work.
- The preliminary examinations are designed to determine that students who intend to pursue the PhD program are qualified to do so. These four-hour written examinations are in the areas of applied analysis and applied linear algebra. Students must pass these exams within two years of entering the program with an MS in mathematics or within three years otherwise.
- Six semesters of residence are required, as specified in the rules of the Graduate School. All students are strongly advised to spend at least one year doing full-time course work or research with no outside employment.

- Application for candidacy is made after completion of the preliminary examinations and after at least three semesters of residency. The application must be submitted at least two weeks before taking the comprehensive examination. The comprehensive examination is designed to determine mastery of graduate-level mathematics and the ability to embark on dissertation research. It consists of a six-hour written examination and an oral follow-up examination. Within six months after passing the comprehensive examination, the candidate must present a dissertation proposal to the dissertation committee.
- Each student must write and defend a dissertation containing original contributions and evidence of significant scholarship. The dissertation defense is public and must be given before an examining committee approved by the Graduate School.

For more detailed information about the applied mathematics PhD, go to Requirements for the PhD Degree on the Math Graduate Handbook Web page.

## Modern Languages

**Chair:** Diane Dansereau

**Coordinator:** Tim Phillips

**Program Assistants:** Jaynie Muggli, Julie Blunck

**Office:** Plaza Building, 118

**Mailing Address:**

Campus Box 178

P.O. Box 173364

Denver, CO 80217-3364

**Telephone:** 303-556-4893

**Fax:** 303-556-6038

**Web site:** [www.cudenver.edu/modlang/](http://www.cudenver.edu/modlang/)

General Information

French Programs

German Programs

Spanish Programs

## Chinese Faculty

**Instructor:**

Kuan-Yi Rose Chang, PhD, Purdue University

## French Faculty

**Associate Professor:**

Diane Dansereau, PhD, University of Michigan

**Senior Instructors:**

Linda Alcott, PhD, University of Colorado

Lori Willard, PhD, University of Colorado

**Instructor:**

Jocelyne Hunsinger, BA, University of Ottawa (Ontario, Canada)

**French Advisor:**

Diane Dansereau

## **German Faculty**

**Associate Professor:**

Carsten E. Seecamp, PhD, Johns Hopkins University

**Senior Instructor:**

Tim Phillips, MA, University of Colorado

**German Advisor:**

Carsten E. Seecamp

## **Latin Faculty**

**Lecturer:**

Mary De Forest, PhD, University of Colorado

## **Spanish Faculty**

**Associate Professor:**

Michael Abeyta, PhD, University of California-Davis

Kathleen Bollard, PhD, University of California-Berkeley

**Assistant Professors:**

Devin Jenkins, PhD, University of New Mexico

Andrés Lema-Hincapié, PhD, Cornell University and PhD, University of Ottawa

Amy Von Canon, PhD, University of Iowa

**Instructors:**

Conxita Domenech, MA, Universidad Autonoma Barcelona, Spain

Ileana Gross, MA, University of Georgia

Ted Wendelin, MA, University of Southern Mississippi in Morelia, Michoacán, Mexico

**Instructor, Attendant Rank:**

Danny Martinez, MA, University of Colorado

**Undergraduate Advisors** (by student's last name):

A—F: Michael Abeyta

G—O: Devin Jenkins

P—Z: Amy Von Canon

**Graduate Advisor:**

Devin Jenkins

**Study Abroad Advisor:**

Amy Von Canon

## **General Information**

The Department of Modern Languages includes Chinese, French, German, Latin and Spanish. Majors are available in French and Spanish, and minors are available in French, German and Spanish. Certification is available in German. Students must declare a major by the time they have completed 60 semester hours of course work. The department recommends that majors and minors include some study abroad while they are fulfilling their degree requirements at UC Denver. Please see a departmental advisor about study abroad opportunities. Credit earned abroad will normally count toward satisfaction of the major and minor requirements at UC Denver, but to assure full transfer of credit, students must see an advisor in the department before enrolling in programs abroad. Courses taken abroad and designated as upper division in French, German or Spanish are subject to the 48-hour maximum of semester hours from a single discipline in the College of Liberal Arts and Sciences.

## **Departmental Honors**

Students who meet certain criteria and have been invited by the faculty of the appropriate language are encouraged to participate in the Department of Modern Languages honors program. Successful completion of this program by students majoring in French or Spanish leads to graduation with the distinction of *cum laude*, *magna cum laude* or *summa cum laude*. See French and Spanish sections for details.

## **Relevance to Other Programs**

In addition to fulfilling major and minor requirements, courses in the Department of Modern Languages prepare students in the language, literature and civilization of the countries and peoples they are studying. Certain courses may apply to the fulfillment of core curriculum requirements in the College of Liberal Arts and Sciences. Other courses lead to a secondary-school teaching certificate, the master of humanities degree and the master of arts degrees in Spanish and education at the Downtown Campus, and to the master of arts degree in French or Spanish on the Boulder campus. Only courses numbered 5000 and above apply to the master's degree; students enrolled in a master's program in Boulder should consult with their advisor before enrolling in courses on the Downtown Campus.

## **Foreign Language Requirement**

All students with majors in the College of Liberal Arts and Sciences must demonstrate proficiency in a foreign language at the second semester level. This is accomplished through course work, by examination or by completion of second-year high school credit. Students must receive a grade of C- (1.7) or higher in the final semester of the second-year course in high school or the second-semester college-level course in order to fulfill the foreign language requirement. The prerequisite for the second-semester college course is a grade of C (2.0) or better in the first-semester course. There is no pass/fail option for any course taken for the foreign language requirement.

Students may show their level of proficiency by taking the placement/proficiency exam. The languages tested are French, German and Spanish. For other languages, consult the CLAS Advising Office (North Classroom, 4002). For information on the placement/proficiency exam, check the Modern Languages Web site or call the Department of Modern Languages, 303-556-4893. The number of times a student may take the exam is limited to once per semester.

For information on fulfilling part of the foreign language requirement through study abroad, see the Study Abroad Web site or call 303-315-2232, or consult a Modern Languages advisor.

## **Department of Modern Languages Policy on Student Placement in Lower-Division Courses**

A student may not enroll in a lower-division (1000/2000) language course that is below his/her level of language proficiency. Students wishing to enroll in a lower-division language course that does not directly follow their last completed course in the regular sequence must consult with an appropriate faculty member of the Department of Modern Languages prior to enrollment. Students who have achieved some proficiency in a foreign language through other means than academic courses must also consult with an appropriate faculty member of the Department of Modern Languages prior to enrollment. Call 303-556-4893 for further information.

### **Departmental Advising**

Upon declaring a major or minor in modern languages, each student will be assigned to a faculty advisor with whom the student should consult at least once per semester thereafter. It is especially important that modern language majors have their transcripts reviewed by a departmental advisor before enrolling in their final 30 semester hours at UC Denver. Failure to

do so may result in delay of graduation. Students presenting four years of high school foreign language (Level IV) for admission must see a departmental advisor before enrolling in courses for the major or minor. Students with advanced placement credits from high school should see a departmental advisor about course equivalencies. The Department of Modern Languages does not accept CLEP credits.

Before enrolling in their final semester, seniors demonstrate advanced oral and written proficiency in the language that they are studying through an oral proficiency interview and a written outcomes assessment exam. Students must see a departmental advisor to schedule proficiency tests in their language.

## **Residency Requirement**

A minimum of 18 semester hours of course work leading to a UC Denver major in French or Spanish must be taken from modern languages faculty at the Downtown Campus. For a UC Denver minor in French, German or Spanish, 9 semester hours must be taken from modern languages faculty at the Downtown Campus. Courses taken at other institutions while a student is enrolled at UC Denver may be applied to the major or minor only with departmental approval before enrollment in those courses.

## **French**

### **Undergraduate**

**REQUIREMENTS FOR THE FRENCH MAJOR**

**REQUIREMENTS FOR THE FRENCH MINOR**

### **Graduate**

At present, UC Denver offers no French courses above 5999. The courses at the 5000 level are applicable to an MA degree through the University of Colorado at Boulder and to the master of humanities program at UC Denver, depending upon degree plan approval by the appropriate graduate advisor.

## **German**

### **Undergraduate**

**REQUIREMENTS FOR THE GERMAN MINOR**

**UNDERGRADUATE CERTIFICATE IN APPLIED GERMAN LANGUAGE SKILLS**

### **Graduate**

UC Denver offers no German courses above 5999. Courses at the 5000 level are applicable to an MA degree in German through the University of Colorado at Boulder and to the master of humanities program at UC Denver, depending upon degree plan approval by the appropriate graduate advisor.

## **Spanish**

### **Undergraduate**

**REQUIREMENTS FOR THE SPANISH MAJOR**

**REQUIREMENTS FOR THE SPANISH MINOR**

### **Graduate**

**REQUIREMENTS FOR THE MA IN SPANISH**

## **Bachelor of Arts**

# **French BA**

The French program offers courses in advanced language, linguistics, literature, civilization, culture and business, all taught exclusively in French. A minor is also offered. All French majors are strongly encouraged to participate in a study abroad program. Please see your French department advisor for information about opportunities to include study abroad as part of your major.

## **Admission and Grade Requirements**

To be admitted to major status in French, students must have an overall GPA of C+ (2.3). The minimum grade acceptable in any French course applied to a French major is C (2.0). The grade point average in all courses applied to a French major at UC Denver must be 2.5. No courses taken on a pass/fail basis may be credited toward a French major. Upon declaring a major in French, each student will be assigned to a faculty advisor with whom the student should consult at least once per semester thereafter. It is especially important that students have their transcripts reviewed by their advisor before enrolling in their final 30 credit hours at UC Denver. Failure to do so may result in delay of graduation. Students presenting four years of high school French (Level IV) for admission to UC Denver must see a French advisor before enrolling in courses for the major. Students with Advanced Placement credits from high school must see a French advisor about course equivalencies. The Department of Modern Languages does not accept CLEP credits.

### **Honors in French**

Qualified majors will automatically graduate with regular honors in French. Faculty occasionally nominate students for extra course work leading to higher levels of honors in French. For information, consult the French advisor in the Department of Modern Languages.

### **Outcomes Assessment**

During their final semester in the language, French major students participate in an oral proficiency interview and take a written outcomes assessment exam to measure their level of proficiency and mastery of key concepts.

## **Residency Requirement**

All students majoring in French must complete 30 semester hours of upper-division French courses (courses numbered 3000 and above). A minimum of 18 of those semester hours must be taken from the faculty in French at the Downtown Campus. Courses taken at other institutions while a student is enrolled at UC Denver may be applied to the major only with departmental approval before enrollment in those courses. Students studying French for the professions must also take courses in other areas. Requirements for both tracks are outlined below.

## **Course Requirements for the Major**

### **Track A: Language, Literature and Culture**

Students wishing to improve their linguistic skills as well as their knowledge of Francophone literature and culture may choose this track.

#### **Required Courses**

- FR 3010 - French Phonetics and Pronunciation. **Semester Hours: 3**
- FR 3020 - Oral Practice. **Semester Hours: 3**
- FR 3050 - Advanced Grammar and Composition. **Semester Hours: 3**
- FR 3060 - Advanced French Language Skills. **Semester Hours: 3**

**Total: 12 Hours**

#### **Electives**

Three courses at the 4000 level: **9 semester hours**

Three electives at 3000 or 4000 level: **9 semester hours**

*Note:* students must take at least one literature course and at least one culture or civilization course.

**Total: 18 Hours**

## Track A Major Total: 30 Hours

## Track B: International Language and Culture for the Professions

This option in the French major offers career possibilities, both in government and private industry, at home and abroad. Languages are useful in business, industry, commerce, civil service, law, library science, media, science, economics, health and social sciences. Students who follow this course of study could also qualify as teachers of general business subjects in bilingual as well as traditional school systems. Students interested in this track should contact the French advisor in the Department of Modern Languages as early as possible in their academic career, but not later than the second semester of the sophomore year.

### Prerequisites

(these courses do not count toward the major total of 48 hours)

- ECON 2012 - Principles of Economics: Macroeconomics: SS1. **Semester Hours: 3**
- ECON 2022 - Principles of Economics: Microeconomics: SS1. **Semester Hours: 3**
- MATH 1070 - Algebra for Social Sciences and Business: MA1. **Semester Hours: 3**  
-OR-
- MATH 1110 - College Algebra: MA1. **Semester Hours: 3**  
(or higher level math course)

### Required French Courses

- FR 1000 - Introduction to Cultures of the French-Speaking World: AH1. **Semester Hours: 3**
- FR 3020 - Oral Practice. **Semester Hours: 3**
- FR 3050 - Advanced Grammar and Composition. **Semester Hours: 3**
- FR 3060 - Advanced French Language Skills. **Semester Hours: 3**
- FR 3082 - Introduction To Translation. **Semester Hours: 3**  
(online course)
- FR 3112 - Survey of French Literature I. **Semester Hours: 3**  
-OR-
- FR 3122 - Survey of French Literature II. **Semester Hours: 3**
- FR 3130 - Current Topics of the French-Speaking World. **Semester Hours: 3**  
-OR-
- FR 3140 - Contemporary Francophone Cultures. **Semester Hours: 3**
- FR 4050 - Advanced French for Business. **Semester Hours: 3**
- FR 4210 - French Civilization - Twentieth and Twenty-First Centuries. **Semester Hours: 3**

**Total: 27 Hours**

## French Electives

Choose two (at least one at 4000 level) from:

- FR 3120 - French Cultural Identities: Myths and Realities. **Semester Hours: 3**
  - FR 3130 - Current Topics of the French-Speaking World. **Semester Hours: 3**
  - FR 3140 - Contemporary Francophone Cultures. **Semester Hours: 3**
  - FR 4200 - French Civilization Through the Nineteenth Century. **Semester Hours: 3**
- Any 3000- or 4000-level literature course (not already taken from required list)

**Total: 6 Hours**

## Business Courses

(please be aware of prerequisites in business course descriptions)

- ACCT 2200 - Financial Accounting and Financial Statement Analysis. **Semester Hours: 3**
  - MGMT 1000 - Introduction to Business. **Semester Hours: 3**
  - MGMT 3000 - Managing Individuals and Teams. **Semester Hours: 3**
  - MKTG 3000 - Principles of Marketing. **Semester Hours: 3**
- One 3000-level course in international business

**Total: 15 Hours**

## Recommended

Official proficiency exam (Paris Chamber of Commerce)

## Track B Major Total: 48 Hours

## Secondary Foreign Language Teacher Licensure Program

With this option, students complete a major in French along with additional course work required for certification to teach French in the public schools. This program should be chosen early in the students' careers. For information, consult the CLAS Advising Office Web site (phone 303-556-2555 or visit North Classroom, 4002) and the French advisor.

# Spanish BA

The Spanish program studies the language, linguistics, literature, culture and civilization of Spain, Spanish America and the Spanish-speaking areas of the United States.

## Admission and Grade Requirements

To be admitted to major status in Spanish, students must have an overall GPA of C+ (2.3). The minimum grade acceptable in any course applied to a Spanish major or minor is a C (2.0). The GPA in all courses applied to a Spanish major or minor at UC Denver must be 2.5. No courses taken on a pass/fail basis may be credited toward a Spanish major or minor.

## Residency Requirement

The BA in Spanish requires 30 semester hours of upper-division course work in Spanish and 6 additional hours in related fields. A minimum of 18 semester hours of Spanish course work for the major, and 9 hours for the minor, must be taken from Spanish faculty at the Downtown Campus. Courses taken at other institutions while a student is enrolled at UC Denver may be applied to the major only with departmental approval before enrollment in those courses.

## Proficiency Requirement

Before enrolling in their final semester in the language, Spanish majors must be evaluated by the faculty in oral and written skills. Students must see their Spanish advisor for specific information.

## Course Requirements for the Major

Students majoring in Spanish for the BA degree must complete 30 semester hours of upper-division course work, at least 12 of which must be at the 4000 level. All course work applied to the 30-semester hour minimum must be taught in Spanish. In addition, students must complete 6 semester hours in courses in related fields outside the curriculum in Spanish.

## Program Requirements

### Literature

- SPAN 3252 - Introduction to the Study of Literature. **Semester Hours: 3**  
At least one course on the literature of Spain: **3 semester hours**  
At least one course on the literature of Spanish America: **3 semester hours**

**Total: 9 Hours**

## **Language skills and theory**

- SPAN 3060 - Hispanic Phonetics: Theory and Practice. **Semester Hours: 3**  
6 additional hours in language skills and theory

**Total: 9 Hours**

## **Culture and civilization of Spain or Spanish America**

**Choose two:**

- SPAN 3070 - Bilingual Communities: Spanish as a Language of Contact. **Semester Hours: 3**
- SPAN 3212 - Spanish American Culture and Civilization. **Semester Hours: 3**
- SPAN 3221 - Culture and Civilization of Spain I. **Semester Hours: 3**
- SPAN 3222 - Culture and Civilization of Spain II. **Semester Hours: 3**
- SPAN 4230 - Modern Culture of Spain through Film and Narrative. **Semester Hours: 3**

**Total: 6 Hours**

## **Related fields**

**Choose 2 courses from the following fields of study:**

Latin American studies (from fields such as history, geography, political science, art history)  
Hispanic American studies  
Linguistics (in the fields of anthropology or English)  
Comparative literature  
Upper-division courses in another foreign language

**Total: 6 Hours**

**Major Total: 30 Hours**

## **International Language and Culture for the Professions Track**

This option in the Spanish major offers career possibilities, both in government and private industry, at home and abroad. Languages are useful in business, industry, commerce, civil service, law, library science, media, science, economics, health and social sciences. Students who follow this course of study could also qualify as teachers of general business subjects in bilingual as well as traditional school systems. (However, students who wish to be certified to

teach Spanish in the public schools should consult the department for information concerning the undergraduate language licensure program.)

International Spanish for the professions is a controlled-enrollment major that takes two years to complete. Interested students should contact the Spanish advisor in the Department of Modern Languages to declare the major. This should be done as early as possible in the student's academic career, but not later than the second semester of the sophomore year.

## Prerequisites

**(These courses do not count toward the major total of 45 semester hours)**

- ECON 2012 - Principles of Economics: Macroeconomics: SS1. **Semester Hours: 3**
- ECON 2022 - Principles of Economics: Microeconomics: SS1. **Semester Hours: 3**
- MATH 1070 - Algebra for Social Sciences and Business: MA1. **Semester Hours: 3**  
-OR-
- MATH 1110 - College Algebra: MA1. **Semester Hours: 3**  
(or higher level math course)
- SPAN 2110 - Second Year Spanish I. **Semester Hours: 3**  
-OR-
- SPAN 2120 - Second Year Spanish II. **Semester Hours: 3**

## Required Spanish Courses

- SPAN 3082 - Introduction to Translation I. **Semester Hours: 3**
- SPAN 3252 - Introduction to the Study of Literature. **Semester Hours: 3**
- SPAN 3700 - Spanish for International Business I. **Semester Hours: 3**
- SPAN 3710 - Spanish for International Business II. **Semester Hours: 3**

**Total: 12 Hours**

**Two of the following language skills and theory courses:**

- SPAN 3010 - Advanced Conversation and Composition I. **Semester Hours: 3**
- SPAN 3020 - Advanced Conversation and Composition II. **Semester Hours: 3**
- SPAN 3060 - Hispanic Phonetics: Theory and Practice. **Semester Hours: 3**
- SPAN 3310 - Spanish Writing and Grammar I. **Semester Hours: 3**

**Total: 6 Hours**

**Two of the following culture courses:**

- SPAN 3070 - Bilingual Communities: Spanish as a Language of Contact. **Semester Hours: 3**

- SPAN 3212 - Spanish American Culture and Civilization. **Semester Hours: 3**
- SPAN 3222 - Culture and Civilization of Spain II. **Semester Hours: 3**

**Total: 6 Hours**

## **Electives**

Two SPAN electives, to be taken at the 4000 level.

**Total: 6 Hours**

## **Spanish Total: 30 Hours**

## **Business Courses**

(please be aware of prerequisites in business course descriptions)

- ACCT 2200 - Financial Accounting and Financial Statement Analysis. **Semester Hours: 3**
- MGMT 1000 - Introduction to Business. **Semester Hours: 3**
- MGMT 3000 - Managing Individuals and Teams. **Semester Hours: 3**
- MGMT 4400 - Environments of International Business. **Semester Hours: 3**
- MKTG 3000 - Principles of Marketing. **Semester Hours: 3**

**Business Total: 15 Hours**

## **Spanish Business Option Total: 45 Hours**

## **Recommended:**

- Language study abroad / international travel or field study
- Internship in target language
- Official proficiency exam

## **Undergraduate Licensure Program in Spanish**

With this option, students complete a major in Spanish along with additional course work required for certification to teach Spanish in the public schools. This program should be chosen early in the students' careers. For information, consult the CLAS Advising Office Web site (phone 303-556-2555 or visit North Classroom, 4002) and the Spanish advisor.

## **Honors in Spanish**

Students who complete all the requirements for the Spanish major (as outlined above) and meet the following criteria are encouraged to talk with the Spanish faculty about participation in the honors program. Successful completion of this program by students majoring in Spanish leads to graduation with the distinction of *cum laude*, *magna cum laude* or *summa cum laude*.

### *Cum laude*

Overall GPA of 3.5 or better and Spanish GPA of 3.8 or better

### **Magna cum laude or summa cum laude**

1. Overall GPA of 3.5 or better and Spanish GPA of 3.8 or better  
—and—
2. 6 semester hours of Spanish 4840, *Independent Study*, spread over two semesters. The candidate must present the independent study topic for approval by the faculty honors committee by the end of the semester preceding the independent study. At the end of the independent study project, and at least one month before the end of the second semester, the candidate shall submit a **written thesis** to the faculty honors committee.
3. The designation of *magna* or *summa* will be the decision of the faculty honors committee.

## **Certificate**

# **Applied German Language Skills Undergraduate Certificate**

## **Certificate Description**

The undergraduate certificate in applied German language skills is designed for students of any discipline who wish to acquire and demonstrate to potential employers that they possess a fluid working knowledge of the German language and understanding of the cultures in which German is spoken. The completion of the requirements for this certificate can also serve as a means for nondegree-seeking professionals to develop a working competency in the German language and culture for use in such areas as international business, education, genealogy, transatlantic travel, academic research, translation and many other fields.

## **Admission Requirements**

All currently enrolled students at UC Denver (undergraduate or graduate) in good standing (including nondegree-seeking students) are eligible for admission into the program. Any student who already possesses an undergraduate degree is also qualified for admission into the program, but must apply to the university as a nondegree-seeking student. Students working toward a baccalaureate degree who are currently enrolled in a college-level institution other than UC Denver are also eligible for certification.

## **Certificate Requirements**

To obtain the certificate, students must complete the following three curriculum components:

1. 24 semester hours of course work with UC Denver faculty (15 of which must be upper division)
2. Of these 24 hours, 6 hours of documented university-level course work (or the equivalent) in a German-speaking country
3. An internationally recognized German language proficiency exam

Students must obtain approval from UC Denver German faculty for all of the above and maintain a minimum 3.0 GPA in all course work applied to the certificate. Full details of this curriculum are outlined in documentation that students can obtain from the Department of Modern Languages Web site.

## **Transfer Credit**

A significant portion of the certificate program is based on language proficiency. Consequently, students who have developed language skills through course work at institutions outside of UC Denver, including study abroad, may apply a limited number of previously earned semester hours toward the program. Please make an appointment with an advisor in the department to discuss details. All transfer credits must be approved by UC Denver German faculty.

## **Application of Course Work**

The course work applied toward certification is meant as a proficiency requirement and not as a total semester hour amount. As a result, students who are working toward a degree may apply course work in German certification as credit toward other programs such as a minor, general education requirements or their major. Students are encouraged to inform their major advisor that they are working toward certification in German for help in coordinating their overall academic curriculum.

## **Further Information**

Students are encouraged to hold a personal conference with a departmental advisor before applying to the certificate program. Please check the program description on the Department of Modern Languages Web site or phone 303-556-4893.

## **Non Degree**

## **French Minor**

Students minoring in French must complete 15 semester hours of upper-division French courses (courses numbered 3000 and above). The minor in French must include at least one language skills class, chosen from the following:

## Required Courses

Choose one:

- FR 3010 - French Phonetics and Pronunciation. **Semester Hours: 3**
- FR 3020 - Oral Practice. **Semester Hours: 3**
- FR 3050 - Advanced Grammar and Composition. **Semester Hours: 3**
- FR 3060 - Advanced French Language Skills. **Semester Hours: 3**

**Total: 3 Hours**

## Electives

In addition, students minoring in French must complete four additional upper-division French courses

**Total: 12 Hours**

**Minor Total: 15 Hours**

## German Minor

The German program provides a variety of courses for students interested in German language, linguistics, literature, history, philosophy, music and art.

## Admission and Grade Requirements

To be admitted to minor status in German, students must have an overall GPA of C+ (2.3). The minimum grade acceptable in any course applied to a German minor is a C (2.0). The GPA in all courses applied to a German minor at UC Denver must be 2.5. No courses taken on a pass/fail basis may be credited toward a German minor.

## Residency Requirement

The German minor requires 15 semester hours of upper-division course work. A minimum of 6 semester hours must be taken from German faculty at the Downtown Campus. Courses taken at other institutions while a student is enrolled at UC Denver may be applied to the minor only with departmental approval before enrollment in those courses.

Students who have completed course work through an approved exchange program must also complete a residency requirement of a minimum of 6 credits of upper-division German courses. This residency requirement must include at least 3 semester hours of language skills courses at the Downtown Campus.

## Course Requirements for the Minor

Students minoring in German must complete 15 hours of upper division German courses (courses numbered 3000 and above). The minor in German must include at least one language skills course:

### Required Courses

Choose one:

- GER 3050 - Phonetics and Pronunciation of German. **Semester Hours: 3**
- GER 3060 - Advanced German Language Skills I. **Semester Hours: 3**
- GER 3070 - Advanced German Language Skills II. **Semester Hours: 3**
- GER 3080 - Advanced German Language Skills III. **Semester Hours: 3**
- GER 3090 - Advanced German Language Skills IV. **Semester Hours: 3**

**Total: 3 Hours**

### Electives

In addition, students minoring in German must complete four additional German courses.

**Total: 12 Hours**

### Minor Total: 15 Hours

Students taking a German course taught in English must complete a portion of the course work (e.g., papers and exams) in German for the course to count toward the minor.

## Spanish Minor

Students minoring in Spanish for the BA degree must complete 15 semester hours of upper-division Spanish courses (courses numbered 3000 and higher). All course work must be taught in Spanish.

The minor in Spanish must include at least one culture and civilization class, chosen from the following:

## Required Courses

Choose one:

- SPAN 3070 - Bilingual Communities: Spanish as a Language of Contact. **Semester Hours: 3**
- SPAN 3212 - Spanish American Culture and Civilization. **Semester Hours: 3**
- SPAN 3221 - Culture and Civilization of Spain I. **Semester Hours: 3**
- SPAN 3222 - Culture and Civilization of Spain II. **Semester Hours: 3**
- SPAN 4230 - Modern Culture of Spain through Film and Narrative. **Semester Hours: 3**

**Total: 3 Hours**

## Electives

In addition, students minoring in Spanish must complete four additional upper-division Spanish courses.

**Total: 12 Hours**

**Minor Total: 15 Hours**

## Master of Arts

# Spanish MA

- ▶ Graduate School Rules apply to this program

The UC Denver modern languages faculty offers a Spanish master's degree program that is an alternative to the exclusively literary studies that traditionally lead to doctoral programs. By integrating language, literature and cultural studies with ancillary work in other disciplines, the degree provides a broader expertise that will lead to or enhance careers in teaching, government, social services, business and international trade. Students will tailor the program to their specific interests and needs by developing a topical focus and including courses from outside the Department of Modern Languages, through which they may develop a secondary emphasis that can be incorporated in a thesis project.

## Requirements for Admission

In addition to the general admission requirements of the Graduate School, the Spanish MA program requires:

- an undergraduate GPA of at least 2.5, with a GPA of at least 3.0 in Spanish courses
- a bachelor's degree in Spanish is not required, although all candidates must demonstrate Spanish oral and written proficiency at the advanced level, as defined by the American Council on the Teaching of Foreign Languages
- two copies of all college transcripts
- three letters of recommendation
- a statement of the applicant's purpose in pursuing the degree, in Spanish; any gaps, weaknesses or special circumstances affecting an applicant's academic record should be addressed in the statement of purpose portion of the application
- a TOEFL score higher than 550 for students whose previous academic degree was completed in a non-English-speaking country

In special circumstances, the department may modify its admission standards.

## Program Requirements

Candidates in Spanish must satisfy the general requirements of the Graduate School as outlined in this catalog and will be required to complete 33 hours of course work distributed with respect to one of the following two options:

### Thesis option (course work + thesis):

- SPAN 5000 - Introduction to Graduate Studies in Spanish. **Semester Hours: 3**

Literature/culture and linguistics, including at least 6 hours in literature/culture and 6 hours in linguistics: **15 semester hours**

Courses outside the Department of Modern Languages, as approved by advisor: **6 semester hours**

Elective, as approved by advisor: **3 semester hours**

Thesis preparation and writing: **6 semester hours**

**Thesis Option Total: 33 Hours**

### Nonthesis option (course work):

- SPAN 5000 - Introduction to Graduate Studies in Spanish. **Semester Hours: 3**

Literature/culture and linguistics, including at least 6 hours in literature/culture and 6 hours in linguistics: **18 semester hours**

Courses outside the Department of Modern Languages, as approved by advisor: **6 semester hours**

Electives as approved by advisor (may include another course outside the Department of Modern Languages): **6 semester hours**

## **Nonthesis Option Total: 33 Hours**

### *Notes:*

1. No more than one undergraduate course (3 semester hours) may be applied toward the MA degree and then only in an ancillary field outside the Department of Modern Languages.
2. Students choosing the nonthesis option may elect to take three courses (9 semester hours) outside the department.

## **Financial Aid**

The department offers a limited number of teaching assistantships for graduate students on a semester-by-semester basis. Appointment is competitive and is typically based on a student's academic credentials. Contact the department for details. For information on grants, federal work-study programs, scholarships and loans, contact the Office of Financial Aid (303-556-2886).

For further information concerning the master's degree in Spanish at UC Denver, direct inquiries to the graduate advisor.

## **Philosophy**

**Chair:** Candice Shelby

**Program Assistant:** Agnes Romero

**Office:** Plaza Building, M108

**Telephone:** 303-556-4868

**Fax:** 303-556-8100

**Web site:** [www.cudenver.edu/philosophy/](http://www.cudenver.edu/philosophy/)

Undergraduate Program

Graduate Program

## **Faculty**

### **Associate Professors:**

Robert Metcalf, PhD, Pennsylvania State University

Candice Shelby, PhD, Rice University

Mark Tanzer, PhD, Stony Brook University

### **Assistant Professors:**

David Hildebrand, PhD, University of Texas at Austin

Chad M. Kautzer, PhD, Stony Brook University

Maria L. Talero, PhD, Pennsylvania State University

Gabriel Zamosc-Regueros, PhD, University of Michigan

### **Senior Instructors:**

Myra Bookman, PhD, University of Colorado

Sharon Coggan, PhD, Syracuse University

Daryl Mehring, PhD, University of Colorado

Samuel F. Walker, PhD, University of Colorado

### **Honoraria:**

Barbara Goodrich, William Simpson

The philosophy program is recommended to students whose goal is a liberal arts education in the finest sense. Philosophy is concerned with the transmission and evaluation of basic beliefs and values. It is not an easy field of study, but for more than 25 centuries philosophy has been judged most rewarding by those who seek self-development, intellectual sophistication and the happiness of a reflective life.

Philosophy is an excellent undergraduate preparation for almost any professional field.

## **Undergraduate**

### **REQUIREMENTS FOR THE MAJOR**

### **REQUIREMENTS FOR THE MINOR**

### **HONORS PROGRAM**

Requirements for honors are the following:

#### **A. Course Performance**

- |                           |                          |                 |
|---------------------------|--------------------------|-----------------|
| 1. <i>Cum laude</i>       | 3.4 GPA within the major | 3.3 overall GPA |
| 2. <i>Magna cum laude</i> | 3.6 GPA within the major | 3.5 overall GPA |

3. *Summa cum laude* 3.8 GPA within the major 3.7 overall GPA

## B. Thesis

Majors desiring to graduate with honors in philosophy must enroll in PHIL 4950 for a minimum of 3 hours and a maximum of 6 hours (note that these hours are in addition to the 36 hours required for the philosophy major) and complete research that culminates in a thesis and oral examination. Majors must work with two faculty members during the project. Written proposals must be submitted and approved by the faculty committee prior to the beginning of the project. If the completed thesis and oral exam are deemed worthy of honors, the student will be awarded the honors consistent with his or her GPA. However, to receive highest honors (*summa cum laude*), the faculty committee must designate the performance for both the written thesis and the oral defense as worthy of graduation with highest honors. If the faculty committee makes no such designation, students will graduate *magna cum laude*.

## MINOR IN ETHICS

## CERTIFICATE IN ETHICS

## Graduate

Graduate-level courses offered at the Downtown Campus may be applied to University of Colorado-Boulder graduate degrees in philosophy or toward the master of humanities and master of social science at UC Denver. Contact these programs for degree requirements and applicability limitations of UC Denver course work.

## Center for Ethics and Community

**Executive Director:** Candice L. Shelby

**Telephone:** 303-556-3223

The Center for Ethics and Community is dedicated to strengthening ethics in the community, in schools and universities and in the professions.

The center focuses its activities in five major areas:

- academic programs
- research in ethics
- ethics and the professions
- community outreach
- educational programs

Through the Department of Philosophy, the center offers an ethics certificate and an ethics minor.

The ethics certificate is offered to individuals who are not enrolled in a degree program. The certificate program encourages community members from all walks of life to further their ethics education.

The ethics minor is offered primarily to students enrolled for regular course work.

## **Bachelor of Arts**

# **Philosophy BA**

Students must declare a major by the time they have completed 60 semester hours of course work. A total of 36 semester hours must be completed for the philosophy major, at least 18 of which must be taken at the Downtown Campus. A minimum grade of C (2.0) is required in each course. For those students who qualify for and fulfill the requirements for graduation with honors, a total of at least 39 hours is required. A total of 18 upper-division semester hours are required for the major.

Unless otherwise noted, registration for 4000-level courses in philosophy require a minimum grade of C (2.0) in every prior philosophy course and completion of at least PHIL 3002 or PHIL 3022 or permission of instructor.

## **Program Requirements**

### **Required Courses**

- PHIL 2441 - Logic and Language: AH3. **Semester Hours: 3**
- PHIL 3002 - Ancient Greek Philosophy. **Semester Hours: 3**
- PHIL 3022 - Modern Philosophy. **Semester Hours: 3**  
(It is recommended, but not required, that PHIL 3002 be taken before PHIL 3022)
- PHIL 4735 - Rationalism. **Semester Hours: 3**  
-OR-
- PHIL 4740 - Empiricism. **Semester Hours: 3**  
-OR-
- PHIL 4760 - Kant. **Semester Hours: 3**

**Total: 12 Hours**

### **Additional required course subject areas**

(upper-division courses)

One course in 19th century philosophy (may be a single figure course)

One course in 20th century philosophy (may be a single figure course)

One course in metaphysics or epistemology

One course in ethics or social and political philosophy

**Total: 12 Hours**

## Additional electives

Choose four (maximum of 6 hours in religious studies)

**Total: 12 Hours**

**Major Total: 36 Hours**

## Course work required for graduation with honors:

3-6 semester hours taken over two semesters of:

- PHIL 4950 - Honors Thesis. **Semester Hours: 3 to 6**

Return to Department of Philosophy

## Certificate

# Ethics Undergraduate Certificate

The certificate in ethics is designed for students currently enrolled in a degree program as well as nondegree students.

A total of 15 semester hours is required for an ethics certificate. Students are required to write a capstone paper in an area of ethics directly related to their career and/or field of study (PHIL 3840).

## Certificate Requirements

- PHIL 1020 - Introduction to Ethics and Society: The Person and the Community: AH3. **Semester Hours: 3**

## Choose four:

- PHIL 3002 - Ancient Greek Philosophy. **Semester Hours: 3**
- PHIL 3150 - History of Ethics. **Semester Hours: 3**
- PHIL 3200 - Social and Political Philosophy. **Semester Hours: 3**
- PHIL 3250 - Business Ethics. **Semester Hours: 3**
- PHIL 3500 - Ideology and Culture: Racism and Sexism. **Semester Hours: 3**
- PHIL 3840 - Independent Study. **Semester Hours: 1 to 3**
- PHIL 4150 - Twentieth Century Ethics. **Semester Hours: 3**

- PHIL 4242 - Bioethics. **Semester Hours:** 3

## **Certificate Total: 15 Hours**

### **Non Degree**

## **Ethics Minor**

A total of 15 semester hours is required for an ethics minor, with a minimum grade of C (2.0) in each course.

### **Required Courses**

- PHIL 1020 - Introduction to Ethics and Society: The Person and the Community: AH3. **Semester Hours:** 3

### **Choose four:**

- PHIL 3150 - History of Ethics. **Semester Hours:** 3
- PHIL 3200 - Social and Political Philosophy. **Semester Hours:** 3
- PHIL 3250 - Business Ethics. **Semester Hours:** 3
- PHIL 3500 - Ideology and Culture: Racism and Sexism. **Semester Hours:** 3
- PHIL 3939 - Internship/Cooperative Education. **Semester Hours:** 1 to 3
- PHIL 4150 - Twentieth Century Ethics. **Semester Hours:** 3
- PHIL 4242 - Bioethics. **Semester Hours:** 3

## **Minor Total: 15 Hours**

For those students who major in philosophy and minor in ethics, no course can satisfy the requirements for both. For example, if a student takes PHIL 4150, Twentieth Century Ethics, it cannot satisfy the requirement in the major for a course in 19th or 20th century philosophy.

## **Philosophy Minor**

A total of 15 semester hours is required for the minor in philosophy, with a minimum grade of C (2.0) in each course.

### **Program Requirements**

#### **Required Courses:**

- PHIL 1012 - Introduction to Philosophy: Relationship of the Individual to the World: AH3. **Semester Hours: 3**
- PHIL 3002 - Ancient Greek Philosophy. **Semester Hours: 3**
- PHIL 3022 - Modern Philosophy. **Semester Hours: 3**  
(It is recommended but not required that PHIL 3002 be taken before PHIL 3022.)

**Total: 9 Hours**

## **Electives**

Choose two additional philosophy courses, one of which must be at the upper-division level.

**Total: 6 Hours**

## **Minor Total: 15 Hours**

**Religious studies courses cannot be used to fulfill the requirements for the minor.**

## **Physics**

**Chair:** Randall P. Tagg

**Program Assistant:** Pamela Wojahn

**Office:** North Classroom, 3801

**Telephone:** 303-556-8344

**Fax:** 303-556-6257

**Web site:** [www.cudenver.edu/physics](http://www.cudenver.edu/physics)

## **Faculty**

### **Professors:**

Martin E. Huber, PhD, Stanford University

Martin M. Maltempo, PhD, Columbia University

Alberto C. Sadun, PhD, Massachusetts Institute of Technology

### **Associate Professor:**

Randall P. Tagg, PhD, Massachusetts Institute of Technology

### **Assistant Professors:**

John M. Carlson, PhD, University of Michigan

Emily A. Gibson, PhD, University of Colorado Boulder

### **Emeritus Professors:**

Willard R. Chappell, PhD, University of Colorado

Clyde S. Zaidins, PhD, California Institute of Technology

## **Undergraduate**

Physics, as the most fundamental of the sciences, is the base on which many other disciplines rest. Therefore, knowledge of the fundamentals of physics is often required in other programs, and a physics degree is an outstanding platform for employment and advanced study in many technical disciplines. The department offers both a course of study fulfilling the bachelor of science degree and a wide range of service courses for students majoring in disciplines other than physics. Students intending to major in physics should have a high school background that includes trigonometry, advanced algebra, chemistry and physics, as well as a good preparation in the arts and humanities. Students have an option during their freshman year to overcome some deficiencies in these areas.

The Department of Physics offers various programs of study, or tracks, tailored to the specific career goals of its majors. Students should consult with a departmental advisor prior to choosing a track. *Track 1—Pure and Applied Physics* is intended for students preparing for graduate school, teaching careers, or careers in industry or government labs. *Track 2—Biophysics and Medical Physics* is seen as a bridge to an advanced degree in the health sciences for those interested in medical research, admission to medical school, preparation for work in a hospital or clinical situation, or industrial jobs in biomedical instrumentation. For any track, students preparing for employment in an interdisciplinary area (such as environmental, geophysical or energy study) can choose to add an appropriate minor or arrange a specific major program on an individual basis.

Students interested in teaching physics in high school are encouraged to consider the CLAS educational studies minor in addition to their physics major. Students in other disciplines have the option of choosing a minor in physics or in astrophysics. The department now also offers an online certificate in the scientific foundations of technical innovation, both at undergraduate and graduate levels. This 12-semester-hour program is intended to foster careers in the practical application of physics and the potential commercialization of new technologies.

To enhance the employment and postgraduate study options of physics majors, the department is committed to providing students with opportunities for experimental, computational and theoretical research. On-campus opportunities are available through the faculty research programs, or the department will assist interested physics majors in locating off-campus

opportunities at a government or industrial laboratory. Questions regarding physics courses or the physics curriculum should be directed to a departmental advisor. Appointments should be made through the physics office.

## **REQUIREMENTS FOR MAJOR**

### **Departmental Honors**

Qualified students are encouraged to participate in the physics honors program. For these students, a senior thesis is required. This work will be conducted under the supervision of a faculty advisor. The topic and scope of this work will be chosen by the student in consultation with the thesis advisor. The student has the option of registering for up to 3 semester hours of independent study for the thesis project; regardless of registered semester hours, the student should commit the effort equivalent to a 3-semester-hour laboratory course toward completion of the thesis. The levels of passing scores are satisfactory, meritorious and excellent.

Within this framework, three levels of honors are awarded by the Downtown Campus:

1. *Cum laude*: The student must have a cumulative GPA of 3.25 both in physics and overall at UC Denver. The student's senior thesis and presentation must be judged to be meritorious by the committee.
2. *Magna cum laude*: The student must have a cumulative GPA of 3.50 both in physics and overall at UC Denver. The student's senior thesis and presentation must be judged to be meritorious by the committee.
3. *Summa cum laude*: The student must have a cumulative GPA of 3.75 both in physics and overall at UC Denver. The student's senior thesis and presentation must be judged to be excellent by the committee.

### **Physics Minors**

**MINOR IN PHYSICS**

**MINOR IN ASTROPHYSICS**

### **Certificate**

**Scientific Foundations of Technical Innovation**

### **Bachelor of Science**

## **Physics BS**

### **Program Requirements**

Students must declare their intention to major in physics by the time they have completed 60 semester hours and complete between 47 and 51 semester hours (depending on the track chosen) in physics and related topics. Additionally, all tracks require 16 semester hours in math ancillary courses. No grade below a C (2.0) can be used to meet the requirements for the major. At least 12 semester hours of the requirements for the major must be completed at the Downtown Campus.

A senior thesis, usually from participation in research, is *required* for all students wishing to graduate with departmental honors. All other students are encouraged to do research leading to a project report or senior thesis.

## Required Courses Common to All Tracks

### Required Physics Courses

- PHYS 2311 - General Physics I: Calculus-Based. **Semester Hours: 4**
- PHYS 2331 - General Physics II: Calculus-Based. **Semester Hours: 4**
- PHYS 2371 - Topic-Driven Physics Lab. **Semester Hours: 3**
- PHYS 2711 - Vibrations and Waves. **Semester Hours: 3**
- PHYS 2811 - Modern Physics I. **Semester Hours: 4**
- PHYS 3120 - Methods of Mathematical Physics. **Semester Hours: 3**
- PHYS 3711 - Junior Laboratory I. **Semester Hours: 2**
- PHYS 3811 - Quantum Mechanics. **Semester Hours: 3**

*Note:* The department will accept the following combination of independent study and introductory lab courses in lieu of PHYS 2371. However, PHYS 2371 is strongly recommended because it provides explicit preparation for upper division lab courses.

- PHYS 1840 - Independent Study. **Semester Hours: 1 to 3**
- PHYS 2321 - General Physics Lab I. **Semester Hours: 1**
- PHYS 2341 - General Physics Lab II. **Semester Hours: 1**

**Total physics courses required for all tracks: 26 Hours**

### Required Ancillary Courses

- MATH 1401 - Calculus I: MA1. **Semester Hours: 4**
- MATH 2411 - Calculus II: MA1. **Semester Hours: 4**
- MATH 2421 - Calculus III: MA1. **Semester Hours: 4**
- MATH 3195 - Linear Algebra and Differential Equations. **Semester Hours: 4**

*Note:* The department will accept the following combination of math courses in place of MATH 3195:

- MATH 3191 - Applied Linear Algebra. **Semester Hours:** 3
- MATH 3200 - Elementary Differential Equations. **Semester Hours:** 3

**Total ancillary math courses required for all tracks: 16 Hours**

**Total required semester hours for all physics major tracks:  
42 Hours**

## **Pure and Applied Physics (Track 1)**

Take in addition to the courses common to all tracks:

- PHYS 3211 - Analytical Mechanics. **Semester Hours:** 4
- PHYS 3411 - Thermal Physics. **Semester Hours:** 3
- PHYS 3721 - Junior Laboratory II. **Semester Hours:** 2
- PHYS 4331 - Principles of Electricity and Magnetism. **Semester Hours:** 4

*Note:* Students who must *retake* PHYS 4331 may fulfill this requirement by obtaining a C or better in

- PHYS 4351 - Bioelectromagnetism. **Semester Hours:** 4
  
- PHYS 4711 - Senior Laboratory I. **Semester Hours:** 2  
(or a course in computational physics approved by advisor)

## **Elective Physics Courses**

Six semester hours of physics-related electives at 3000-level or above approved by advisor, including up to 3 hours of independent study

**Total Track 1 Specific Courses: 21 Hours**

## **Biophysics and Medical Physics (Track 2)**

Take in addition to the courses common to all tracks:

- PHYS 3251 - Biophysics of the Body. **Semester Hours:** 4
  - PHYS 3411 - Thermal Physics. **Semester Hours:** 3
  - PHYS 4351 - Bioelectromagnetism. **Semester Hours:** 4  
(recommended option)
- OR-
- PHYS 4331 - Principles of Electricity and Magnetism. **Semester Hours:** 4

## Biophysics electives (8-9 hours)

Biophysics electives at the 3000-level or above approved by advisor (including up to 3 semester hours independent study and/or two courses, PHYS 3151 and PHYS 3161, listed below)

-OR-

The following four courses (an option primarily for pre-med physics majors):

- \* BIOL 2051 - General Biology I: SC1. **Semester Hours: 3**
- \* BIOL 2061 - General Biology II: SC1. **Semester Hours: 3**
- PHYS 3151 - Biophysics Outlook I. **Semester Hours: 1**
- PHYS 3161 - Biophysics Outlook II. **Semester Hours: 1**

- PHYS 3721 - Junior Laboratory II. **Semester Hours: 2**

-OR-

The following two courses (an option primarily for pre-med physics majors):

- \* BIOL 2071 - General Biology Laboratory I: SC1. **Semester Hours: 1**
- \* BIOL 2081 - General Biology Laboratory II: SC1. **Semester Hours: 1**

Numerical modeling or probability and statistics course approved by advisor: **3 semester hours**

**Total Track 2 Specific Courses: 25 Hours**

**Major Total: 63-67 Hours**

## Pre-Med Students

*Note:* courses above marked \* are generally required for medical school admissions. In addition, the following are generally required for medical school admissions but NOT for the biophysics and medical physics track:

- \* CHEM 2031 - General Chemistry I: SC1. **Semester Hours: 3**
- \* CHEM 2038 - General Chemistry Laboratory I: SC1. **Semester Hours: 1**
- \* CHEM 2061 - General Chemistry II: SC1. **Semester Hours: 3**
- \* CHEM 2068 - General Chemistry Laboratory II: SC1. **Semester Hours: 2**
- \* CHEM 3411 - Organic Chemistry I. **Semester Hours: 4**
- \* CHEM 3418 - Organic Chemistry Laboratory I. **Semester Hours: 1**
- \* CHEM 3421 - Organic Chemistry II. **Semester Hours: 4**
- \* CHEM 3428 - Organic Chemistry Laboratory II. **Semester Hours: 1**

**Total additional pre-med (but not required for Track 2): 19 hours**

## Certificate

# Scientific Foundations of Technical Innovation Certificate

The goal of this certificate is to give students and working professionals an opportunity to broaden their technical knowledge while contributing to regional economic development. Two real-world projects—one for a client and one for the student’s own pursuits—are combined with a series of six short courses to provide both context and substance for gaining knowledge needed to create technical prototypes. The model is based on the method by which most physical science graduate students learn technical domains on a “just-in-time” basis. It is also a method by which many corporations quickly bring new project team members up to speed on project knowledge. Entry into the certificate program requires prior completion of two semesters of calculus-based physics and two semesters of calculus **or** permission of the certificate advisor.

## Undergraduate required courses

- PHYS 4850 - Physics for Design and Innovation I. **Semester Hours: 3**
- PHYS 4400-4499 - Topics in Scientific Instrumentation and Laboratory Methods.  
**Semester Hours: 1**  
Choose six 1-semester-hour short courses out of a larger list of offered topics; the specific sequence must be approved by the certificate advisor
- PHYS 4852 - Physics for Design and Innovation II. **Semester Hours: 3**

**Total: 12 Hours**

## Graduate required courses

Graduate versions of the courses (5000-level) require an undergraduate degree and additional work on technical analysis or connection to professional practice.

- PHYS 5850 - Physics for Design and Innovation I. **Semester Hours: 3**
- PHYS 5400-5499 - Topics in Scientific Instrumentation and Laboratory Methods.  
**Semester Hours: 1**  
Choose six 1-semester-hour short courses out of a larger list of offered topics; the specific sequence must be approved by the certificate advisor.
- PHYS 5852 - Physics for Design and Innovation II. **Semester Hours: 3**

**Total: 12 Hours**

# Scientific Foundations of Technical Innovation Certificate for Graduate Students

## Scientific Foundations of Technical Innovation Certificate

The goal of this certificate is to give students and working professionals an opportunity to broaden their technical knowledge while contributing to regional economic development. Two real-world projects—one for a client and one for the student’s own pursuits—are combined with a series of six short courses to provide both context and substance for gaining knowledge needed to create technical prototypes. The model is based on the method by which most physical science graduate students learn technical domains on a “just-in-time” basis. It is also a method by which many corporations quickly bring new project team members up to speed on project knowledge. Entry into the certificate program requires prior completion of two semesters of calculus-based physics and two semesters of calculus or permission of the certificate advisor.

## Undergraduate required courses

- PHYS 4850 - Physics for Design and Innovation I. **Semester Hours: 3**
- PHYS 4400-4499 - Topics in Scientific Instrumentation and Laboratory Methods. **Semester Hours: 1**
- Choose six 1-semester-hour short courses out of a larger list of offered topics; the specific sequence must be approved by the certificate advisor
- PHYS 4852 - Physics for Design and Innovation II. **Semester Hours: 3**
- 

**Total: 12 Hours**

## Graduate required courses

Graduate versions of the courses (5000-level) require an undergraduate degree and additional work on technical analysis or connection to professional practice.

- PHYS 5850 - Physics for Design and Innovation I. **Semester Hours: 3**
- PHYS 5400-5499 - Topics in Scientific Instrumentation and Laboratory Methods. **Semester Hours: 1**
- Choose six 1-semester-hour short courses out of a larger list of offered topics; the specific sequence must be approved by the certificate advisor.

- PHYS 5852 - Physics for Design and Innovation II. **Semester Hours: 3**

**Total: 12 Hours**

**Non Degree**

## **Astrophysics Minor**

Astrophysics is an important and well-represented subdiscipline of physics. It includes the study of the solar system, galactic and extra-galactic astrophysics, as well as cosmology. A minor in this field combines a theoretical approach with observational analysis. There is also opportunity to do research in this field.

While the Department of Physics offers minors in both physics and astrophysics, it is not possible to receive minors in both fields. Physics majors may elect to receive only the astrophysics minor from the department.

The astrophysics minor requires a total of 17 semester hours, in which no grade below a C (2.0) may be used to meet the requirements for the minor. At least 6 semester hours taken for the minor must be completed at the Downtown Campus. Requirements for the minor in astrophysics may be used to fulfill the requirements of the major in physics. However, a student majoring in physics who wants to minor in astrophysics needs to take 15 semester hours in astrophysics that do not overlap with the major.

### **Program Requirements**

#### **Required Physics Courses:**

- PHYS 1052 - General Astronomy I: SC1. **Semester Hours: 4**

#### **Either of the following two sequences:**

- PHYS 2010 - College Physics I. **Semester Hours: 4**
  - PHYS 2020 - College Physics II: SC1. **Semester Hours: 4**
  - PHYS 2030 - College Physics Lab I: SC1. **Semester Hours: 1**
  - PHYS 2040 - College Physics Lab II: SC1. **Semester Hours: 1**
- Sequence Total: 10 Hours**
- OR-
- PHYS 2311 - General Physics I: Calculus-Based. **Semester Hours: 4**
  - PHYS 2321 - General Physics Lab I. **Semester Hours: 1**
  - PHYS 2331 - General Physics II: Calculus-Based. **Semester Hours: 4**
  - PHYS 2341 - General Physics Lab II. **Semester Hours: 1**
- Sequence Total: 10 Hours**

## Elective Physics Courses

Choose one:

- GEOL 1302 - Introduction to Astrogeology. **Semester Hours: 3**
- PHYS 3040 - Modern Cosmology. **Semester Hours: 3**
- PHYS 3050 - General Astronomy II. **Semester Hours: 3**
- PHYS 3060 - Astronomical Image Processing Lab. **Semester Hours: 3**
- \* PHYS 3840 - Independent Study. **Semester Hours: 1 to 3**
- PHYS 3939 - Internship/Cooperative Education. **Semester Hours: 1 to 3**
- \* PHYS 4840 - Independent Study. **Semester Hours: 1 to 3**
- \* PHYS 4920 - Advanced Undergraduate Seminar. **Semester Hours: 1**
- \* PHYS 4931 - Internship in Applied Physics. **Semester Hours: 2 to 4**
- \* PHYS 4980 - Advanced Physics Topics. **Semester Hours: 1 to 3**

**Total: 3 Hours**

**Minor Total: 17 Hours**

\*Topics in these classes vary. See departmental advisor for approval.

## Physics Minor

A total of 16 semester hours is required for a minor in physics. No grade below a C can be used to meet the requirements for the minor. At least 6 semester hours of the requirements for the minor must be completed at the Downtown Campus.

### Program Requirements

### Required Physics Courses

Either of the following two sequences:

- PHYS 2010 - College Physics I. **Semester Hours: 4**
  - PHYS 2020 - College Physics II: SC1. **Semester Hours: 4**
  - PHYS 2030 - College Physics Lab I: SC1. **Semester Hours: 1**
  - PHYS 2040 - College Physics Lab II: SC1. **Semester Hours: 1**
- Sequence Total: 10 Hours**
- OR-
- PHYS 2311 - General Physics I: Calculus-Based. **Semester Hours: 4**
  - PHYS 2321 - General Physics Lab I. **Semester Hours: 1**
  - PHYS 2331 - General Physics II: Calculus-Based. **Semester Hours: 4**
  - PHYS 2341 - General Physics Lab II. **Semester Hours: 1**

**Sequence Total: 10 Hours**

## **Elective Physics Courses**

At least 3 of the 6 semester hours must be at the 3000 level or above.

**Total: 6 Hours**

## **Minor Total: 16 Hours**

### **Political Science**

**Chair:** Jana Everett

**Program Assistant:** Cory Gruebele

**Pre-law Advisor:** Glenn Morris

**Undergraduate Advisor:** Lucy McGuffey

**Graduate Advisor:** Anna Sampaio

**Office:** King Center, 502

**Telephone:** 303-556-3556

**Fax:** 303-556-6041

**Web site:** [www.cudenver.edu/polisci/](http://www.cudenver.edu/polisci/)

### **Faculty**

#### **Professors:**

Mike Cummings, PhD, Stanford University

Jana Everett, PhD, University of Michigan

#### **Associate Professors:**

Glenn T. Morris, JD, Harvard University School of Law

Tony Robinson, PhD, University of California, Berkeley

Anna Sampaio, PhD, University of California at Riverside

Stephen C. Thomas, PhD, Stanford University

#### **Assistant Professors:**

Michael J. Berry, PhD, University of Colorado

Christoph Stefes, PhD, University of Denver

**Adjoint Faculty:**

Kathryn Cheever, PhD, University of Colorado

**Senior Instructors:**

Karen Breslin, JD, University of Denver

Amin Kazak, PhD, University of Denver

Lucy McGuffey, PhD, University of Denver

**Instructors:**

Harvey Bishop

Thorsten Sphen

**Adjunct Faculty:**

Loring Abeyta

Charles Norton

Thad Tecza

**Emeritus Faculty:**

Joel Edelstein, PhD, University of California, Riverside

Political science is the study of people, power and the public good. Looking at a variety of societies, institutions and interpersonal situations, the discipline asks who has power, where this power comes from, how it is used, how it promotes or impairs the public good and how the public good is defined. Political science draws from other fields, such as psychology, philosophy, economics, sociology and world literature. Finally, it explores the relationship between idealism and realism, between theory and practice, between political thought and personal action.

Opportunities for students with a BA in political science include careers in business, teaching, journalism, community organizing and government service. A political science degree also serves as good preparation for professional training in law and public administration. The students' internship experiences increase their job opportunities. Students with an MA in

political science may find careers in such areas as business, government research and administration and teaching at the community-college level.

Please visit the political science department Web site for detailed information on programs, faculty, students, courses and syllabi, community involvement and service learning, internships and photographs.

## **Undergraduate**

### **REQUIREMENTS FOR THE MAJOR**

### **REQUIREMENTS FOR THE MINOR**

## **Departmental Honors**

Requirements for honors in political science are an overall GPA (in all courses, not just political science courses) of 3.65 or better and the preparation and defense of an honors paper. Honors graduates with an overall GPA of 3.75 to 3.84 may graduate with high honors, and those with GPAs of 3.85 and higher may graduate with highest honors. Level of honors granted depends upon both the GPA and the quality of the honors paper.

## **Graduate**

### **REQUIREMENTS FOR THE MA DEGREE**

## **Fourth World Center for the Study of Indigenous Law and Politics**

**Executive Director:** Glenn T. Morris

**Telephone:** 303-556-6243

**Web site:** <http://carbon.cudenver.edu/public/fwc/>

This center provides a research clearinghouse to students and faculty on the Downtown Campus on legal and political issues that affect indigenous peoples (the Fourth World). In addition to supporting a modest library of rare books and periodicals on indigenous issues, the center also stocks video and audio resources on subjects of indigenous politics and a substantial news file archive on current developments in the Fourth World. The center has produced curricular materials, including the *Fourth World Bulletin*, for use in international relations and area-studies courses.

Currently, the center is expanding the number of course offerings in the area of Fourth World studies and expects to offer a certificate in Fourth World studies in the near future.

## **Center for NEW DIRECTIONS in Politics and Public Policy**

**Director:** Kathryn Cheever

**Telephone:** 303-556-5950

**Web site:** <http://thunder1.cudenver.edu/newdirections/index.htm>

This center provides academic programs, courses and research focused in the areas of politics and public policy with the purpose of developing the leadership capacities necessary to address changing public priorities for the 21st century within neighborhoods, communities, governmental jurisdictions and nonprofit entities.

The center expects to offer an undergraduate certificate in public policy and administrative leadership in the near future.

## **Bachelor of Arts**

# **Political Science BA**

Undergraduate students must declare their intention to major in political science by the time they have completed 60 semester hours, and must complete a minimum of 36 semester hours in political science, of which at least 21 must be upper-division courses. Fifteen of the 36 hours must be taken from Downtown Campus faculty. Courses are distributed among the primary fields as listed in this section, i.e., American politics, comparative politics, international relations, political theory and public policy and administration. To count for the major, all course work must be completed with a grade of C (2.0) or better. Two cognate courses (which don't count toward the 36 hours) from the list below must also be completed.

## **Required Political Science Courses**

### **Required Core**

- P SC 1001 - Introduction to Political Science: The Quest for Freedom and Justice: SS1. **Semester Hours: 3**
- P SC 1101 - American Political System: SS1. **Semester Hours: 3**
- P SC 3011 - Research Methods. **Semester Hours: 3**  
-OR-
- P SC 4011 - GIS in Political Science. **Semester Hours: 3**

**Total: 9 Hours**

### **Choose two:**

- P SC 4207 - Theories of Social and Political Change. **Semester Hours: 3**
- P SC 4407 - Early Political Thought. **Semester Hours: 3**
- P SC 4417 - Modern Political Thought. **Semester Hours: 3**

- P SC 4427 - Law, Politics and Justice. **Semester Hours: 3**
- P SC 4437 - Coercion and the State. **Semester Hours: 3**
- P SC 4457 - American Political Thought. **Semester Hours: 3**

**Total: 6 Hours**

**One 4000-level course in each of three fields:**

American politics, comparative politics, and international relations

**Total: 9 Hours**

## **Experiential-Learning Requirement**

**Choose one:**

- P SC 3914 - The Urban Citizen. **Semester Hours: 3**
- P SC 3939 - Internship/Cooperative Education. **Semester Hours: 1 to 3**
- P SC 4934 - CU at the Capitol. **Semester Hours: 3**  
Experiential learning project in any P SC class: **3 semester hours**

**Total: 3 Hours**

## **Electives**

Three political science elective courses

**Total: 9 Hours**

**Political Science Total: 36 Hours**

## **Required Cognate Courses**

In addition to the 36 hours above, choose two of the following cognate courses:

- ECON 2012 - Principles of Economics: Macroeconomics: SS1. **Semester Hours: 3**
- ECON 2022 - Principles of Economics: Microeconomics: SS1. **Semester Hours: 3**
- HIST 1016 - World History to 1500. **Semester Hours: 3**
- HIST 1026 - World History Since 1500. **Semester Hours: 3**
- HIST 1211 - Western Civilization I. **Semester Hours: 3**
- HIST 1212 - Western Civilization II. **Semester Hours: 3**
- HIST 1361 - U.S. History to 1876: HI1. **Semester Hours: 3**

- HIST 1362 - U.S. History Since 1876: HI1. **Semester Hours: 3**

**Total: 6 Hours**

**Major Total: 42 Hours**

## **Public Policy Option**

This option was designed for students who specifically desire to pursue careers in public policy and/or public administration in the public or nonprofit sectors. Grounded in basic political science theory and familiarity with American, comparative and international politics, this BA track emphasizes the specifically political aspects of public policy processes and settings. Cases will emphasize key policy issues confronting U.S. local, state and national decision makers and citizens. A focus on politics and the policy making process will prepare students conceptually and methodologically to move beyond partisan politics to address how leaders can best mobilize resources to achieve constituent goals consistent with the public interest. The course requirements for this concentration are on the department's Web site: <http://thunder1.cudenver.edu/clas/polisci/major.html#publicPolicy>.

## **Non Degree**

# **Political Science Minor**

A student can earn an undergraduate minor in political science by completing 15 semester hours distributed as shown below. At least 9 of the 15 hours must be taken from Downtown Campus faculty.

## **Course Requirements**

### **One lower-division course**

- P SC 1001 - Introduction to Political Science: The Quest for Freedom and Justice: SS1. **Semester Hours: 3**  
-OR-
- P SC 1101 - American Political System: SS1. **Semester Hours: 3**

### **Four upper-division courses**

Choose four upper-division courses, including one each in political theory, American politics, comparative politics and international relations.

## **Minor Total: 15 Hours**

### **Master of Arts**

# **Political Science MA**

- ▶ Graduate School Rules apply to this program

The political science department offers a master of arts (MA) degree in political science with an emphasis on building academic and practical skills in key areas of the discipline. Research and teaching in the department centers on the major fields of American politics, comparative politics, international relations, political theory and public policy; however, the department also offers more specialized training in human rights, legal studies, gender politics, race and ethnic politics, European studies, indigenous politics and urban politics. Students pursuing the MA have the option of completing the traditional track or an alternative track centered on the study on politics, public policy and leadership. Students completing the program have gone on to PhD programs across the country and work in a variety of areas, including; state and local elected office, government service, directors of community-based organizations and nongovernmental organizations, legislative analysts, UN affiliates, lobbyists, teachers, media analysis and political consulting.

### **Requirements for Admission**

Students applying for admission to the MA program in political science should present at least 18 semester hours of previous academic work in political science, at least 9 hours of which should be at the upper-division or graduate level. The department may make exceptions to these requirements in unusual cases (for instance, if course work in related fields such as psychology, economics and history compensates for the deficiencies in political science). Applicants should present an undergraduate GPA of at least 3.0 to be considered; however, the department typically admits students with a GPA of 3.2 or higher. In their applications, students must submit transcripts and letters of recommendation (from academic sources) as specified by the Graduate School. In addition, applicants must submit a statement of academic objectives and an academic writing sample. Standardized test scores are not required of applicants, but will be considered if submitted.

In order to take graduate courses in political science, students must either be admitted to the MA program or secure permission as a nondegree student. Nondegree students may take up to 12 semester hours of graduate course work; however, they must first secure permission from the department graduate advisor to enroll in all graduate course work. Nondegree students are not eligible to enroll in P SC 5000. The State of the Discipline.

### **Degree Requirements**

In addition to the requirements for admission and details of the program spelled out here, graduate students in political science must also abide by department rules and procedures specified in the Graduate Student Handbook. Failure to meet these policies may result in a student being dropped from the program.

Under the MA program in political science, two degree plans are available:

- Plan I requires the completion of eight graduate courses (24 semester hours) and a 6-credit thesis
- Plan II requires the completion of nine graduate courses (27 semester hours) and a 3-credit project.

Course work in both plans completed under the traditional track offered on the Downtown Campus must include P SC 5000. The State of the Discipline and at least one graduate seminar in each of the following areas: American politics, comparative politics or international relations, and political theory.

Students will complete between 12 and 15 elective semester hours, depending on whether they are working under Plan I or II, which may be fulfilled through graduate course work in political science, related disciplines, independent study or internships. Ultimately, the total combination of independent study, graduate course work in related disciplines and internship cannot exceed 9 semester hours. With either plan, students are required to complete a minimum of 16 semester hours with the political science department at the University of Colorado Denver, and maintain a minimum *B* (3.0) overall GPA or better. Students who are on probation must meet regularly with the graduate advisor and must secure approval from the advisor for all course work while on probation.

Plan II is available both under the traditional MA track offered on the Denver campus, as well as through an alternative track offered off-campus through the Center for New Directions in Politics and Public Policy at Chaparral in Douglas County and on the Fort Lewis College campus in Durango. This second track provides an MA in political science with an emphasis in politics and public policy, and courses in this track are offered in an intensive weekend format. The emphasis on politics and the policy-making process relates to the ability of leaders to mobilize resources and achieve constituent goals consistent with the public interest. In this context, politics entails communication, and effective politics *requires* communication. In short, this emphasis on political awareness seeks to help participants utilize the political process as the “art of making what appears to be impossible, possible.” For details about this off-campus track in politics and public policy, contact the Center for New Directions at 303-556-5950.

## Psychology

**Chair:** Peter S. Kaplan

**Program Assistant:** Gay Freebern

**BA Undergraduate Advisor:** Mitchell Handelsman

**BS Undergraduate Advisor:** David Albeck

**Director of Clinical Training:** Allison Bashe

**Office:** North Classroom, 5002

**Telephone:** 303-556-8565

**Fax:** 303-556-3520

**Web site:** [www.cudenver.edu/psychology/index.html](http://www.cudenver.edu/psychology/index.html)

Undergraduate Programs

Graduate Programs

## **Faculty**

### **Professors:**

James Grigsby, PhD, University of Colorado

Mitchell M. Handelsman, PhD, University of Kansas

Peter S. Kaplan, PhD, Indiana University

### **Associate Professors:**

David Albeck, PhD, University of Colorado

Richard Allen, PhD, University of North Carolina at Chapel Hill

Eric Benotsch, PhD, University of Iowa

Joy L. Berrenberg, PhD, University of Colorado

Evelinn Borraro, PhD, University of North Texas

Mary Coussons-Read, PhD, University of North Carolina

Michael Zinser, PhD, University of Wisconsin, Madison

### **Assistant Professors:**

Elizabeth Sandin Allen, PhD, University of North Carolina at Chapel Hill

Abbie Beacham, PhD, University of Louisville

Kristin Kilbourne, PhD, University of Miami

### **Research Assistant Professor:**

Jennifer H. Adams, PhD, University of Houston

### **Senior Instructors:**

Allison Bashe, PhD, Stony Brook University

Matthew Bealor, PhD, University of Colorado

Joan Bihun, PhD, Wayne State University

Kevin Everhart, PhD, University of South Carolina

### **Emeritus Professors:**

Rick M. Gardner, PhD, University of Nevada

Gary S. Stern, PhD, University of Massachusetts

Psychology is the scientific study of behavior, consisting of the following major areas of study: experimental psychology, biopsychology, animal behavior, developmental psychology, social psychology, cognitive psychology, personality, industrial/organizational psychology and abnormal psychology. The requirements for the major are designed to introduce the student to the spectrum of psychology, including an early exposure to research methods and statistics.

The psychology major prepares students for employment and for graduate study in psychology and related fields. The psychology department also offers an MA in psychology with a clinical emphasis and a PhD in clinical health psychology.

## **Undergraduate**

**REQUIREMENTS FOR THE MAJOR: BA**

**REQUIREMENTS FOR THE MAJOR: BS**

## **Honors**

The psychology department has approved a very rigorous set of requirements for Latin honors. Students interested in research are encouraged to pursue opportunities as early in their academic career as possible. Successful completion of an honor's project is at least a yearlong, multifaceted process. To be eligible to graduate with honors in psychology, a UC Denver psychology major must have an overall GPA of 3.5 or higher at the start of the project (75 semester hours completed toward the degree) and a GPA of 3.5 or higher in psychology courses taken at UC Denver.

Upon successful completion and defense of an honors project, level of honors will be determined by GPA according to the following scale: 3.8–4.0, *summa cum laude*; 3.6–3.79, *magna cum laude*; 3.5–3.59, *cum laude*. Worthiness of a given project for the award of honors will be determined by the student's honors committee.

During the first semester of a project, a student must enroll for 3 semester hours of independent study. For these semester hours, the student must complete a committee-approved, detailed,

written honors research proposal by the end of the semester. In the final semester, the student must enroll for 3 semester hours of PSY 4840. During this semester, the student will complete the project, submit it to his or her committee and defend the project. Acceptable projects include:

- an original empirical study designed and carried out by the student and approved by the honors committee
- a substantive, integrative library review in an area approved by the honors committee
- a substantive, integrative critical analysis of a major theoretical issue in the field of psychology, approved by the honors committee

Students interested in earning honors should consult with the psychology faculty during their junior year. More information about honors projects can be found on the psychology department Web site.

## **REQUIREMENTS FOR THE MINOR**

### **Graduate**

The psychology department offers a master of arts (MA) degree in psychology with an emphasis in clinical psychology and a doctor of philosophy (PhD) degree in clinical health psychology. In general, our programs train students within the context of the scientist-practitioner model. That is, we value an integrated approach to both the science and practice of clinical psychology. Our training emphasizes the contribution of research to the understanding, treatment and prevention of human problems, and the application of knowledge that is grounded in scientific evidence. Detailed information about admissions and requirements for both graduate programs can be found on the department Web site.

#### **Admissions**

We admit new students only for the fall semester. In order to be considered for admission, you must have a BA or BS from a college or university of recognized standing and a minimum GPA of 3.0 for the MA program and 3.5 for the PhD program. You must also have completed undergraduate courses in introductory psychology, psychological statistics and abnormal psychology. Research methods is an additional prerequisite for the PhD program. The GRE general test is required for both programs, and the psychology subject test is optional. Previous clinical and research experience are weighted heavily in the admissions process.

#### **REQUIREMENTS FOR THE MA IN PSYCHOLOGY, CLINICAL EMPHASIS**

#### **REQUIREMENTS FOR THE PhD IN CLINICAL HEALTH PSYCHOLOGY**

### **Bachelor of Arts**

## **Psychology BA**

Students should consult with the advisor when they declare a psychology major, which must be done once they have completed 60 semester hours of course work. Psychology BA major

requirements include at least 37 and not more than 48 semester hours in psychology. Of these, at least 15 hours must be in upper-division courses completed at the Downtown Campus. No grade below C (2.0) will be accepted toward the major requirements. Note that a prior college-level algebra course is strongly recommended for PSY 2090.

PSY 3939, Internship/Cooperative Education, does NOT count toward the 37-hour minimum or the 15-hour upper-division requirement, but it does count as elective psychology credit.

## Program Requirements

### Required Courses

- PSY 1000 - Introduction to Psychology I: SS3. **Semester Hours: 3**
- PSY 1005 - Introduction to Psychology II: SS3. **Semester Hours: 3**
- PSY 2090 - Statistics and Research Methods. **Semester Hours: 4**
- PSY 2220 - Biological Basis of Behavior: SC2. **Semester Hours: 3**

**Total: 13 Hours**

**Choose three, including one or both PSY 3222 and PSY 4144:**

- PSY 3104 - Behavioral Genetics. **Semester Hours: 3**
- PSY 3222 - Principles of Learning and Behavior. **Semester Hours: 3**
- PSY 3254 - Introduction to Animal Behavior. **Semester Hours: 3**
- PSY 3262 - Health Psychology. **Semester Hours: 3**
- PSY 3263 - Hormones and Behavior. **Semester Hours: 3**
- PSY 3265 - Drugs, Brain and Behavior. **Semester Hours: 3**
- PSY 3724 - Developmental Psychobiology. **Semester Hours: 3**
- PSY 3810 - Neuropsychology. **Semester Hours: 3**
- PSY 3822 - Aging, Brain and Behavior. **Semester Hours: 3**
- PSY 4054 - Behavioral Neuroscience. **Semester Hours: 3**
- PSY 4144 - Human Cognition. **Semester Hours: 3**
- PSY 4164 - Psychology of Perception. **Semester Hours: 3**

**Total: 9 Hours**

**Choose four, including at least two or all three of PSY 3205, PSY 3305, and PSY 4415:**

- PSY 3090 - Research Methods in Experimental Psychology. **Semester Hours: 4**
- PSY 3135 - Organizational Psychology. **Semester Hours: 3**
- PSY 3205 - Human Development I: Child Psychology. **Semester Hours: 3**
- PSY 3215 - Human Development II: Adolescence and Adulthood. **Semester Hours: 3**
- PSY 3235 - Human Sexuality. **Semester Hours: 3**

- PSY 3305 - Abnormal Psychology. **Semester Hours: 3**
- PSY 3405 - Family Psychology. **Semester Hours: 3**
- PSY 3505 - Psychology and the Law. **Semester Hours: 3**
- PSY 3610 - Psychological Trauma. **Semester Hours: 3**
- PSY 3611 - Psychology of Women. **Semester Hours: 3**
- PSY 3612 - Domestic Abuse. **Semester Hours: 3**
- PSY 4415 - Experimental Social Psychology. **Semester Hours: 3**
- PSY 4455 - Theories of Personality. **Semester Hours: 3**
- PSY 4485 - Psychology of Cultural Diversity. **Semester Hours: 3**
- PSY 4500 - Psychotherapy. **Semester Hours: 3**
- PSY 4645 - Industrial Psychology. **Semester Hours: 3**
- PSY 4730 - Clinical Psychology: Ethics and Issues. **Semester Hours: 3**

**Total: 12-13 Hours**

### **One integrative course:**

- PSY 4511 - History of Psychology. **Semester Hours: 3**

**Total: 3 Hours**

## **BA Major Total: 37-38 Hours**

### **PSYCHOLOGY BS REQUIREMENTS**

## **Bachelor of Science**

# **Psychology BS**

Students must declare a major by the time they have completed 60 semester hours of course work. To be admitted to the BS major, students must have sophomore standing and have received grades of *B* or better in General Biology I and II for majors with laboratory, or the equivalent. Students must take at least 48 hours and a maximum of 56 semester hours in psychology, biology and chemistry that will count toward graduation. A minimum of 15 upper-division semester hours must be taken from Downtown Campus faculty. No grade below *C* is acceptable toward the major requirements; i.e., psychology, biology or chemistry courses in which a student earns a *C*- or below will not count toward the major.

## **Psychology Requirements**

### **Required Psychology Courses**

- PSY 1000 - Introduction to Psychology I: SS3. **Semester Hours: 3**
- PSY 1005 - Introduction to Psychology II: SS3. **Semester Hours: 3**
- PSY 2090 - Statistics and Research Methods. **Semester Hours: 4**
- PSY 2220 - Biological Basis of Behavior: SC2. **Semester Hours: 3**
- PSY 4054 - Behavioral Neuroscience. **Semester Hours: 3**

**Total: 16 Hours**

**Choose two:**

- PSY 3090 - Research Methods in Experimental Psychology. **Semester Hours: 4**
- PSY 3104 - Behavioral Genetics. **Semester Hours: 3**
- PSY 3222 - Principles of Learning and Behavior. **Semester Hours: 3**
- PSY 3254 - Introduction to Animal Behavior. **Semester Hours: 3**
- PSY 3263 - Hormones and Behavior. **Semester Hours: 3**
- PSY 3265 - Drugs, Brain and Behavior. **Semester Hours: 3**
- PSY 3724 - Developmental Psychobiology. **Semester Hours: 3**
- PSY 3810 - Neuropsychology. **Semester Hours: 3**
- PSY 3822 - Aging, Brain and Behavior. **Semester Hours: 3**
- PSY 4164 - Psychology of Perception. **Semester Hours: 3**

**Total: 6-7 Hours**

## **Experiential Learning Requirement**

Students must complete at least one of the following (all require consultation with BS advisor AND permission of instructor):

- PSY 3939 - Internship/Cooperative Education. **Semester Hours: 1 to 3** (2.75 GPA required)
- PSY 4840 - Independent Study. **Semester Hours: 1 to 3**  
Honors Project in Psychology (3.5 GPA required): **3 Semester Hours**

**Total: 3 Hours**

## **Physical and Biological Science Requirements**

### **Required Courses**

- BIOL 2051 - General Biology I: SC1. **Semester Hours: 3**
- BIOL 2061 - General Biology II: SC1. **Semester Hours: 3**
- BIOL 2071 - General Biology Laboratory I: SC1. **Semester Hours: 1**

- BIOL 2081 - General Biology Laboratory II: SC1. **Semester Hours: 1**
- CHEM 2031 - General Chemistry I: SC1. **Semester Hours: 3**
- CHEM 2038 - General Chemistry Laboratory I: SC1. **Semester Hours: 1**
- CHEM 2061 - General Chemistry II: SC1. **Semester Hours: 3**
- CHEM 2068 - General Chemistry Laboratory II: SC1. **Semester Hours: 2**

**Total: 17 Hours**

**Choose two:**

- BIOL 3225 - Human Physiology. **Semester Hours: 4**
- BIOL 3244 - Human Anatomy. **Semester Hours: 4**
- BIOL 3611 - General Cell Biology. **Semester Hours: 3**
- BIOL 3654 - General Microbiology. **Semester Hours: 4**
- BIOL 3832 - General Genetics. **Semester Hours: 4**
- BIOL 4134 - Human Genetics. **Semester Hours: 3**
- BIOL 4165 - Neurobiology. **Semester Hours: 3**
- BIOL 4621 - Immunology. **Semester Hours: 3**
- CHEM 4810 - General Biochemistry I. **Semester Hours: 3**

**Total: 6-8 Hours**

## **BS Major Total: 48-51 Hours**

Additional elective courses in psychology, biology and chemistry may be taken up to the maximum of 56 hours.

### **PSYCHOLOGY BA REQUIREMENTS**

#### **Non Degree**

## **Psychology Minor**

### **Program Requirements**

A minor in psychology requires the completion of 15 semester hours with a grade of C (2.0) or better, including the following courses:

- PSY 1000 - Introduction to Psychology I: SS3. **Semester Hours: 3**
- PSY 1005 - Introduction to Psychology II: SS3. **Semester Hours: 3**
- PSY 3205 - Human Development I: Child Psychology. **Semester Hours: 3**
- OR-
- PSY 3305 - Abnormal Psychology. **Semester Hours: 3**

-OR-

- PSY 4415 - Experimental Social Psychology. **Semester Hours: 3**
- PSY 3222 - Principles of Learning and Behavior. **Semester Hours: 3**

-OR-

- PSY 4144 - Human Cognition. **Semester Hours: 3**
- PSY 4511 - History of Psychology. **Semester Hours: 3**

At least 6 upper-division semester hours must be taken from UC Denver Downtown Campus faculty. Further information about the department may be obtained from department advisors or by calling 303-556-8565.

## Master of Arts

# Psychology MA

- ▶ Graduate School Rules apply to this program

## Objectives and Requirements

The two major objectives of the MA program are to prepare graduates for doctoral-level study in both PhD and PsyD programs and to train graduates to provide direct service, under supervision, in mental health agencies. Assessment training includes theory, diagnostic interviewing, intelligence testing and some personality testing with both children and adults. We introduce students to the theory and application of major models of psychotherapy and to psychopathology theory and research. We also emphasize the ethical principles that permeate clinical psychology and the application of these principles to problems in mental health practice, teaching and research. Finally, students become well versed in statistical methods. Students take the required courses during their first year in the program. During the second year, they choose to specialize by opting for a research-based thesis and/or an applied internship at a mental health agency. Students also demonstrate competency by defending a thesis or an internship competency project. Students can complete the program in slightly less than two years, and have up to five years to complete the program according to Graduate School Rules. See the department Web site for complete information on the MA in psychology.

## Doctor of Philosophy

# Clinical Health Psychology PhD

- ▶ Graduate School Rules apply to this program

## Objectives and Requirements

A primary focus of clinical health psychology is the development of effective disease prevention interventions for populations at high risk for medical problems. A second focus of clinical health psychology is the development of strategies to help individuals who are already ill to manage their disease, increase their ability to collaborate with medical professionals and improve their coping skills. Students in this program will be trained to work within the community to use psychological tools and techniques to promote health, prevent and treat illness and improve the health care system. In addition to course work, students acquire expertise in research by completing a second-year project and doctoral dissertation, and demonstrate competence in clinical assessment and intervention through several applied practicum experiences, a clinical competency project and a pre-doctoral internship. Students can complete the program in five years and have up to eight years to complete the program according to Graduate School Rules. See the department Web site for complete information on the PhD in clinical health psychology.

## **Religious Studies**

**Director:** Sharon L. Coggan

**Office:** Modular #1, MO-01 (east of Tivoli Student Union)

**Telephone:** 303-556-4715

**Web site:** [www.cudenver.edu/religiousStudies/](http://www.cudenver.edu/religiousStudies/)

## **Faculty (concurrently appointed)**

### **Professor:**

Martin G. Lockley (Geography and Environmental Sciences)

### **Associate Professors:**

Nancy Ciccone (English)

Colleen Donnelly (English)

Robert Metcalf (Philosophy)

### **Instructors:**

Edward Casteel (Sociology)

Sharon Coggan (Philosophy/Religious Studies)

Amin Kazak (Political Science)

Daryl Mehring (Philosophy)

Lucy McGuffey (Political Science)

### **Lecturers:**

Celeste Rossmiller (Religious Studies)

Richard Smith (History)

Constance Wise (Religious Studies)

An undergraduate minor is offered in religious studies, a discipline that overlaps with many other fields of study: anthropology, literature, philosophy, psychology and others. Religion has played a vital role in history and continues to do so in contemporary life. The degree of interaction between a religious tradition and its host society is profound, knowledge of which is essential for

a genuine understanding of that culture. Students will study the nature of the belief systems of the world's great religious traditions. Specific courses will offer the possibility of focusing one's studies in the areas of ancient myth and shamanic traditions, Judaic and Christian studies, Islam, Asian religions, psychology of religion, philosophy of religion, anthropology and sociology of religion, religion and literature and biblical studies.

## **REQUIREMENTS FOR THE MINOR**

### **Non Degree**

# **Religious Studies Minor**

Eighteen semester hours, at least 9 of which must be upper division and at least 9 semester hours taken with Downtown Campus faculty. A minimum cumulative GPA of 2.0 for all UC Denver courses taken in the minor is required, with no individual course grade lower than a C (2.0).

## **Program Requirements**

### **Required Courses**

- RLST 1610 - Introduction to Religious Studies: AH3. **Semester Hours: 3**

### **One course in Western religions chosen from approved list:**

- \* RLST 2660 - World Religions: AH3. **Semester Hours: 3**
- RLST 3000 - Judaism, Christianity and Islam: Affinity and Difference. **Semester Hours: 3**
- RLST 3060 - History of Early Christianity. **Semester Hours: 3**  
-OR-
- ETST 3224 - U.S./Middle East Culture and Religion. **Semester Hours: 3**
- RLST 2700 - The Bible as Literature. **Semester Hours: 3**  
-OR-
- ENGL 2520 - The Bible as Literature. **Semester Hours: 3**
- RLST 3740 - Biblical Traditions: Old Testament. **Semester Hours: 3**
- RLST 3760 - Biblical Studies: New Testament. **Semester Hours: 3**
- RLST 3770 - Archaeological Discoveries Relating to the Bible. **Semester Hours: 3**
- RLST 4070 - Western Religious Thought. **Semester Hours: 3**  
-OR-
- PHIL 4710 - Western Religious Thought. **Semester Hours: 3**
- RLST 4400 - Differing Concepts of God. **Semester Hours: 3**  
-OR-
- \* RLST 4440 - Concepts of the Soul. **Semester Hours: 3**

-OR-

- PHIL 4470 - Concepts of the Soul. **Semester Hours: 3**
- \* RLST 4460 - Death and Concepts of Afterlife. **Semester Hours: 3**

\* Fulfills requirement for either Eastern or Western Religion, but not both simultaneously

### **One course in Eastern religions chosen from approved list:**

- \* RLST 2660 - World Religions: AH3. **Semester Hours: 3**
- RLST 3400 - Asian Philosophies and Religions. **Semester Hours: 3**
- OR-
- PHIL 3666 - Asian Philosophies and Religions. **Semester Hours: 3**
- RLST 3500 - Religions of India. **Semester Hours: 3**
- RLST 3660 - Chinese Philosophy and Culture. **Semester Hours: 3**
- OR-
- PHIL 3981 - Chinese Philosophy and Culture. **Semester Hours: 3**
- RLST 4080 - Eastern Religious Thought. **Semester Hours: 3**
- OR-
- PHIL 4720 - Eastern Religious Thought. **Semester Hours: 3**
- RLST 4160 - Mysticism. **Semester Hours: 3**
- \* RLST 4440 - Concepts of the Soul. **Semester Hours: 3**
- \* RLST 4460 - Death and Concepts of Afterlife. **Semester Hours: 3**

\* Fulfills requirement for either Eastern or Western Religion, but not both simultaneously

### **Elective courses (9 hours):**

The remaining 9 hours to equal the required 18 hours will count as electives, to be chosen from the approved lists (above).

Other courses, such as certain special topics, art history courses featuring religious themes and others may count toward the minor at the discretion of the course instructor and the director.

## **Minor Total: 18 Hours**

## **Social Justice**

**Director:** David Hildebrand, Philosophy

**Office:** Plaza M108H

**Telephone:** 303-556-8100

**E-mail:** david.hildebrand@ucdenver.edu

**Web site:** <http://thunder1.cudenver.edu/clas/socialjustice/>

## **Faculty**

**(concurrently appointed)**

**Professors:**

Jana Everett (Political Science)

Donna Langston (Ethnic Studies)

**Associate Professors:**

Nancy Ciccone (English)

Candan Duran-Aydintug (Sociology)

David Hildebrand (Philosophy)

Omar Swartz (Communication)

Barbara Walkosz (Communication)

Catherine Wiley (English)

**Assistant Professors:**

Christopher Agee (History)

Chad Kautzer (Philosophy)

**Instructors:**

Harvey Bishop (Political Science)

Lucy McGuffey (Political Science)

## **Undergraduate Minor**

Twenty-first century students need global perspectives on citizenship that are informed by and can contribute to processes of civic engagement locally and in all parts of the world. This minor encourages students to recognize how social justice, critical consumption of goods and ideas and civic engagement intersect. It reinforces the many ways that our students are already engaged as citizens, and it helps solidify their power to effect real change.

### **STUDENT LEARNING GOALS**

As minors in social justice, students will hone skills in critical thinking, oral and written discourse and problem solving so that they can reflect on their own moral values and civic responsibilities.

They will also critically assess how they are defined and influenced by various sources such as media and institutions that describe and prescribe our and others' cultures and learn to understand others' beliefs and values despite differences. Finally, social justice minors will engage in dialogue to resolve conflicts and design solutions by working in a collaborative manner to create change.

## **REQUIREMENTS FOR THE MINOR**

### **Non Degree**

# **Social Justice Minor**

## **Requirements for the Minor**

The minor consists of 18 semester hours, structured as follows:

- A required introductory class (with either a social science or humanities focus); see below.
- An experiential learning component of 3 semester hours.
- Upper-division course work to be determined by individual students in consultation with the social justice minor director. At least two disciplines must be represented.
- A 3-semester-hour capstone seminar that will provide opportunity for further reflection on the experiential learning projects and student group projects.

## **Required course**

**Choose one:**

- SJUS 2010 - Social Justice: Theories, Narratives, and Technologies. **Semester Hours:** 3
- OR-
- SJUS 2000 - Democratic Participation and Social Justice. **Semester Hours:** 3

**Total: 3 Hours**

## **Internship**

A 3-semester-hour internship in any discipline of the social sciences or humanities, involving community work and including a reflective component and public dissemination or report.

**Total: 3 Hours**

## **Upper-Division Courses**

**Choose three** (below is a sample list of upper-division courses, but other courses may be considered):

- ANTH 3142 - Cultural Diversity in the Modern World. **Semester Hours: 3**
- ANTH 4070 - Culture of Development and Globalization. **Semester Hours: 3**
- CMMU 4022 - Critical Analysis of Communication. **Semester Hours: 3**
- CMMU 4200 - Persuasion. **Semester Hours: 3**
- CMMU 4260 - Communication and Conflict. **Semester Hours: 3**
- ENGL 3795 - Race and Ethnicity in American Literature. **Semester Hours: 3**
- ENGL 4280 - Proposal and Grant Writing. **Semester Hours: 3**
- ENGL 4701 - Multimedia in the Community. **Semester Hours: 3**
- ETST 3108 - Chicano/a and Latino/a History. **Semester Hours: 3**
- ETST 3274 - Power, Poverty, Culture. **Semester Hours: 3**
- ETST 3396 - History of the American Indian. **Semester Hours: 3**
- ETST 3704 - Culture, Racism and Alienation. **Semester Hours: 3**
- GEOG 3411 - Globalization and Regional Development. **Semester Hours: 3**
- GEOG 4335 - Contemporary Environmental Issues. **Semester Hours: 3**
- GEOG 4640 - Urban Geography: Denver and the U.S.. **Semester Hours: 3**
- HBSC 3041 - Health, Culture and Society. **Semester Hours: 3**
- HBSC 4021 - Community Health Assessment. **Semester Hours: 3**
- HIST 3345 - Immigration and Ethnicity in American History. **Semester Hours: 3**
- HIST 4217 - Consumer Culture. **Semester Hours: 3**
- HIST 4219 - Depression, Affluence and Anxiety: U.S. History, 1929 to the Present. **Semester Hours: 3**
- PHIL 3200 - Social and Political Philosophy. **Semester Hours: 3**
- PHIL 3280 - War and Morality. **Semester Hours: 3**
- PHIL 3500 - Ideology and Culture: Racism and Sexism. **Semester Hours: 3**
- PHIL 4920 - Philosophy of Media and Technology. **Semester Hours: 3**
- OR-
- PHIL 5920 - Philosophy of Media and Technology. **Semester Hours: 3**
- P SC 3034 - Race, Gender, Law and Public Policy. **Semester Hours: 3**
- P SC 4025 - Local Governance and Globalization. **Semester Hours: 3**
- P SC 4207 - Theories of Social and Political Change. **Semester Hours: 3**
- RLST 4000 - Religion and Cultural Diversity. **Semester Hours: 3**
- SOC 3001 - Urban Sociology. **Semester Hours: 3**
- SOC 3030 - Social Change. **Semester Hours: 3**
- SOC 4440 - Social Stratification. **Semester Hours: 3**

**Total: 9 Hours**

## **Capstone**

- SJUS 4000 - Social Justice Capstone. **Semester Hours: 3**

**Total: 3 Hours**

**Minor Total: 18 Hours**

## **Social Science, Master of**

**Director:** Myra Bookman

**Assistant Director:** Margaret Woodhull

**Office:** Modular #1, MO-01 (east of Tivoli Student Union)

**Telephone:** 303-556-2305

**Fax:** 303-352-3872

**E-mail:** masterhs@ucdenver.edu

**Web site:** <http://thunder1.cudenver.edu/ict/index.html>

## **Faculty**

### **Senior Instructors:**

Myra Bookman, PhD, University of Colorado

Margaret Woodhull, PhD, University of Texas, Austin

The master of social science program is designed to meet the needs of students who prefer flexibility in constructing an individualized course of study in social science. Emphasis is placed on the integration of knowledge across and beyond traditional disciplinary boundaries. This is accomplished through three required seminars, courses from a variety of disciplines chosen with the approval of advisors and program directors and a project or thesis. Courses can be chosen from the social science disciplines: anthropology, communication, economics, geography, history, political science, psychology and sociology, as well as from other disciplines and programs, e.g., English, philosophy, education, public affairs and architecture.

The MSS program is intended for students interested in developing their own interdisciplinary perspectives in such areas as social thought, public policy, women's studies, educational reform and cross-cultural studies or politics. The program can provide: training for advancement in the professions of education, business, social service and government; a basis for further graduate studies in a specific social science discipline or professional field; a means for teachers and other working students to tailor degree programs to fit their personal career development needs; and a nontraditional approach for recent university graduates or adults re-entering the university to pursue liberal educational goals in the social sciences.

### **MSS REQUIREMENTS**

## **Master of Social Science**

# **Social Science MSS**

- ▶ Graduate School Rules apply to this program

## Requirements for Admission

General rules for admission into the Graduate School apply to admission into the MSS program.

*For admission as a regular graduate student, applicants must:*

- have earned a bachelor's degree
- submit two official copies of all transcripts, with an overall GPA of at least 3.0 out of 4.0
- have appropriate undergraduate training or professional background or indicators that supply evidence of ability to pursue the MSS degree
- include a writing sample
- submit three letters of recommendation (at least two from academic sources)
- submit a written statement specifying the goal of advanced study in the social sciences, expressed in clear, correct and effective English
- standardized test scores are not required, but will be considered if submitted

After meeting all other requirements for admission, applicants may be required to have an interview to discuss their interest in the program and their plans for study. For out-of-state applicants, an appropriate substitute for the interview may be determined by the director.

*Provisional Admission:*

Applicants may be admitted as provisional-status graduate students if their complete record indicates a high probability of success.

*Non-degree Students:*

Potential applicants may take graduate-level courses as nondegree students (unclassified student with a bachelor's degree) if they:

1. Wish to strengthen their record in order to demonstrate that they can successfully complete courses in the program  
–or–
2. Wish to start courses in the program prior to completing their application. Up to 12 semester hours taken as a nondegree student may be accepted by the program once a student has been admitted into the program (the 12-hour limit also includes graduate work from another university).

*International Students:*

International students must also meet UC Denver requirements for international admission. See the International Admissions web site or call 303-315-2230 for further information.

## Degree Requirements

The MSS is a 36-semester-hour program, of which 30 hours must meet all specifications of the Graduate School. Throughout their work toward the MSS degree, students must maintain at

least a *B* (3.0) average in all courses. A grade of *B-* or below will not be counted toward the degree.

Students may pursue courses around any coherent theme with the approval of MSS program directors and advisors. In addition to the unlimited self-structured options, there are four tracks in place from which students can select: women's and gender studies, international studies, society and environment and community health science.

## Three Required Core Seminars

The following two courses must be taken during the first year following entrance to the program:

- S SC 5013 - Philosophical Problems in the Social Sciences and Humanities. **Semester Hours: 3**
- S SC 5020 - Elements of Social Thought. **Semester Hours: 3**

The third required course should be taken later in the program when students are ready to write a proposal for the thesis or project:

- S SC 5023 - Research Perspectives in Social Science. **Semester Hours: 3**

**Total: 9 Hours**

## Electives

Additionally, students must complete a total of 21-24 semester hours comprising a coherent selection of courses from a variety of disciplines. All courses for the self-structured portion of the program must be selected with the approval of one of the MSS program directors.

A total of two independent study courses and two 4000-level undergraduate courses may count toward the degree. All independent study contracts must be approved by one of the program directors. The remaining course work must be 5000/6000-level courses offered through various departments.

Students completing a project take 24 hours of electives, while thesis students complete 21 hours of electives.

**Total: 21-24 Hours**

## Thesis or Project

In order to proceed with a thesis or project, all students must submit a proposal approved by three faculty members (and approved by one of the program directors in cases where one of the

directors is not serving on the committee). Students must also pass an oral comprehensive exam to graduate. Total hours required are: 3 hours of project and 6 hours of thesis.

- S SC 6950 - Master's Thesis. **Semester Hours:** 1 to 8
- S SC 6960 - Master's Project or Report. **Semester Hours:** 1 to 6

**Total: 3-6 Hours**

**Degree Total: 36 Hours**

## **Sociology**

**Chair:** Sharon Araji, Chair

**Program Assistant:** Rachel Watson

**Office:** Lawrence Street Center, Suite 420

**Telephone:** 303-315-2148

**Fax:** 303-315-2149

**Web site:** [www.cudenver.edu/sociology/](http://www.cudenver.edu/sociology/)

Undergraduate Programs

Graduate Program

## **Faculty**

### **Professors:**

Sharon Araji, PhD, Washington State University

Karl H. Flaming, PhD, Syracuse University

### **Associate Professors:**

Candan Duran-Aydintug, PhD, Washington State University

Jon Winterton, PhD, Michigan State University

### **Assistant Professors:**

Paula Fomby, PhD, University of Wisconsin-Madison

Akihiko Hirose, PhD, University of California, Riverside

**Senior Instructor:**

Lucy Dwight, PhD, The Pennsylvania State University

**Instructors:**

Edward Casteel, MSW, University of Denver

Andrea Haar, MA, University of Colorado Denver

**Associate Professor Emeritus:**

Richard H. Anderson, PhD, University of Oregon

## Undergraduate

Sociology is the scientific study of groups, social process and behavior. The major in sociology is designed to familiarize the student with these areas through an understanding of theory, method and statistical procedures employed within them. Concentration is possible at the undergraduate level. However, the faculty believes the undergraduate should have a foundation in the basics of the discipline upon which to build a future specialization. Such specialization is more appropriate at the advanced levels.

Many career opportunities combine a foundation in sociology with business, computer science or community development. Opportunities within the field of sociology proper usually require graduate study. The major will prepare the student for such advanced work as well as for pursuit of career options with only the BA degree. For example, graduates with a sociology BA are employed in the human services field and with state and local government agencies.

The department has developed the following rationale for courses offered:

1. Lower-division courses (for majors and nonmajors)
  - a. 1000-level courses provide an introduction to the broad sociological perspective as it applies to social life, social systems and society.
  - b. 2000-level courses introduce the student to somewhat more specific content areas: population study, human ecology, social psychology, etc.
2. Upper-division courses (3000 and 4000)
  - a. 3000-level courses serve as advanced surveys of some specific area of concentration. They are designed to acquaint the student with the issues, methods, concepts and theoretical frameworks employed in the content area. Such courses as urban sociology, race and ethnicity, etc. are offered at this level. Many of these courses are open courses, in that students from other departments and colleges are encouraged to enroll in them.
  - b. 4000-level courses are devoted to a more detailed in-depth examination of specific issues, approaches and concepts within the previously identified content

areas. These are advanced courses and are geared more directly to sociology and social science majors.

- c. Undergraduate students can enroll in a course at the 4000/5000 level only if they are classified at junior or senior standing.

## **REQUIREMENTS FOR THE MAJOR**

## **REQUIREMENTS FOR THE MINOR**

# **Departmental Honors**

Students wishing to graduate with departmental honors in sociology (*cum laude*, *magna cum laude*, or *summa cum laude*) must have a minimum cumulative GPA of 3.2 and a 3.2 or higher in all sociology courses. Additional requirements are available in the sociology office. Qualified students are encouraged to apply for the honors program no later than the beginning of their senior year.

# **Graduate**

The MA degree in sociology offered at the Downtown Campus focuses on social psychology, sociology of the family, urban sociology and applied sociology. The program's urban emphasis complements professional degree programs in design and planning, medicine, nursing, community health, physical engineering, public and business administration, education and fine arts by providing advanced seminars and planning and research opportunities in theory and research.

## **Admission Requirements**

Application to the MA program is open to all students holding a BA, BS or higher degree in any field. Students without prior training in sociology but with otherwise exemplary records, may be admitted and may be required to make up deficiencies without graduate credit depending upon the results of the mandatory diagnostic exams in the areas of theory, methods and statistics.

## **Recommended Academic Standards**

- A combined GPA of at least 3.3 for all courses taken at the undergraduate or graduate level prior to admission
- A combined GPA of at least 3.5 for all sociology courses taken at the undergraduate or graduate level prior to admission

## **Application Materials**

- Complete application form
- Three letters of recommendation (at least two must be from academic/professional sources)
- Two copies of official transcripts sent directly to the Department of Sociology from all schools where BA credit hours were taken
- A statement of purpose and goal of graduate study

- Writing sample
- GRE score may be optionally submitted to aid application file
- **International Students:** You must complete an International Student Application. Minimum TOEFL score of 525 required.

### **Application Deadlines**

Applications are accepted for **fall** admission only. All application materials are due on April 1.

## **REQUIREMENTS FOR THE MA IN SOCIOLOGY**

### **Bachelor of Arts**

# **Sociology BA**

Students must declare a major by the time they have completed 60 semester hours of course work. The major requires a total of 34 hours with an average grade of C (2.0) in all courses. At least 16 of the 34 hours must be upper-division (3000-4000 level) courses. The maximum number of hours allowed in sociology is 48.

## **Course Requirements**

### **Core Courses**

The core consists of the following group of courses, all of which must be completed with a grade of C (2.0) or better:

- SOC 1001 - Introduction to Sociology: SS3. **Semester Hours: 3**
- SOC 3001 - Urban Sociology. **Semester Hours: 3**
- \* SOC 3111 - Research Methods. **Semester Hours: 3**
- \* SOC 3121 - Statistics. **Semester Hours: 4**
- \* SOC 4150 - History of Sociological Theory. **Semester Hours: 3**
- \* SOC 4160 - Contemporary Sociological Theory. **Semester Hours: 3**

### **Total: 19 Hours**

\*Must be taken from Downtown Campus faculty

### **Electives: 15 Hours**

Choose a minimum of 15 hours and a maximum of 29 hours of electives in sociology, with an average grade of C (2.0) in all courses.

### **Major Total: 34 Hours**

All prospective majors should contact the department as early in their academic careers as possible for information and for assignment to a major advisor. Transfer or returning students should consult with the department chairman concerning completion of the core courses.

The department requires that at least 13 hours of sociology be taken from Downtown Campus faculty, including the following courses: SOC 3111, 3121, 4150 and 4160.

## **Non Degree**

# **Sociology Minor**

For an undergraduate minor in sociology, a minimum of 15 semester hours in sociology must be completed with a grade of C or better. Nine of these hours must be taken from Downtown Campus faculty.

## **Course Requirements**

### **Required Courses**

- SOC 1001 - Introduction to Sociology: SS3. **Semester Hours: 3**  
and
- SOC 4150 - History of Sociological Theory. **Semester Hours: 3**

**Total: 6 Hours**

### **Electives**

Nine hours of sociology courses, completed with a grade of C or better.

**Total: 9 Hours**

**Minor Total: 15 Hours**

## **Master of Arts**

# **Sociology MA**

► Graduate School Rules apply to this program

## **Program Requirements**

Two plans of study are available for students. Both options require a minimum of 36 hours. A thesis is required for the thesis option, and a project and internship are required for the nonthesis option. Before beginning the required course work, attendance at an orientation is required for incoming cohorts as well as the completion of mandatory diagnostic exams.

## Required Courses

Core courses are required for all graduate students, regardless of plan. Students who are officially admitted to the program are required to follow a sequential plan. SOC 5000 must be taken in the first fall semester. Students must take SOC 5014 before taking SOC 5015. Similarly, SOC 5024 must be taken before SOC 5183.

- SOC 5000 - Professional Seminar: Sociological Inquiry. **Semester Hours: 3**
- SOC 5014 - Classical Sociological Theory. **Semester Hours: 3**
- SOC 5015 - Contemporary Sociological Theory. **Semester Hours: 3**
- SOC 5024 - Seminar: Research Methods I. **Semester Hours: 3**
- SOC 5183 - Seminar: Quantitative Data Analysis. **Semester Hours: 3**

**Total: 15 Hours**

## PLANS OF STUDY

Students must also choose **one** of the following options:

### Thesis Option Requirements

Core course requirements	15 Hours
Five elective courses	15 Hours
Master's thesis	6 Hours total required

- SOC 5955 - Master's Thesis. **Semester Hours: 1 to 4**

**Thesis Option Total: 36 Hours**

### Nonthesis Option Requirements

Core course requirements	15 Hours
Five elective courses	15 Hours

Internship	3 Hours
Master's project	3 Hours

- SOC 5964 - Master's Report. **Semester Hours:** 1 to 4

## **Nonthesis Option Total: 36 Hours**

## **Elective Credit Requirements (15 semester hours for both options)**

Students can take an unlimited number of sociology graduate seminars (i.e., 5000-level, stacked or not) to fulfill their 15 elective semester hours, or a combination of the following:

- Independent study: maximum 6 semester hours
- Courses in other departments: maximum 6 semester hours
- Internship: maximum 3 semester hours

For further information about the Department of Sociology or the MA program, visit the Sociology Web Site.

## **Sustainability**

**Director:** Stephen Koester (Anthropology)

**Office:** Administration Building, 270

**Telephone:** 303-556-6795

**E-Mail:** [steve.koester@ucdenver.edu](mailto:steve.koester@ucdenver.edu)

**Web site:** <http://thunder1.cudenver.edu/clas/sustainability/>

## **Faculty**

**(concurrently appointed)**

**Professors:**

Larry G. Anderson, Chemistry

Stephen Koester, Anthropology

Diana F. Tomback, Integrative Biology

**Associate Professors:**

Steven R. Beckman, Economics

John Brett, Anthropology  
Greg Cronin, Integrative Biology  
Larry Erbert, Communication  
Randall P. Tagg, Physics  
Deborah S. K. Thomas, Geography  
John W. Wyckoff, Environmental Sciences

**Assistant Professors:**

Casey Allen, Geography/Environmental Sciences  
Thomas G. Andrews, History  
Laurel Hartley, Integrative Biology  
Rafael Moreno-Sanchez, Geography  
Maria L. Talero, Philosophy  
Bryan S. Wee, Geography

**Adjoint Faculty:**

Kathryn Cheever, Political Science

Questions of sustainability are currently among the most important facing humankind and are receiving tremendous attention in the media. Because issues of sustainability do not arise from single causes, nor can solutions be developed from within narrow disciplinary frameworks, a multidisciplinary perspective is not only desirable but necessary to identify and understand problems, and create, evaluate and implement solutions.

Specializations in this critical area of study include: health and the environment, sustainable ecology, environmental ethics, environmental policymaking and policy analysis, institutional behavior, community-based and participatory approaches to sustainable development and conservation, environmental justice, sustainable food production and critical consumerism. The sustainability minor offers a holistic approach to development and daily living, which demands scientific, economic, environmental and social perspectives to understand and implement actions that can inform the public, business, industry, government and service organizations on how their activities affect the environment.

**REQUIREMENTS FOR THE SUSTAINABILITY MINOR**

**Non Degree**

# Sustainability Minor

The sustainability minor is interdisciplinary, drawing on the expertise across CLAS departments: anthropology, biology, chemistry, communication, economics, environmental sciences, geography, geology, history, economics, philosophy, physics and political science. The core courses are taught by a faculty team from natural sciences and social sciences, who will present the concepts from the empirical and humanistic perspectives. The teaching team changes each term so that faculty from any given CLAS department will rotate through the core courses every 3-4 years.

The minor comprises 18 hours, distributed as follows:

- two core courses that introduce students to the systems theories that document how living things affect and are affected by their environments
- two electives chosen from an approved list of CLAS courses
- students select either a field study, internship, service learning or related travel study course
- capstone course in sustainability

## Requirements for the Minor

### Core Courses

- SUST 3010 - The Non-Sustainable Past. **Semester Hours: 3**
- SUST 3011 - The Sustainable Present. **Semester Hours: 3**

**Total: 6 Hours**

### Electives

Choose two from the following list of approved electives:

#### Anthropology

- ANTH 1302 - Introduction to Archaeology: SS3. **Semester Hours: 4**
- ANTH 1303 - Introduction to Biological Anthropology: SC1. **Semester Hours: 4**
- ANTH 2102 - Culture and the Human Experience: SS3. **Semester Hours: 3**
- ANTH 3006 - Development, Environment and Culture. **Semester Hours: 3**
- ANTH 3301 - World Prehistory. **Semester Hours: 3**
- ANTH 3512 - Human Evolution. **Semester Hours: 3**
- ANTH 4030 - Ethnobiology. **Semester Hours: 3**
- ANTH 4060 - Evolutionary Medicine. **Semester Hours: 3**
- ANTH 4070 - Culture of Development and Globalization. **Semester Hours: 3**

- ANTH 4170 - Culture and the Environment. **Semester Hours: 3**
- ANTH 4220 - Community in Global Context. **Semester Hours: 3**
- ANTH 4250 - Culture Change in the Modern World. **Semester Hours: 3**
- ANTH 4450 - Development and Conservation: Contemporary Issues. **Semester Hours: 3**
- ANTH 4460 - Development and Conservation: Theory and Practice. **Semester Hours: 3**
- ANTH 4560 - Human Ecology. **Semester Hours: 3**

## **Biology**

- BIOL 1550 - Basic Biology: Ecology and the Diversity of Life: SC1. **Semester Hours: 4**
- BIOL 3122 - Natural History of Colorado. **Semester Hours: 3**
- BIOL 3330 - Plant Diversity. **Semester Hours: 3**
- BIOL 3411 - Principles of Ecology. **Semester Hours: 3**
- BIOL 3412 - Fundamentals of Applied Ecology. **Semester Hours: 3**
- BIOL 3521 - Vertebrate Biology. **Semester Hours: 3**
- BIOL 4154 - Conservation Biology. **Semester Hours: 3**

## **Business**

- MGMT 4950 - Special Topics in Management. **Semester Hours: 3**  
when offered as Business and Sustainability
- MKTG 4950 - Special Topics. **Semester Hours: 3**  
when offered as Nonprofit and Social Marketing

## **Chemistry**

- CHEM 1474 - Core Chemistry: Chemistry For the Consumer: SC1. **Semester Hours: 4**
- CHEM 4700 - Environmental Chemistry. **Semester Hours: 3**
- CHEM 5700 - Environmental Chemistry. **Semester Hours: 3**

## **Communication**

- CMMU 4282 - Environmental Communication. **Semester Hours: 3**
- CMMU 5282 - Environmental Communication. **Semester Hours: 3**

## **Economics**

- ECON 4530 - Economics of Natural Resources. **Semester Hours: 3**
- ECON 4540 - Environmental Economics. **Semester Hours: 3**
- ECON 4770 - Economic Development--Theory and Problems. **Semester Hours: 3**
- ECON 5530 - Economics of Natural Resources. **Semester Hours: 3**

- ECON 5540 - Environmental Economics. **Semester Hours: 3**

## **Geography / Geology / Environmental Science**

- ENVS 1042 - Introduction to Environmental Sciences: SC1. **Semester Hours: 4**
- ENVS 1342 - Introduction to Environment and Society: SS2. **Semester Hours: 3**
- ENVS 3082 - Energy and the Environment. **Semester Hours: 3**
- GEOG 1202 - Introduction to Physical Geography: SC2. **Semester Hours: 3**
- GEOG 3302 - Water Resources. **Semester Hours: 3**
- GEOG 3411 - Globalization and Regional Development. **Semester Hours: 3**
- GEOG 4010 - Biogeochemical Cycles. **Semester Hours: 3**
- GEOG 4020 - Earth Environments and Human Impacts. **Semester Hours: 3**
- GEOL 4030 - Environmental Geology. **Semester Hours: 3**
- GEOG 4090 - Environmental Modeling with Geographic Information Systems. **Semester Hours: 3**
- GEOG 4230 - Hazard Mitigation and Vulnerability Assessment. **Semester Hours: 3**
- GEOG 4265 - Sustainability in Resources Management. **Semester Hours: 3**
- GEOG 4335 - Contemporary Environmental Issues. **Semester Hours: 3**
- GEOG 4350 - Environment and Society in the American Past. **Semester Hours: 3**
- GEOG 4640 - Urban Geography: Denver and the U.S.. **Semester Hours: 3**
- GEOG 5090 - Environmental Modeling with Geographic Information Systems. **Semester Hours: 3**
- GEOG 5230 - Hazard Mitigation and Vulnerability Assessment. **Semester Hours: 3**
- GEOG 5265 - Sustainability in Resources Management. **Semester Hours: 3**
- GEOG 5335 - Contemporary Environmental Issues. **Semester Hours: 3**
- GEOG 5350 - Environment and Society in the American Past. **Semester Hours: 3**
- GEOG 5640 - Urban Geography: Denver and the U.S.. **Semester Hours: 3**

## **History**

- HIST 3350 - Colonial Latin America. **Semester Hours: 3**
- HIST 3360 - Denver History. **Semester Hours: 3**
- HIST 3366 - Environmental History of North America. **Semester Hours: 3**
- HIST 3451 - Introduction to African History. **Semester Hours: 3**
- HIST 3460 - Introduction to Latin American History. **Semester Hours: 3**
- HIST 3470 - Introduction to Asian History. **Semester Hours: 3**
- HIST 3606 - Science, Technology, and Society in the Modern World. **Semester Hours: 3**
- HIST 4217 - Consumer Culture. **Semester Hours: 3**
- HIST 4226 - U.S. Business History. **Semester Hours: 3**
- HIST 4227 - American West. **Semester Hours: 3**
- HIST 4236 - Colorado Mining and Railroads. **Semester Hours: 3**

- HIST 4411 - Modern Mexico. **Semester Hours: 3**
- HIST 4417 - Commodities and Globalization: Dessert in World History. **Semester Hours: 3**
- HIST 4421 - Modern China. **Semester Hours: 3**
- HIST 4431 - Modern Japan. **Semester Hours: 3**
- HIST 4451 - Southern Africa. **Semester Hours: 3**
- HIST 4461 - The Modern Middle East. **Semester Hours: 3**
- HIST 4501 - World History for Educators. **Semester Hours: 3**
- HIST 4503 - Topics in History of Science. **Semester Hours: 3**
- HIST 4504 - Animals in U.S. History. **Semester Hours: 3**

## Physics

- PHYS 3082 - Energy and the Environment. **Semester Hours: 3**
- PHYS 4400-4499 - Topics in Scientific Instrumentation and Laboratory Methods. **Semester Hours: 1**
- PHYS 4850 - Physics for Design and Innovation I. **Semester Hours: 3**
- PHYS 4852 - Physics for Design and Innovation II. **Semester Hours: 3**  
Note: PHYS 4850 is prerequisite for PHYS 4852
- PHYS 5400-5499 - Topics in Scientific Instrumentation and Laboratory Methods. **Semester Hours: 1**
- PHYS 5850 - Physics for Design and Innovation I. **Semester Hours: 3**
- PHYS 5852 - Physics for Design and Innovation II. **Semester Hours: 3**  
Note: PHYS 5850 is prerequisite for PHYS 5852

## Philosophy

- PHIL 4250 - Environmental Ethics. **Semester Hours: 3**
- PHIL 4510 - Philosophy of Nature. **Semester Hours: 3**
- PHIL 5250 - Environmental Ethics. **Semester Hours: 3**

## Political Science

- P SC 3034 - Race, Gender, Law and Public Policy. **Semester Hours: 3**
- P SC 3035 - Political Movements: Race and Gender. **Semester Hours: 3**
- P SC 3042 - Introduction to International Relations. **Semester Hours: 3**
- P SC 3914 - The Urban Citizen. **Semester Hours: 3**
- P SC 4009 - Politics of the Budgetary Process. **Semester Hours: 3**
- P SC 4014 - Media and Politics. **Semester Hours: 3**
- P SC 4025 - Local Governance and Globalization. **Semester Hours: 3**
- P SC 4085 - Comparative Public Policy. **Semester Hours: 3**
- P SC 4144 - Indigenous Political Systems. **Semester Hours: 3**
- P SC 4206 - Social Movements, NGOs and Global Politics. **Semester Hours: 3**
- P SC 4207 - Theories of Social and Political Change. **Semester Hours: 3**

- P SC 4215 - Women's Rights, Human Rights: Global Perspectives. **Semester Hours: 3**
- P SC 4217 - Human Rights in Theory and Practice. **Semester Hours: 3**
- P SC 4226 - The United Nations in World Affairs. **Semester Hours: 3**
- P SC 4248 - Gender, Globalization and Development. **Semester Hours: 3**
- P SC 4324 - Politics, Public Policy and Leadership. **Semester Hours: 3**
- P SC 4326 - Advanced International Political Economy: Globalization. **Semester Hours: 3**
- P SC 4354 - Environmental Politics. **Semester Hours: 3**
- P SC 4365 - Global Ecological Crises. **Semester Hours: 3**
- P SC 4374 - Public Priorities for the 21st Century. **Semester Hours: 3**
- P SC 4545 - Immigration Politics. **Semester Hours: 3**
- P SC 4555 - International Women's Resistance. **Semester Hours: 3**
- P SC 4645 - Comparative Political Leadership. **Semester Hours: 3**

**Total: 6 Hours**

## **Experiential learning course**

Students choose a field study, internship, service learning or related travel study course.

**Total: 3 Hours**

## **Capstone**

- SUST 4960 - Capstone in Sustainability. **Semester Hours: 3**

**Total: 3 Hours**

**Total: 18 Hours**

## **Women's and Gender Studies**

**Director:** Marjorie Levine-Clark (History)

**Co-Directors:** Gillian Silverman (English), Margaret Woodhull (Humanities and Social Sciences)

**Office:** KC 544

**Telephone:** 303-556-2896

**Fax:** 303-556-6037

**Website:** <http://thunder1.cudenver.edu/clas/wgst/>

**Associated Faculty**

Joanne Addison (English)  
Brenda J. Allen (Communication)  
Elizabeth Allen (Psychology)  
Sharon Araji (Sociology)  
Laura Argys (Economics)  
Pompa Banerjee (English)  
Myra Bookman (Humanities and Social Sciences)  
Michelle Comstock (English)  
Mary Coussons-Read (Psychology)  
Jennifer Davis (English)  
Candan Duran-Aydintug (Sociology)  
Paula Espinoza (Ethnic Studies)  
Jana Everett (Political Science)  
Sonja Foss (Communication)  
Pamela Laird (History)  
Donna Langston (Ethnic Studies)  
Myra Rich (History)  
Anna Sampaio (Political Science)  
Candice Shelby (Philosophy)  
Cate Wiley (English)

Women's and gender studies (WGST) is an interdisciplinary program that focuses on the centrality of gender and sexuality to understanding our past and present worlds. Students and faculty probe assumptions about men and women and question structures of inequality as they play out in local and global contexts. Through a study of gender and sexuality, we expand our thinking about other relations of power, such as race, class, ethnicity, nationality and physical ability. WGST fosters connections with the local community and promotes advocacy of human rights and social justice.

## **Undergraduate Studies**

**Minor in Women's and Gender Studies**

**Individually Structured Major**

Students interested in a major in women's and gender studies may develop one through the individually structured major (ISM). The ISM is an interdisciplinary major based on an individual contract rather than a preset list of courses. By choosing an ISM, students can pursue their interests in WGST across a variety of departments. For more information on an ISM in women's and gender studies, contact Marjorie Levine-Clark, and see the ISM Web site.

## Graduate Studies

At the graduate level, students may pursue women's and gender studies as a track in the master of social science degree program. Students learn to think critically about the condition of women and the role of gender in both historical and contemporary experience. Course work focuses on conceptual models for understanding women and gender, such as feminist, queer, post-colonial and race theories as they operate through culture, language, politics, visual representation and history. For more information, contact Myra Bookman or Margaret Woodhull.

The master of social science program also offers a certificate in women's studies for students pursuing master's degrees in departments in the College of Liberal Arts and Sciences. For details, contact Myra Bookman or Margaret Woodhull.

## Non Degree

# Women's and Gender Studies Minor

The women's and gender studies minor gives students the opportunity to explore gender issues in the humanities and social sciences. To minor in WGST, a student must complete 18 semester hours in WGST courses with a grade of C or better. At least 12 semester hours for the WGST minor must be taken with UC Denver faculty, and all courses for the minor must be approved by a WGST advisor.

## Requirements for the Minor

### 1. Required Course: WGST 1050 (3 semester hours)

This course provides an introduction to key concepts, themes and approaches to the interdisciplinary field of women's and gender studies. It helps students develop an overall framework for WGST in which to place their electives and internship.

- WGST 1050 - Introduction to Women's and Gender Studies. **Semester Hours: 3**

### 2. WGST-related courses at the 3000 level or above (12 semester hours)

These courses combine humanities and social science fields. Advisor approval is required for course selection. Students are strongly urged to take at least one course that focuses on women's and gender issues in international perspective. Courses which are eligible for WGST credit include (but are not limited to):

## Humanities

- ENGL 3450 - Twentieth Century Women Writers. **Semester Hours: 3**
- ENGL 4510 - Whores and Saints: Medieval Women. **Semester Hours: 3**
- FR 4510 - French Women Writers. **Semester Hours: 3**
- HIST 3343 - Women in U.S. History. **Semester Hours: 3**
- HIST 4230 - Women in the West. **Semester Hours: 3**
- HIST 4303 - Sex and Gender in Modern Britain. **Semester Hours: 3**
- HIST 4307 - History of Sexuality. **Semester Hours: 3**
- HIST 4345 - Gender, Science, and Medicine: 1600 to the Present. **Semester Hours: 3**
- PHIL 3500 - Ideology and Culture: Racism and Sexism. **Semester Hours: 3**
- PHIL 4933 - Philosophy of Eros. **Semester Hours: 3**
- RLST 4420 - Goddess Traditions. **Semester Hours: 3**
- SPAN 4540 - Race, Class, and Gender in Spanish Golden Age Literature. **Semester Hours: 3**
- WGST 4306 - Survey of Feminist Thought. **Semester Hours: 3**  
-OR-
- ENGL 4306 - Survey of Feminist Thought. **Semester Hours: 3**  
-OR-
- HIST 4306 - Survey of Feminist Thought. **Semester Hours: 3**

## Social Sciences

- ANTH 4200 - Gender in Cross-Cultural Perspective. **Semester Hours: 3**
- ANTH 4260 - Human Reproductive Ecology. **Semester Hours: 3**
- CMMU 4020 - Feminist Perspectives on Communication. **Semester Hours: 3**
- CMMU 4045 - Female-Male Friendships. **Semester Hours: 3**
- CMMU 4265 - Gender and Communication. **Semester Hours: 3**
- CMMU 4268 - Communication and Diversity in U.S. History. **Semester Hours: 3**
- CMMU 4275 - Family Communication. **Semester Hours: 3**
- ECON 3100 - Economics of Race and Gender. **Semester Hours: 3**
- ECON 3400 - Economics of Sex and Drugs. **Semester Hours: 3**
- HBSC 3010 - Evolution of Human Sexuality. **Semester Hours: 3**
- P SC 3034 - Race, Gender, Law and Public Policy. **Semester Hours: 3**
- P SC 3035 - Political Movements: Race and Gender. **Semester Hours: 3**
- P SC 4215 - Women's Rights, Human Rights: Global Perspectives. **Semester Hours: 3**
- P SC 4248 - Gender, Globalization and Development. **Semester Hours: 3**
- P SC 4555 - International Women's Resistance. **Semester Hours: 3**
- P SC 4564 - Gender and Politics. **Semester Hours: 3**

- P SC 4827 - Women and the Law. **Semester Hours: 3**
  - PSY 3235 - Human Sexuality. **Semester Hours: 3**
  - PSY 3405 - Family Psychology. **Semester Hours: 3**
  - PSY 3611 - Psychology of Women. **Semester Hours: 3**
  - PSY 3612 - Domestic Abuse. **Semester Hours: 3**
  - SOC 3010 - Sociology of Human Sexuality. **Semester Hours: 3**
  - SOC 3080 - Sex and Gender. **Semester Hours: 3**
  - SOC 3700 - Sociology of the Family. **Semester Hours: 3**
  - SOC 4120 - Popular Culture and the American Family. **Semester Hours: 3**
- See the WGST Web site for this semester's course offerings.

### **3. WGST Community Internship (3 semester hours)**

An internship working in the community around issues related to women and gender. Working with a WGST advisor and the UC Denver Experiential Learning Center (ELC), students will choose an internship related to their interests in WGST. Through the ELC, students sign up for their internship under WGST 3939. Students will be required to complete a critical writing component made up of an ongoing log about the internship experience and an 8-10 page final paper discussing the interrelationships between the practical internship experience and the theoretical/scholarly insights of women's and gender studies. Students may also choose to use WGST 2900, Smart Girl Leadership Training, in lieu of their internship and must follow the requirements of that course and practicum. Students must have taken WGST 1050 before enrolling for their internship.

- WGST 3939 - Cooperative Education. **Semester Hours: 1 to 3**
- OR-
- WGST 2900 - Smart Girl Leadership Training and Practicum. **Semester Hours: 3**

**Total: 18 Hours**

## **School of Public Affairs**

**Dean:** Paul Teske

**Associate Dean:** Linda deLeon

**Associate Dean, Colorado Springs:** Teresa Schwart

**Assistant Deans, Denver:**

Jeanne Paradeis

Kelly Hupfeld

### **Contact**

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1380 Lawrence Street

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**Mailing Address**

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**Current Student Inquiries**

**Telephone:** 303-315-2228

**Graduate Students Last Name A–K:**

Dawn.Savage@ucdenver.edu

**Graduate Students Last Name L–Z:**

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**Undergraduate Students**

brendan.hardy@ucdenver.edu

**Prospective Student Inquiries - PhD & MPA**

Annie Davies

**Telephone:** 303-315-2896

**E-mail:** spa@ucdenver.edu

**Prospective Student Inquiries - BA & MCJ**

Brendan Hardy

**Telephone:** 303-315-2227

**E-mail:** spa@ucdenver.edu

**Application Deadlines****Undergraduate**

*Fall*—July 22

*Spring*—December 1

*Summer*—May 3

**MPA & MCJ****Preferred Deadline**

*Fall*

March 15

**Final**

August 1

Spring  
Summer

October 15  
March 15

December 1  
May 1

## PhD

*Fall admission only—Feb.*

1

*Graduates of the School of Public Affairs (SPA) are prepared to **lead** the field, **solve** pressing social issues and **change** communities for the better. Nationally ranked for excellence, SPA offers programs in multiple locations: on the UC Denver Downtown Campus, at the Colorado Springs Campus, on the Western Slope (Grand Junction) and through the nation's oldest online MPA. The school offers four degrees: the bachelor of arts in criminal justice, the master of public administration (MPA), the master of criminal justice (MCJ) and the PhD in public affairs. Qualified senior managers may elect to participate in the school's executive MPA option, an innovative partnership between the school and the federal Management Development Centers, while upper-level police officials may choose the executive leadership MCJ. SPA offers an accelerated MPA option as well as a variety of concentrations for students with diverse interests.*

## SPA Students

The School of Public Affairs (SPA) attracts a dynamic mix of students, from undergraduates just beginning their public service careers to well-seasoned professionals already immersed in public or nonprofit management and policy. Students encompass a range of age and experience, and they represent the diversity of the Denver metropolitan area. SPA classrooms promote interaction among students, and the variety of backgrounds including domestic, international, pre-career and mid-career students enriches learning enormously.

Our graduates are leaders. They include state legislators and department heads, city managers and mayors, police chiefs and correctional administrators, nonprofit and for-profit executives, school superintendents, university presidents and faculty.

The School of Public Affairs is accredited by the National Association of Schools of Public Affairs and Administration's (NASPAA) Commission on Peer Review and Accreditation.

## The Mission of SPA

The School of Public Affairs will improve the quality of public life in Colorado and the Rocky Mountain West.

To achieve this mission, SPA has set the following objectives:

- **build educational and research excellence**, establishing the School of Public Affairs as the best school of public affairs in the Rocky Mountain West and a top-ranked national school

- **focus on solving pressing public problems**, both by helping students to build strong problem-solving skills and by committing the entire SPA community to participation in problem-solving efforts
- **strengthen SPA's contribution to successful student career development**
- **serve all of Colorado, the Mountain West and the global community**

## **A Commitment to Community, to Public Service and to Problem Solving**

The School of Public Affairs seeks students committed to public service. It prepares those students through a rigorous course of study that combines scholarship and theory while building practical analytical, management and policymaking skills. SPA faculty frequently engage students in community-centered research projects, and the school offers a variety of opportunities for students to engage in the work of its centers or to participate in events featuring visiting experts.

## **The Centers**

The centers at the School of Public Affairs create bridges between the research-driven world of academia and the public and nonprofit sectors. This is how SPA contributes to the community—and how the school in turn seeks to provide leadership, policy solutions and ideas for societal change. The centers also enable students to engage first-hand in public policy research, work with client organizations, participate in internships and attend conferences and seminars. The SPA centers involve themselves in an impressive array of projects, from working with the Colorado Trust to helping Colorado communities establish health-delivery partnerships and studying Colorado's homeless population.

## **SPA Centers**

- Institute for Policy Research and Implementation
- Center on Domestic Violence
- Wirth Chair in Environmental and Community Development Policy
- Center for Education Policy Analysis
- Center for Public/Private Sector Cooperation
- Center for the Improvement of Public Management
- Center on Reinventing Public Education—Denver

## **Departments and Programs**

### **Bachelor of Arts**

## **Criminal Justice BA**

**Program Director:** Mary Dodge, PhD  
**Prospective Students:** 303-315-2227  
**Current Students and Advising:** 303-315-2227

## **Faculty**

### **Professors:**

Mark Pogrebin, PhD, University of Iowa

Eric Poole, PhD, Washington State University

### **Associate Professors:**

Mary Dodge, PhD, University of California, Irvine

Angela Gover, PhD, University of Maryland

Paul Stretesky, PhD Florida State University

### **Assistant Professor:**

Deanna Perez, PhD, University of Maryland

### **Associate Research Professor:**

Jerry Williams, DPA, University of Colorado

The School of Public Affairs is excited to offer a new bachelor of arts program in criminal justice. It is an interdisciplinary program that combines specific course work in criminal justice with a liberal arts focus. The criminal justice degree offers training for specific occupations within criminal justice agencies and provides students with the critical thinking, writing and presentation skills necessary for career advancement and graduate study. The course work explores the complex nature of crime causation, criminal justice organizations and the implications of public policies that allow graduates to adapt to the evolving nature of the field.

As with all undergraduate degrees, students are required to complete the requirements of the Downtown Campus core curriculum, providing an education that draws heavily on social and natural sciences as well as liberal arts. The program will not only provide a direct line to employment in the growing field of criminal justice, but will also facilitate the movement of outstanding students into SPA's MCJ and PhD graduate programs. Junior and senior criminal justice students may be permitted to enroll in a graduate level MCJ course by advisement. Students will be well prepared to pursue additional advanced degrees in fields where critical thinking and analytical skills are required.

## **Admissions Requirements**

Entering freshmen, current UC Denver students and transfer students are eligible for admission to the program. All students must meet the admission requirements described in the Information for Undergraduate Students chapter of this catalog.

## **Transfer Students**

Students who have attended another college or university are expected to meet general requirements for admission of transfer students as described in the Information for Undergraduate Students chapter. Transfer students with at least 30 semester hours of transferable credit who have been denied admission to the college by the Downtown Campus Office of Admissions, and who have special circumstances not covered by the regular admission policies, may petition the SPA Academic Standards for provisional admission. The Academic Standards Committee requires evidence of academic performance before provisional admission is granted. Policies and procedures for the SPA Academic Standards Committee are available through the SPA Advising Office.

## **Advising and Student Services**

Upon matriculation into the criminal justice program, students will receive advising from the undergraduate academic advisor. The academic advisor will assist students with registration, clarify university and department policy and facilitate the graduation checkout. Advising will ensure that students take appropriate courses in the core curriculum to provide a foundation for their course work in the program. Students will also be assigned a faculty advisor who will assist them with questions about their majors, concentrations and career directions.

## **The Internship Program**

Undergraduate students without experience in the field will be expected to complete an internship for credit under the direction of a faculty sponsor. Internships are helpful for career exploration early in a student's academic career or for job experience after developing academic content in the major. Students must have a minimum 2.0 cumulative GPA and a minimum of 15 semester hours completed at UC Denver before registering for the internship. A maximum of 3 semester hours of internship per semester and 6 semester hours total may be counted toward the 120 semester hours necessary for graduation.

Undergraduate students should contact the Experiential Learning Center for details on internship placements, paperwork and requirements.

## **Program Requirements**

Students completing a BA in criminal justice at UC Denver will complete a minimum of 120 semester hours including:

- 34–36 general education core curriculum semester hours

- 21 undergraduate criminal justice semester hours, including 16 upper-division semester hours
- 15 elective semester hours in criminal justice and ancillary fields for the selected area of concentration (including an internship)
- 46–48 elective semester hours, an optional CLAS or language minor (15-21 hours), optional electives or internship
- students without experience in the field of criminal justice must complete a 3-semester-hour internship

*Students must receive a minimum of a C (2.0) in each undergraduate course applied to satisfy degree requirements.*

## Required Criminal Justice Courses

- C J 1001 - Introduction to Criminal Justice. **Semester Hours: 3**
- C J 2041 - Crime Theory and Causes. **Semester Hours: 3**
- C J 3100 - Criminal Justice Research Methods. **Semester Hours: 3**
- C J 3150 - Statistics for Criminal Justice. **Semester Hours: 3**
- C J 4042 - Corrections. **Semester Hours: 3**
- C J 4043 - Law Enforcement. **Semester Hours: 3**
- C J 4044 - Courts and Judicial Process. **Semester Hours: 3**

**Total: 21**

## Criminal Justice Electives

*Criminal Justice Electives—15 semester hours, with 9 hours from the Department of Criminal Justice and 6 from other departments*

- C J 2110 - Drugs, Alcohol and Crime. **Semester Hours: 3**
- C J 2210 - Probation and Parole. **Semester Hours: 3**
- C J 2320 - Police-Community Relations. **Semester Hours: 3**
- C J 2510 - Juvenile Justice Administration. **Semester Hours: 3**
- C J 3160 - White-Collar Crime. **Semester Hours: 3**
- C J 3220 - Community-Based Corrections. **Semester Hours: 3**
- C J 3250 - Violence in Society. **Semester Hours: 3**
- C J 3252 - Violent Offenders. **Semester Hours: 3**
- C J 3310 - Police in Contemporary Society. **Semester Hours: 3**
- C J 3420 - Pleas, Trials and Sentences. **Semester Hours: 3**
- C J 3540 - Crime and Delinquency Prevention. **Semester Hours: 3**
- C J 4120 - Race, Class and Crime. **Semester Hours: 3**
- C J 4130 - Poverty and Crime. **Semester Hours: 3**
- C J 4140 - Domestic Violence and Crime. **Semester Hours: 3**
- C J 4170 - Victim Studies. **Semester Hours: 3**

- C J 4180 - Comparative Study of Criminal Justice Systems. **Semester Hours: 3** (CJ 1001++)
- C J 4230 - Corrections and Treatment. **Semester Hours: 3**
- C J 4410 - Criminal Law and Constitutional Procedures. **Semester Hours: 3**
- C J 4430 - Law and Society. **Semester Hours: 3**
- C J 4440 - Courts and Social Policy. **Semester Hours: 3**
- C J 4520 - Gangs and Criminal Organizations. **Semester Hours: 3**
- C J 4530 - Families and Intergenerational Crime. **Semester Hours: 3**
- C J 4600 - Special Topics in CJ. **Semester Hours: 3** (CJ 1001, CJ 2041++)

**Total: 9 hours**

++Prerequisite

## **Other Department Electives\*\***

- CMMU 4265 - Gender and Communication. **Semester Hours: 3**
- ECON 3300 - Economics Of Crime and Punishment. **Semester Hours: 3**
- P SC 3034 - Race, Gender, Law and Public Policy. **Semester Hours: 3**
- P SC 4124 - Denver Politics. **Semester Hours: 3**
- P SC 4185 - Corruption in the U.S. and Abroad. **Semester Hours: 3**
- P SC 4427 - Law, Politics and Justice. **Semester Hours: 3**
- P SC 4477 - Constitutional Law I. **Semester Hours: 3**
- P SC 4487 - Constitutional Law II. **Semester Hours: 3**
- P SC 4545 - Immigration Politics. **Semester Hours: 3**
- P SC 4837 - Contemporary Issues in Civil Liberties. **Semester Hours: 3**
- PSY 3135 - Organizational Psychology. **Semester Hours: 3**
- PSY 3205 - Human Development I: Child Psychology. **Semester Hours: 3**
- PSY 3215 - Human Development II: Adolescence and Adulthood. **Semester Hours: 3**
- PSY 3265 - Drugs, Brain and Behavior. **Semester Hours: 3**
- PSY 3305 - Abnormal Psychology. **Semester Hours: 3**
- PSY 3612 - Domestic Abuse. **Semester Hours: 3**
- SOC 2462 - Introduction to Social Psychology: SS3. **Semester Hours: 3**
- SOC 3020 - Race and Ethnicity in the U.S.. **Semester Hours: 3**
- SOC 3600 - Social Relations. **Semester Hours: 3**
- SOC 3700 - Sociology of the Family. **Semester Hours: 3**
- SOC 4340 - Juvenile Delinquency. **Semester Hours: 3**
- SOC 4440 - Social Stratification. **Semester Hours: 3**
- SOC 4460 - Hate Groups and Group Violence. **Semester Hours: 3**
- SOC 4770 - Advanced Topics in Sociology. **Semester Hours: 3**

**Total: 6 hours**

\*\*Students must comply with departmental prerequisites.

## Examples for Areas of Concentration

### Juvenile Justice

- C J 2510 - Juvenile Justice Administration. **Semester Hours: 3**
- C J 3540 - Crime and Delinquency Prevention. **Semester Hours: 3**
- C J 4520 - Gangs and Criminal Organizations. **Semester Hours: 3**
- SOC 3700 - Sociology of the Family. **Semester Hours: 3**
- SOC 4340 - Juvenile Delinquency. **Semester Hours: 3**

**Total: 15 hours**

### Law and Society

- C J 3420 - Pleas, Trials and Sentences. **Semester Hours: 3**
- C J 4430 - Law and Society. **Semester Hours: 3**
- C J 4440 - Courts and Social Policy. **Semester Hours: 3**
- P SC 4427 - Law, Politics and Justice. **Semester Hours: 3**
- P SC 3034 - Race, Gender, Law and Public Policy. **Semester Hours: 3**

**Total: 15 hours**

### Domestic Violence

- C J 4140 - Domestic Violence and Crime. **Semester Hours: 3**
- C J 4170 - Victim Studies. **Semester Hours: 3**
- C J 4530 - Families and Intergenerational Crime. **Semester Hours: 3**
- CMMU 4265 - Gender and Communication. **Semester Hours: 3**
- PSY 3612 - Domestic Abuse. **Semester Hours: 3**

**Total: 15 hours**

## Bachelor of Arts/Master of Public Administration

### Public Affairs BA/MPA

The College of Liberal Arts and Sciences and the School of Public Affairs, offer students the opportunity to complete both a bachelor's degree and master's degree in five years rather than the usual six years. The program combines undergraduate general education and major studies

with a specialized curriculum in public affairs and strives to develop intellectual and professional skills in a coordinated manner. The five year BA/MPA program decreases the time and number of semester hours required to earn both degrees by allowing students to count graduate level courses in the School of Public Affairs toward the bachelor's degree requirements. The program is designed to give students an opportunity to prepare for professional positions and advancement with federal, state or local governments, nonprofits or private sector firms concerned or involved with public affairs.

## **Admissions Requirements and Recommendations**

Interested students should contact their CLAS advisor as early as possible to ensure proper planning for the five year degree.

Interested students should contact the MPA Director as early as possible for advising (Dr. Mary Guy, 303-315-2007 or mary.guy@ucdenver.edu).

Students may apply to the program during the semester in which they will successfully complete 90 semester hours.

To apply, students must have a 3.5 or higher GPA in CLAS.

Students who wish to apply should have most of their general education and major requirements completed by the time they have earned 90 semester hours.

Students must complete all the required application materials for the School of Public Affairs:

- The UC Denver graduate application, parts 1 and 2
- A declaration of program form
- A resume highlighting work and volunteer experience, extra-curricular activities and any special skills, achievements and awards
- Scores from the GRE, GMAT or LSAT (GRE preferred)

## **Program Requirements**

Students must fulfill all the requirements for graduation for CLAS:

- Total of 120 hours (includes hours in public affairs)
- 30 hours in the core curriculum
- 30-48 hours to satisfy major requirements
- Writing proficiency (1 – 7 hours)
- Mathematics proficiency (0 – 3 hours)
- Level III foreign language (0 – 13 hours)
- It is highly recommended that students complete a course in American government, statistics and economics before applying to the MPA program

Students must maintain a 3.5 GPA in CLAS course work.

Students may complete a maximum of 18 semester hours of SPA course work while classified as an undergraduate student.

Students must fulfill all the requirements for graduation from SPA:

- Total of 36–39 semester hours in public affairs
- Six core courses (PAD 5001 – PAD 5006)
- Five elective courses at the graduate level (5000 and 6000 level courses)
- Nine of the 15 elective semester hours must be PAD courses
- An internship (3 hours) is required from those who do not have significant work experience in the field
- Successful completion of the advanced seminar (capstone) course taken in a semester AFTER all core courses are completed. A thesis option is available. Interested students should contact their SPA faculty advisor.

Students must maintain a 3.0 or higher GPA in public affairs course work.

## Program Options

BA/MPA students may choose from any CLAS major.

BA/MPA students may choose to do a general MPA or select a MPA concentration in local government, nonprofit management, environmental policy, emergency management and homeland security or domestic violence.

## Degree Confirmation

Students are eligible to receive a bachelor's degree once they have successfully completed 120 semester hours and all CLAS requirements. The BA/MPA will be conferred once the student has completed all requirements of the master of public administration degree, including at least 36 hours of graduate level course work.

## Certificate

# Domestic Violence Graduate Certificate

## Certificate Requirements

Students take the four specified courses below and one elective.

- P AD 5910 - Women and Violence: A Sociological Perspective. **Semester Hours: 3**
- P AD 5920 - Psychology of Violence Against Women. **Semester Hours: 3**
- P AD 5930 - Battered Women and the Legal System. **Semester Hours: 3**
- P AD 5940 - Domestic Violence Social Change and Advocacy. **Semester Hours: 3**

**Total: 15 Hours**

# **Emergency Management and Homeland Security Graduate Certificate**

## **Certificate Requirements**

Students take two required courses as well as electives approved by advisor.

- GEOG 5230 - Hazard Mitigation and Vulnerability Assessment. **Semester Hours: 3**
- P AD 5650 - Disaster and Emergency Management Policies. **Semester Hours: 3**
- Electives approved by advisor (3) (6-9 semester hours)

**Total: 15 Hours**

The emergency management and homeland security certificate requires the completion of three electives chosen from a preapproved, multidisciplinary list of courses relevant to emergency management. Students may choose electives in one of three tracks: policy and management; spatial analysis, planning and quantitative assessment; or public safety, homeland security and justice.

# **Environmental Policy, Management and Law Graduate Certificate**

## **Certificate Requirements**

Students take at least two of the three courses listed below:

- P AD 5631 - Seminar in Environmental Politics and Policy. **Semester Hours: 3**
- P AD 5632 - Seminar in Environmental Management. **Semester Hours: 3**
- P AD 5633 - Seminar in Natural Resource and Environmental Health Law. **Semester Hours: 3**

**Total: 15 Hours**

# **Local Government Graduate Certificate**

## Certificate Requirements

Students take at least two of the three courses listed below:

- P AD 5625 - Local Government Management. **Semester Hours: 3**
  - P AD 5626 - Local Government Politics and Policy. **Semester Hours: 3**
  - P AD 5628 - Urban Social Problems. **Semester Hours: 3**
- Electives approved by advisor (3) (6-9 semester hours)

**Total: 15 Hours**

# Nonprofit Management Graduate Certificate

## Certificate Requirements

Students take two required courses as well as electives approved by advisor.

- P AD 5110 - Seminar in Nonprofit Management. **Semester Hours: 3**
  - P AD 5140 - Nonprofit Financial Management. **Semester Hours: 3**
- Additional electives (3): **Semester Hours: 9**

**Total: 15 Hours**

## Non Degree

# Criminal Justice Minor

## Program Requirements

A minor in criminal justice requires 18 semester hours of course work including the following:

- C J 1001 - Introduction to Criminal Justice. **Semester Hours: 3**
- C J 2041 - Crime Theory and Causes. **Semester Hours: 3**

**Total: 6 Hours**

**At least one of the following**

- C J 4042 - Corrections. **Semester Hours: 3**
- C J 4043 - Law Enforcement. **Semester Hours: 3**
- C J 4044 - Courts and Judicial Process. **Semester Hours: 3**

## **Total: 3-9 Hours**

One to three additional elective courses in criminal justice or ancillary fields.

## **Master of Criminal Justice**

# **Criminal Justice MCJ**

► Graduate School Rules apply to this program

**Program Director:** Mary Dodge, PhD

## **Faculty**

### **Professors:**

Mark Pogrebin, PhD, University of Iowa

Eric Poole, PhD, Washington State University

### **Associate Professors:**

Mary Dodge, PhD, University of California, Irvine

Angela Gover, PhD, University of Maryland

Paul Stretesky, PhD Florida State University

### **Assistant Professor:**

Deanna Perez, PhD, University of Maryland

### **Associate Research Professor:**

Jerry Williams, DPA, University of Colorado Denver

The master of criminal justice (MCJ) program is designed for students interested in comprehensive professional graduate education in the field of criminal justice. It is intended to develop in the student an in-depth understanding of the fields within criminal justice and of background material from supporting disciplines, which enables the student to adapt to many operational specializations.

As an academic and professional field of study, this program is dedicated to preparing men and women not only to administer the system as it presently exists—but also to evaluate, to analyze

and to change—to become pioneers in accelerating the shaping of a rational and responsive criminal justice system.

To deal with this system effectively, research design capability must be developed along with the skills required for the ordering and analysis of empirical data. This course of study prepares the student to be an innovator in crime control and prevention through course work dealing with strategies and skills for promoting individual, organizational and social change.

## MPA AND MCJ—General Information

### Admission Requirements

1. A baccalaureate degree from a college or university of accredited standing, with a minimum GPA of 3.0. Two sets of official transcripts are required from all higher education institutions attended.
2. Three recommendations from qualified references. Recommendations may be from professors, employers and/or others acquainted with the prospective student's professional and/or academic work.
3. Applicants are required to take the GRE, the GMAT or the LSAT unless they meet the requirements for waiver. Standard graduate admission test scores are normally waived when the candidate already has a graduate degree in another field from an accredited institution. Other applicants may have test scores waived if they have an undergraduate GPA of 3.0 or better *and* they have *significant* professional employment in management or policymaking positions for a minimum of 10 years or the equivalent.
4. A current resume highlighting professional accomplishments and community involvement.
5. International students whose first language is not English are required to take the TOEFL or IELTS. A score of 550 or higher on the paper-based exam or 213 or higher on the computer-based exam is required for the MPA or 525/197 for the MCJ.

All application material and test scores should be sent to SPA, University of Colorado Denver, Campus Box 142, P.O. Box 173364, Denver, CO 80217-3364.

SPA will process applications as they come in. Master-level applicants generally receive notification of their admission status three weeks after all materials have been received in the office. The preferred deadlines listed below allow students to receive best consideration for scholarships, financial aid and course selection. *Students who do not meet the preferred deadline may still submit application materials until approximately one month before the start of classes and will be considered on a space-available basis.*

<i>Semester</i>	<i>Preferred Application Deadline</i>	<i>Final Deadline*</i>
Fall	March 15	August 1
Spring	October 15	December 1
Summer	March 15	May 1

\*Final deadline does not apply to international students who should contact the Office of International Admissions for deadline information.

## Provisional Admission

Under special circumstances, a student may be admitted on provisional status for one semester. Students admitted on a provisional basis take two courses in their first semester. MPA students may select two of the following: P AD 5001, 5003 or 5004. They may take no other courses during that semester. Based on their performance in these courses, a decision will be made concerning their admission into the program.

## Nondegree Admissions

Students may register as nondegree students while developing their application packet. However, students are discouraged from taking many courses as a nondegree student if they hope to pursue a degree. **Nine semester hours taken in the program as a nondegree student may be applied to the master's degree programs with approval of an advisor.** Nondegree student application forms are available in the Office of Admissions or online.

## Transfer of Credit to SPA

Up to 9 semester hours of appropriate graduate work from an accredited college or university may transfer, if such credit was not applied to a completed degree.

## Limitation of Course Load

The normal course load for a full-time student is 9 semester hours. A student who is employed full time may not carry more than 9 hours unless an excess load has been approved in advance by the faculty advisor.

## Financial Assistance

Students in the master's degree programs are eligible for several types of financial assistance. Educational loans require application to the Office of Financial Aid on the Downtown Campus and completion of the FAFSA. A number of students secure internships or other part-time positions with local, state and federal agencies in the Denver metropolitan area. Scholarship assistance is available on a limited basis.

The school receives announcements for fellowships from various government organizations and actively seeks additional funding for student support in the form of internship positions and research assistantships.

Persons interested in applying for financial assistance should inquire in the SPA office. The deadline for current students is March 15 for the fall term. Prospective students seeking scholarship funds should have complete scholarship applications on file at the SPA office by the preferred application deadline for the semester they are requesting funds.

## **The Internship Program**

An internship for the MPA and MCJ programs is required for students who have not had significant public, nonprofit or private-sector experience. The purpose of the internship is to continue the linkage between theory and practice that is the philosophical basis of SPA. The internships generally involve part-time work. A maximum of three semester hours will be awarded for internship service. Great care is taken by the SPA to ensure that the internship experience meets the intellectual needs of the student. Placements have included the Governor's Office, Colorado General Assembly, Denver Mayor's Office, City of Denver, Denver Police Department, Boulder Crime Lab, Western Governor's Association, the National Conference of State Legislatures, the Colorado Department of Public Health and Environment and the Denver Center for the Performing Arts.

## **Time Limit for Master's Degree**

Master's degree students must complete all course work and degree requirements within six years of registration in their first course.

## **Degree Requirements**

### **1. Graduate Study**

The program leading to the MCJ degree requires a minimum of 36 semester hours of appropriate graduate study with an average of B or better. No grade below C will be accepted for graduate credit. No more than 6 semester hours of independent study can be applied toward the degree.

### **2. Core Courses**

The completion of the following core courses is required with a grade of B- or better:

- C J 5000 - Law and Social Control. **Semester Hours: 3**
- C J 5100 - Administration of Criminal Justice. **Semester Hours: 3**
- C J 5120 - Nature and Causes of Crime. **Semester Hours: 3**
- C J 5321 - Research Methods in Criminal Justice. **Semester Hours: 3**

**Total: 12 Hours**

### 3. Course Work

Students must complete a minimum of 27 semester hours of course work in criminal justice.

### 4. Criminal Justice Experience

Students who have not had criminal justice experience are required to complete CJ 6910 (field study). A minimum of 240 hours of supervised work is required to earn 3 hours of credit. All required core courses must be completed before taking CJ 6910.

### 5. Advanced Seminar

All MCJ students, except those pursuing the thesis option, must complete the Advanced Seminar during the last semester of their degree program. All core classes must be completed before taking the advanced seminar. Students admitted before Spring 2009 may opt to take a written comprehensive exam in lieu of CJ 5561.

- C J 5561 - Advanced Seminar in Criminal Justice. **Semester Hours: 3**

Students must receive the approval of both a faculty advisor and the director of the criminal justice program to complete a thesis for 3–6 semester hours in lieu of the advanced seminar.

### Elective Courses

The courses listed below may be taken as electives for the MCJ degree:

- C J 5200 - Wrongful Convictions. **Semester Hours: 3**
- C J 5210 - Prisoner Reentry. **Semester Hours: 3**
- C J 5220 - The American Jury System. **Semester Hours: 3**
- C J 5240 - Gang Patterns and Policies. **Semester Hours: 3**
- C J 5250 - Criminal Offenders. **Semester Hours: 3**
- C J 5260 - Crime and Literature. **Semester Hours: 3**
- C J 5325 - Qualitative Methods for Criminal Justice. **Semester Hours: 3 or**
- C J 7325 - Qualitative Methods for Criminal Justice. **Semester Hours: 3**
- C J 5410 - Victimology. **Semester Hours: 3**
- C J 5430 - Drugs, Alcohol and Crime. **Semester Hours: 3**
- C J 5510 - Seminar: Contemporary Issues in Law Enforcement. **Semester Hours: 3 or**
- C J 7510 - Seminar: Contemporary Issues in Law Enforcement. **Semester Hours: 3**
- C J 5520 - Seminar: Corrections. **Semester Hours: 3 or**
- C J 7520 - Seminar: Corrections. **Semester Hours: 3**
- C J 5530 - Seminar: Community Corrections. **Semester Hours: 3 or**
- C J 7530 - Seminar: Community Corrections. **Semester Hours: 3**
- C J 5540 - Seminar: Juvenile Justice Administration. **Semester Hours: 3 or**

- C J 7540 - Seminar: Juvenile Justice Administration. **Semester Hours: 3**
- C J 5552 - Seminar: Criminal Justice Ethics. **Semester Hours: 3 or**
- C J 7552 - Seminar: Criminal Justice Ethics. **Semester Hours: 3**
- C J 5553 - Seminar: Women and Criminal Justice. **Semester Hours: 3 or**
- C J 7553 - Seminar: Women and Criminal Justice. **Semester Hours: 3**
- C J 5554 - Seminar: Criminal Justice Reform. **Semester Hours: 3 or**
- C J 7554 - Seminar: Criminal Justice Reform. **Semester Hours: 3**
- C J 5571 - Advanced Seminar: The Social Organization of Crime. **Semester Hours: 3 or**
- C J 7571 - Advanced Seminar: The Social Organization of Crime. **Semester Hours: 3**
- C J 5572 - Advanced Seminar: Race, Crime and Justice. **Semester Hours: 3 or**
- C J 7572 - Advanced Seminar: Race, Crime and Justice. **Semester Hours: 3**
- C J 5573 - Advanced Seminar: Organized Crime. **Semester Hours: 3 or**
- C J 7573 - Advanced Seminar: Organized Crime. **Semester Hours: 3**
- C J 5574 - Advanced Seminar: White Collar Crime. **Semester Hours: 3 or**
- C J 7574 - Advanced Seminar: White Collar Crime. **Semester Hours: 3**
- C J 5575 - Advanced Seminar: The Mentally Disordered Offender. **Semester Hours: 3**  
or
- C J 7575 - Advanced Seminar: The Mentally Disordered Offender. **Semester Hours: 3**

## MCJ Options

### Concentration in Domestic Violence

A student may choose to complete a concentration in domestic violence as part of the MCJ degree. The concentration provides an interdisciplinary perspective on crime, the formulation of laws and codes, the criminal legal system and its intersection with women and violence. Students seeking a domestic violence concentration must complete 15 semester hours related to domestic violence, which are completed via intensive workshops that meet periodically throughout a two-year period.

- P AD 5910 - Women and Violence: A Sociological Perspective. **Semester Hours: 3**
- P AD 5920 - Psychology of Violence Against Women. **Semester Hours: 3**
- P AD 5930 - Battered Women and the Legal System. **Semester Hours: 3**
- P AD 5940 - Domestic Violence Social Change and Advocacy. **Semester Hours: 3**  
Elective (1) (3 semester hours)

**Total: 15 Hours**

## Master of Public Administration

### Public Administration MPA

**Program Director:** Mary Guy, PhD

## **Faculty**

### **Professors:**

Kathleen Beatty, PhD, Washington State University

Lloyd Burton, PhD, University of California, Berkley

Peter deLeon, PhD, Pardee RAND Graduate School

Robert Gage, PhD, Indiana University

Mary Guy, PhD, University of South Carolina

Richard Stillman, PhD, Syracuse University

Paul Teske, PhD, Princeton University

### **Associate Professors:**

Linda deLeon, PhD, University of California, Los Angeles

Angela Gover, PhD, University of Maryland

Jody Fitzpatrick, PhD, University of Texas, Austin

Christine Martell, PhD, Indiana University

Allan Wallis, PhD, City University Graduate Center

### **Assistant Professors:**

George Busenberg, PhD, University of North Carolina at Chapel Hill

Danielle Varda, PhD, University of Colorado Denver

Chris Weible, PhD, University of California-Davis

### **MPA, West Slope Director:**

Fred Rainquet, PhD, University of Colorado

### **Wirth Chair:**

Sen. Gary Hart (Ret.), JD, Yale University

**Research Professor:**

Stephen Block, PhD, University of Colorado

**Clinical Professor:**

Malcolm Goggin, PhD, Stanford University

**Research Associate:**

Robert Reichardt, PhD, Pardee RAND Graduate School

Kelly Hupfeld, JD, Northwestern University

**Professors Emeritus:**

John Buechner, PhD, University of Michigan

Dale Neugarten, PhD, University of Southern California

The master of public administration (MPA) is designed to provide graduate professional education for students who wish to prepare themselves for careers in public management or policy, in nonprofit organizations or in private corporations that interface with the other sectors. The program also offers to those already in public service an opportunity to pursue additional education as a means of furthering their careers.

## **MPA AND MCJ—General Information**

### **Admission Requirements**

1. A baccalaureate degree from a college or university of accredited standing, with a minimum GPA of 3.0. Two sets of official transcripts are required from all higher education institutions attended.
2. Three recommendations from qualified references. Recommendations may be from professors, employers and/or others acquainted with the prospective student's professional and/or academic work.
3. Applicants are required to take the GRE, the GMAT or the LSAT unless they meet the requirements for waiver. Standard graduate admission test scores are normally waived when the candidate already has a graduate degree in another field from an accredited institution. Other applicants may have test scores waived if they have an undergraduate GPA of 3.0 or better *and* they have *significant* professional employment in management or policymaking positions for a minimum of 10 years or the equivalent.

4. A current resume highlighting professional accomplishments and community involvement.
5. International students whose first language is not English are required to take the TOEFL or IELTS. A score of 550 or higher on the paper-based exam or 213 or higher on the computer-based exam is required for the MPA or 525/197 for the MCJ.

All application material and test scores should be sent to SPA, University of Colorado Denver, Campus Box 142, P.O. Box 173364, Denver, CO 80217-3364.

SPA will process applications as they come in. Master-level applicants generally receive notification of their admission status three weeks after all materials have been received in the office. The preferred deadlines listed below allow students to receive best consideration for scholarships, financial aid and course selection. *Students who do not meet the preferred deadline may still submit application materials until approximately one month before the start of classes and will be considered on a space-available basis.*

<i>Semester</i>	<i>Preferred Application Deadline</i>	<i>Final Deadline*</i>
Fall	March 15	August 1
Spring	October 15	December 1
Summer	March 15	May 1

\*Final deadline does not apply to international students who should contact the Office of International Admissions for deadline information.

## Provisional Admission

Under special circumstances, a student may be admitted on provisional status for one semester. Students admitted on a provisional basis take two courses in their first semester. MPA students may select two of the following: P AD 5001, 5003 or 5004. They may take no other courses during that semester. Based on their performance in these courses, a decision will be made concerning their admission into the program.

## Nondegree Admissions

Students may register as nondegree students while developing their application packet. However, students are discouraged from taking many courses as a nondegree student if they hope to pursue a degree. **Nine semester hours taken in the program as a nondegree student may be applied to the master's degree programs with approval of an advisor.** Nondegree student application forms are available in the Office of Admissions or online.

## Transfer of Credit to SPA

Up to 9 semester hours of appropriate graduate work from an accredited college or university may transfer, if such credit was not applied to a completed degree.

## **Limitation of Course Load**

The normal course load for a full-time student is 9 semester hours. A student who is employed full time may not carry more than 9 hours unless an excess load has been approved in advance by the faculty advisor.

## **Financial Assistance**

Students in the master's degree programs are eligible for several types of financial assistance. Educational loans require application to the Office of Financial Aid on the Downtown Campus and completion of the FAFSA. A number of students secure internships or other part-time positions with local, state and federal agencies in the Denver metropolitan area. Scholarship assistance is available on a limited basis.

The school receives announcements for fellowships from various government organizations and actively seeks additional funding for student support in the form of internship positions and research assistantships.

Persons interested in applying for financial assistance should inquire in the SPA office. The deadline for current students is March 15 for the fall term. Prospective students seeking scholarship funds should have complete scholarship applications on file at the SPA office by the preferred application deadline for the semester they are requesting funds.

## **The Internship Program**

An internship for the MPA and MCJ programs is required for students who have not had significant public, nonprofit or private-sector experience. The purpose of the internship is to continue the linkage between theory and practice that is the philosophical basis of SPA. The internships generally involve part-time work. A maximum of three semester hours will be awarded for internship service. Great care is taken by the SPA to ensure that the internship experience meets the intellectual needs of the student. Placements have included the Governor's Office, Colorado General Assembly, Denver Mayor's Office, City of Denver, Denver Police Department, Boulder Crime Lab, Western Governor's Association, the National Conference of State Legislatures, the Colorado Department of Public Health and Environment and the Denver Center for the Performing Arts.

## **Time Limit for Master's Degree**

Master's degree students must complete all course work and degree requirements within six years of registration in their first course.

## **Degree Requirements**

The minimum requirements for the basic MPA degree are outlined below. Occasionally, changes are made; students may graduate under the requirements that were in effect when they were admitted.

## 1. Graduate Course Work

All students must complete a minimum of 36 semester hours of graduate course work, with an average of B or better. No more than 6 semester hours of independent study can be applied toward the degree. Students who have not had professional work experience in the public or nonprofit sectors must complete an internship through an additional 3-semester-hour course described in No. 6 below, bringing their total semester-hour requirements to 39.

## 2. Complete the Following Core Courses

All MPA students (with the exception of those in the executive MPA option) must complete the following core courses or approved equivalents:

- P AD 5001 - Introduction to Public Administration and Public Service. **Semester Hours:** 3
- P AD 5002 - Organizational Management and Change. **Semester Hours:** 3
- P AD 5003 - Research and Analytic Methods. **Semester Hours:** 3
- P AD 5004 - Economics and Public Finance. **Semester Hours:** 3
- P AD 5005 - The Policy Process and Democracy. **Semester Hours:** 3
- P AD 5006 - Leadership and Professional Ethics. **Semester Hours:** 3

### Total: 18 Hours

Students must receive a grade of *B-* or better in each core course. Students who earn a lower grade may repeat the course once to attempt to earn a *B-* or better.

## 3. Electives

All MPA students must complete 15 hours of electives. Courses in which a student earns a grade of less than a *C* will not be counted toward a degree.

## 4. Advanced Seminar Class

All MPA students, except those pursuing the thesis option, must complete the advanced seminar class during the last semester of their degree program. All core courses must be completed before beginning the advanced seminar.

- P AD 5361 - Advanced Seminar in Public Policy and Management. **Semester Hours:** 3

## 5. Thesis Option

The thesis option is available in lieu of PAD 5361 for MPA students who have an interest in pursuing a topic in-depth or who are planning to pursue a career in research or academia. Students must receive approval from their faculty advisor or the MPA director to pursue the thesis option. The thesis is a six credit course that normally spans two semesters.

## 6. Internships

Students who have limited experience (generally defined as less than one year of experience) in public, nonprofit or relevant private-sector service must enroll in P AD 6910, Field Study in Public Administration. The decision to require P AD 6910 for a particular student is made by the faculty admissions committee or the student's faculty advisor upon the student's acceptance to the MPA program. A minimum of 300 hours of supervised work and study is required to earn 3 semester hours of credit. This requirement raises the total semester hours needed to earn the MPA degree to 39.

## MPA Options

### Concentrations and Graduate Certificates

All SPA concentrations are a total of 15 semester hours and may either be taken as part of the MPA program or as a stand-alone graduate certificate.

A student *may* choose to select one of the concentrations described below or may complete the MPA without a specified concentration. Students completing a concentration take their electives in the area of their concentration, complete the advanced seminar project in the area of their concentration and are advised by faculty from the concentration. The concentrations and their particular required courses are:

#### Environmental Policy, Management and Law Concentration

Students take at least two of the three courses listed below:

- P AD 5631 - Seminar in Environmental Politics and Policy. **Semester Hours: 3**
  - P AD 5632 - Seminar in Environmental Management. **Semester Hours: 3**
  - P AD 5633 - Seminar in Natural Resource and Environmental Health Law. **Semester Hours: 3**
- Electives approved by advisor (3) (6-9 semester hours)

**Total: 15 Hours**

#### Local Government Concentration

Students take at least two of the three courses listed below:

- P AD 5625 - Local Government Management. **Semester Hours: 3**
- P AD 5626 - Local Government Politics and Policy. **Semester Hours: 3**
- P AD 5628 - Urban Social Problems. **Semester Hours: 3**  
Electives approved by advisor (3) (6-9 semester hours)

**Total: 15 Hours**

## **Domestic Violence Concentration**

Students take four specified courses and one elective.

- P AD 5110 - Seminar in Nonprofit Management. **Semester Hours: 3**
- P AD 5910 - Women and Violence: A Sociological Perspective. **Semester Hours: 3**
- P AD 5920 - Psychology of Violence Against Women. **Semester Hours: 3**
- P AD 5930 - Battered Women and the Legal System. **Semester Hours: 3**  
Elective approved by advisor (1) (3 semester hours)

**Total: 15 Hours**

## **Emergency Management and Homeland Security Concentration**

Students take two required courses as well as electives approved by advisor.

- GEOG 5230 - Hazard Mitigation and Vulnerability Assessment. **Semester Hours: 3**
- P AD 5650 - Disaster and Emergency Management Policies. **Semester Hours: 3**  
Electives approved by advisor (3) (6-9 semester hours)

**Total: 15 Hours**

The emergency management and homeland security concentration requires the completion of three electives chosen from a preapproved, multidisciplinary list of courses relevant to emergency management. Students may choose electives in one of three tracks: policy and management; spatial analysis, planning and quantitative assessment; or public safety, homeland security and justice.

## **Nonprofit Organizations Concentration**

Students take two required courses as well as nonprofit electives approved by advisor.

- P AD 5110 - Seminar in Nonprofit Management. **Semester Hours: 3**
- P AD 5140 - Nonprofit Financial Management. **Semester Hours: 3**

Other nonprofit courses (9 semester hours)

**Total: 15 Hours**

## **The Accelerated Cohort**

The accelerated MPA is a fast-paced, full-time option that brings academically superior students together with a dedicated research and teaching faculty in the midst of the vibrant downtown Denver environment.

The accelerated option enables students to focus their energies in a concentrated program of study and earn a nationally accredited, 36-hour MPA in 12 months. (It is preferred that applicants have some knowledge of economics, statistics and political science.)

The cost for the accelerated option is the same for both in-state and out-of-state students, providing out-of-state students with substantial savings.

The students in the cohort enjoy a unique experience as they go through all classes in the MPA together, fostering a community of scholar-practitioners.

Students are admitted to the program in cohorts of approximately 20 participants. A new cohort starts each fall. The cohort format helps to increase the opportunity to become acquainted with other graduate students and increases the opportunities for interaction between program participants and faculty.

## **The Executive Option**

The School of Public Affairs and the management development centers of the federal Office of Personnel Management have formed a partnership to offer an innovative course of study for selected senior level professionals in the public and nonprofit sectors.

The executive MPA option provides students with an opportunity to earn a master's degree targeted at improving their leadership competencies, while also offering significant flexibility in customizing coursework to fit students' individual needs and career objectives. In addition, the course formats—online courses and weekend or week-long intensive meetings—enable students to fit their study into the framework of busy lives.

The executive MPA option is intended to serve high-level managers and policy experts from public agencies—federal, state and local—as well as those from the nonprofit sector.

## **Program Design**

The executive MPA option requires 30 semester hours of credit plus two required seminars at one of the management development centers of the federal Office of Personnel Management. One is in Aurora, Colorado; the other is outside Washington, D.C. The first required seminar is an assessment seminar. Students explore their own managerial and leadership styles, their personality types and their levels of competence in a variety of executive skills. A group of

highly-skilled trainers and psychologists administer and interpret test results, and participants use this self-knowledge to plan their MPA degree.

Near the end of the program, students also participate in one of the management development centers' core leadership seminars. These seminars focus on developing competencies identified by the federal government as necessary for its highest-level managers, the senior executive service. The required Western Management Development Center courses should total six semester hours of graduate credit. More information is available online at [www.leadership.opm.gov](http://www.leadership.opm.gov) or by e-mail from WMDC Program Manager Bruce Kirschner at [bhkirsch@opm.gov](mailto:bhkirsch@opm.gov).

Executive students must take P AD 5001, Introduction to Public Administration and Public Service, as one of their first courses. They then must select a minimum of three of the core courses listed below. Their advisor will assist in this selection. They must be able to demonstrate that they have gained competencies in the core courses they do not take through job experience and/or past course work.

Three of five are required:

- P AD 5002 - Organizational Management and Change. **Semester Hours: 3**
- P AD 5003 - Research and Analytic Methods. **Semester Hours: 3**
- P AD 5004 - Economics and Public Finance. **Semester Hours: 3**
- P AD 5005 - The Policy Process and Democracy. **Semester Hours: 3**
- P AD 5006 - Leadership and Professional Ethics. **Semester Hours: 3**

**Total: 9 Hours**

These courses may be taken at one of SPA's sites in Denver, Colorado Springs or Grand Junction, or, for students who live outside of Colorado, online.

Students also take five elective courses (15 semester hours), which may be selected either from the offerings at the management development centers or from SPA. Both partners provide a wide variety of courses. At least 18 semester hours must be SPA course work.

At or very near the end of their program, students participate in P AD 5361, Advanced Seminar. In this course, students engage in a self-designed professional project that integrates their new skills and knowledge. In addition, they reassess their professional competencies, charting the progress they have made during the program and designing a plan for future developmental experiences.

## Online Option

SPA provides a unique opportunity for students who live at a distance from the university to obtain a MPA degree.

Designed to serve students who are looking for a high-quality education, but who need an alternative to traditional classroom instruction, students may elect to do one or all of their courses online. This option allows students to complete the entire degree at a distance or to choose to come to campus for some courses while using an interactive online format for others.

For both in-state and out-of-state online students, tuition is comparable to the rate charged to in-state students for courses that meet in the classroom. The nonprofit organization concentration is available online, as well as a variety of other electives leading to a general MPA degree. Students in the executive option may also choose to do all SPA course work online.

## **Domestic Violence Cohort**

The first graduate program of its kind in the nation, the University of Colorado Denver's MPA concentration in domestic violence focuses on the management and policies surrounding domestic violence, as well as grass-roots social justice work and best practices in this emerging field. Each fall, 10 to 20 students are accepted into the cohort program, allowing the participants to build a strong community of advocates and learners.

The program invites students from around the world to participate in a unique cohort program, which combines online courses with five intensive campus seminars spaced throughout the two-year program. Students may choose to take all courses in the classroom if they wish.

The cost of the domestic violence concentration courses is the same for in-state and out-of-state students. Nonresident students pursuing the MPA with a concentration in domestic violence may also qualify for reduced tuition through the Western Regional Graduate Program which covers 14 western states.

## **Western Slope Cohort**

Public and nonprofit sector professionals living in Colorado's Western Slope have the opportunity to earn a MPA without traveling to the Front Range. SPA offers one MPA course each semester in Grand Junction at Mesa State College and supplements these offerings with online courses. Courses are designed to integrate the academic and applied experiences necessary to be an effective modern manager. The courses are offered in an intensive weekend format and emphasize the needs of small and rural communities.

## **Master of Public Administration/Dual Degree**

# **Public Administration MPA/JD**

The School of Public Affairs and the University of Colorado at Boulder School of Law jointly sponsor a dual degree program leading to the simultaneous granting of the master of public administration (MPA) and juris doctor (JD) degrees. The program may be of particular interest to students who wish to practice law within the public sector, obtain a senior administrative post, represent public-sector clients, represent private-sector clients in transactions with government

agencies and institutions and/or develop scholarly expertise in the relationship between law and public administration.

Interested persons must separately apply to and be admitted by both SPA and the School of Law. Upon admission, students may begin full-time study at either SPA or the School of Law; however, law study must be initiated no later than the beginning of the second year of enrollment in the program, and the first year of law study must be taken in its entirety and exclusive of nonlaw course work.

Through the choice of electives, students may develop a limited substantive specialization within the study of law and public administration. The dual degree program is structured to allow for 12 semester hours from the law school to be accepted as electives in the 36-semester-hour MPA program, and 12 semester hours from SPA to be accepted into the law school's 89-semester-hour JD program. Students are thus simultaneously awarded both degrees with a cumulative total of 101 semester hours; the program therefore allows students to complete all dual degree requirements in approximately four years of full-time study. Students without prior public-sector work experience will be required to complete an internship in an appropriate governmental institution or closely related nonprofit organization.

# **Public Affairs/Urban and Regional Planning MPA/MURP**

## **Background and Purpose**

Public administration and urban and regional planning have many aspects in common. To provide students with an excellent education through understanding of both professions, the School of Public Affairs and the College of Architecture and Planning have developed a dual degree program. Students can obtain both master of public administration (MPA) and master of urban and regional planning (MURP) degrees with a minimum of 63 semester hours, as compared to a total of 87 semester hours to complete both degrees independently.

To be eligible for the dual MPA/MURP degree program, students must be admitted to each of the two schools under their respective admission procedures and standards and indicate an intention to pursue the dual degree. Students will take all the core courses and the advanced seminar in public policy and management required for an MPA, plus the core and concentration requirements necessary for the MURP.

Students in each school must apply to the other school before completing 18 hours in their respective programs. Upon admission to both schools, students will be assigned an advisor in each school to work out a specific degree plan.

## **Core and Elective Requirements**

## Core Courses (42 semester hours)

### MURP

- URP 5501 - Planning Issues and Processes. **Semester Hours: 3**
- URP 5511 - Planning Methods II. **Semester Hours: 3**
- URP 5520 - Urban Spatial Analysis. **Semester Hours: 3**
- URP 5530 - Planning Law. **Semester Hours: 3**
- URP 6630 - Planning Studio I. **Semester Hours: 6**
- URP 6631 - Planning Studio II. **Semester Hours: 6**

**Total: 18 Hours**

### MPA

- P AD 5001 - Introduction to Public Administration and Public Service. **Semester Hours: 3**
- P AD 5002 - Organizational Management and Change. **Semester Hours: 3**
- P AD 5004 - Economics and Public Finance. **Semester Hours: 3**
- P AD 5005 - The Policy Process and Democracy. **Semester Hours: 3**
- P AD 5006 - Leadership and Professional Ethics. **Semester Hours: 3**

**Total: 15 Hours**

### Take one of two

- P AD 5003 - Research and Analytic Methods. **Semester Hours: 3**
- URP 5510 - Planning Methods I. **Semester Hours: 3**

**Total: 3 Hours**

## Additional Course Work (21 semester hours)

### MURP

12 hours if URP 5510 elected, or 15 hours if P AD 5003 elected. Courses are to be selected with MURP advisor's approval.

- URP 5510 - Planning Methods I. **Semester Hours: 3**
- P AD 5003 - Research and Analytic Methods. **Semester Hours: 3**

**Total: 12-15 Hours**

## MPA

6 hours if P AD 5003 elected, or 9 hours if URP 5510 elected.

- P AD 5003 - Research and Analytic Methods. **Semester Hours: 3**
- URP 5510 - Planning Methods I. **Semester Hours: 3**

**Total: 6-9 Hours**

## Practicum

- P AD 5361 - Advanced Seminar in Public Policy and Management. **Semester Hours: 3**  
(3 hours required)

**Total: 3 Hours (required)**

## Electives

Take one of the following or another option with MPA advisor's approval (3 hours):

- P AD 5250 - Intergovernmental Management. **Semester Hours: 3**
- P AD 5410 - Administrative Law. **Semester Hours: 3**
- P AD 5440 - Negotiation and Conflict Resolution. **Semester Hours: 3**
- P AD 5502 - Public Financial Management and Policy. **Semester Hours: 3**
- P AD 5503 - Governmental Budgeting. **Semester Hours: 3**
- P AD 5540 - Organization Development. **Semester Hours: 3**
- P AD 5625 - Local Government Management. **Semester Hours: 3**
- P AD 5626 - Local Government Politics and Policy. **Semester Hours: 3**
- P AD 5631 - Seminar in Environmental Politics and Policy. **Semester Hours: 3**
- P AD 5632 - Seminar in Environmental Management. **Semester Hours: 3**

**Total: 3 Hours**

## Doctor of Philosophy

# Public Affairs PhD

► Graduate School Rules apply to this program

Program Director: Peter deLeon, PhD

## Faculty

**Professors:**

Kathleen Beatty, PhD, Washington State University  
Lloyd Burton, PhD, University of California, Berkley  
Peter deLeon, PhD, Pardee RAND Graduate School  
Robert Gage, PhD, Indiana University  
Mary Guy, PhD, University of South Carolina  
Richard Stillman, PhD, Syracuse University  
Paul Teske, PhD, Princeton University

**Associate Professors:**

Linda deLeon, PhD, University of California, Los Angeles  
Angela Gover, PhD, University of Maryland  
Jody Fitzpatrick, PhD, University of Texas, Austin  
Allan Wallis, PhD, City University Graduate Center  
Christine Martell, PhD, Indiana University

**Assistant Professors:**

George Busenberg, PhD, University of North Carolina at Chapel Hill  
Danielle M. Varda, PhD, University of Colorado Denver  
Christopher M. Weible, PhD, University of California-Davis

**Wirth Chair:**

Sen. Gary Hart (Ret.), JD, Yale University

**Research Professor:**

Stephen Block, PhD, University of Colorado

**Clinical Professor**

Malcolm Goggin, PhD, Stanford University

**Research Associate:**

Robert Reichardt, PhD, Pardee RAND Graduate School

**Lecturers:**

Todd Bryan, MPA, Harvard University

Floyd Ciruli, JD, Georgetown University

Wellington Webb, MA, University of Northern Colorado

**Professors Emeritus:**

John Buechner, PhD, University of Michigan

Dale Neugarten, PhD, University of Southern California

The School of Public Affairs offers a program of advanced graduate study leading to the doctor of philosophy in public affairs. The program, based on the Downtown Campus, permits elective work to be taken on any campus of the university if it is part of the approved program of study or degree plan.

The doctoral program was developed to meet the need for people with mastery in the scholarly theory, concepts and research skills of public administration, public policy and public management, and who are able to use such skills in careers of research, teaching and analysis of public-sector challenges. The PhD is designed to prepare students for leadership responsibilities in academia, research and public policy analysis. Accordingly, the PhD stresses the development of theoretical, conceptual and methodological knowledge in public administration, policy and management.

## **Participants**

The doctoral program is primarily designed to serve (1) people who desire to further the field of public policy and public and nonprofit management through teaching and research; (2) scholar-practitioners working in government, private-sector organizations concerned with government and nonprofit organizations; and (3) policy analysts in government, private-sector organizations concerned with government and nonprofit organizations.

## **Time Required for PhD Degree**

The PhD program requires an intense commitment. Most courses and seminars are offered during the late afternoon, in the evenings or on an intensive basis. (Some electives are offered online, but core courses are not.) Anyone starting the PhD program with a master's degree in public administration can expect to take at least three but no more than eight years to complete all of the requirements for the PhD.

Students are required to enroll for a minimum of 6 semester hours of course work each fall and spring semester. All requirements for the PhD degree should be completed within eight years of admittance. Any student entering the program with no prior graduate work in public administration, public policy or management should expect additional course requirements.

## **PhD Admission Requirements**

Admission to the program is based on the personal and professional qualifications of the applicant. It is desirable that an applicant have a master's degree in public administration or a closely related field before undertaking doctoral work. Applicants should have a 3.5 GPA or above in master-level course work, as well as a combined score of 1,000 or better on the quantitative and verbal sections of the GRE. Successful applicants will also show the potential for productive careers of scholarship, research and analysis.

Meeting the minimum thresholds listed above does not assure admission. In unusual cases, students who fail to meet the thresholds may be admitted if high academic skills are demonstrated in other ways.

## **PhD Application Process**

Applicants must submit the following items to the SPA office before they can be formally considered for admission. The application deadline is February 1; admitted students will begin in the fall semester.

- application forms
- official transcripts (two copies) from all degree granting institutions
- GRE scores (no more than three years old)
- a resume or vita
- three letters of recommendation from colleagues and previous professors, focusing on the potential for deriving benefit from the PhD program
- a 500–1,000 word statement of educational and career goals, focusing on research interests

In addition, students may also submit samples of research reports or publications. All application materials will be retained by SPA and will not be returned. A personal meeting with the PhD director or other faculty member is recommended.

## **Financial Assistance**

For excellent candidates, SPA will fund a small number of doctoral research assistantships each year based on financial availability. Students selected will receive a full-tuition waiver as well as

a stipend of \$15,000 for the academic year. Our goal is to provide such funding for students for at least three years.

## **Degree Requirements**

### **Course Work**

A total of 36 semester hours of course work is required past a master's degree in public administration or a related degree. In some cases, additional prerequisite courses may be required to assure adequate preparation for doctoral studies. All PhD students are required to take a minimum of 6 semester hours of course work in both the fall and spring semesters, until their course work requirements are met, if they wish to maintain their full-time student status.

**During their first year of study, all PhD students are required to take the following four doctoral seminars:**

- P AD 8010 - Historical and Comparative Foundations of Public Administration. **Semester Hours: 3**
- P AD 8020 - Seminar in Public Management. **Semester Hours: 3**
- P AD 8030 - Seminar in Public Policy. **Semester Hours: 3**
- P AD 8040 - Critical Issues in Public Affairs. **Semester Hours: 3**

**Total: 12 Hours**

**During the next year, doctoral students are required to take**

- P AD 8040 - Critical Issues in Public Affairs. **Semester Hours: 3**
- P AD 8070 - Advanced Seminar in Research Methods. **Semester Hours: 3**
- P AD 8060 - Seminar on Conduct of Empirical Inquiry. **Semester Hours: 3**

**Total: 6 Hours**

Prerequisites for P AD 8070 include P AD 7330, Intermediate Statistical Analysis, P AD 8010, 8020, 8030, 8040 and 8060. These prerequisites may be waived with the permission of the doctoral director.

In addition, all PhD students must complete a second methodology course (as well as four elective courses) relevant to the student's dissertation plans.

## **Comprehensive Exam and Dissertation**

In addition to course work, PhD students must pass a comprehensive exam no later than the beginning of their third year of study. Students are also required to complete and defend, before a faculty committee, a dissertation that makes a significant contribution to the literature and theory of public administration, management or policy.

Students are advanced to candidacy for the PhD once they have completed all required course work and examinations, have successfully presented their research colloquium and have been certified for candidacy by his/her doctoral committee. After students are formally advanced to candidacy, they must register for a total of 30 hours of dissertation research credit to complete the PhD. Each fall and spring semester, students are expected to register for 5 semester hours of dissertation research; if unable to register for at least 5 semester hours, students must request a leave of absence from the PhD program until able to complete the minimum dissertation requirement. Students may take up to two semesters' leave of absence before they are disenrolled from the program. Students then would need to reapply to the program.

Further details on the program can be found in the *Handbook for the Doctor of Philosophy in Public Affairs Program*, available from the SPA office on online at <http://spa.ucdenver.edu>.

## Programs

### Undergraduate Areas of Study

# Accounting Emphasis BS in Business Administration

**Program Director:** Michael Roberts

**Telephone:** 303-556-5884

**E-mail:** [Michael.Roberts@ucdenver.edu](mailto:Michael.Roberts@ucdenver.edu)

Accounting courses are offered in several fields of professional accountancy at the intermediate, advanced and graduate levels. They provide preparation for practice in one or more of the following fields:

- Auditing
- Financial Accounting
- Financial Management
- Management Control Systems
- Managerial Accounting
- Tax Accounting
- Teaching and Research

In all of these fields a thorough knowledge of the social, legal, economic and political environment is needed. A high degree of analytical ability and communication skill is indispensable. A grade of C must be earned in all accounting courses to qualify for graduation.

Courses in English composition, speech, ethics and logic are desirable. Courses in statistics and information systems, beyond the required business core courses, are highly recommended.

## Required Courses

ACCT 3054 - Accounting Systems and Data Processing. **Semester Hours: 3**

ACCT 3220 - Intermediate Financial Accounting I. **Semester Hours: 3**

ACCT 3230 - Intermediate Financial Accounting II. **Semester Hours: 3**

ACCT 3320 - Intermediate Cost Accounting. **Semester Hours: 3**

ACCT 4410 - Income Tax Accounting. **Semester Hours: 3**

ACCT 4620 - Auditing. **Semester Hours: 3**

ACCT free elective (4000 level) (3 semester hours) choose one course from the following:

ACCT 4240 - Advanced Financial Accounting. **Semester Hours: 3**

ACCT 4070 - Management Accounting. **Semester Hours: 3**

ACCT 4330 - Managerial Accounting Problems and Cases. **Semester Hours: 3**

ACCT 4370 - International Accounting. **Semester Hours: 3**

ACCT 4520 - Oil and Gas Accounting. **Semester Hours: 3**

ACCT 4780 - Accounting IS Processes and Control. **Semester Hours: 3**

ACCT 4800 - Accounting for Government and Nonprofit Organizations. **Semester Hours: 3**

ACCT 4840 - Independent Study. **Semester Hours: 1 to 8**

ACCT 4915 - Accounting for the Public Interest. **Semester Hours: 3**

ACCT 4950 - Special Topics. **Semester Hours: 3**

### Total: 21 Hours

Students planning to pursue accounting as a career may take more than the above required hours. Many students complete a total of 30 hours of accounting, often taking two accounting courses each semester in their junior and senior years. Students should work closely with the accounting faculty and business advisors in planning their accounting programs.

The accounting program offers several 4000/6000-level courses. Students with credit for a 4000-level course cannot receive credit for the corresponding 6000-level course. Graduate students should take 6000-level courses.

Accounting students often specialize in a particular topical area of accounting.

### Financial Accounting

#### *Recommended Electives*

ACCT 4240 - Advanced Financial Accounting. **Semester Hours: 3**

ACCT 4800 - Accounting for Government and Nonprofit Organizations. **Semester Hours: 3**

## **Managerial Accounting**

### *Recommended Electives*

ACCT 4330 - Managerial Accounting Problems and Cases. **Semester Hours: 3**

ACCT 4800 - Accounting for Government and Nonprofit Organizations. **Semester Hours: 3**

## **Accounting and Information Systems (ACIS)**

Within the accounting curriculum students can choose to add courses in information systems to complement their individual interests as well as prior education and work experiences.

### **Required Courses**

ACCT 3054 - Accounting Systems and Data Processing. **Semester Hours: 3**

ACCT 3220 - Intermediate Financial Accounting I. **Semester Hours: 3**

ACCT 3230 - Intermediate Financial Accounting II. **Semester Hours: 3**

ACCT 3320 - Intermediate Cost Accounting. **Semester Hours: 3**

ACCT 4410 - Income Tax Accounting. **Semester Hours: 3**

ACCT 4620 - Auditing. **Semester Hours: 3**

ACCT 4780 - Accounting IS Processes and Control. **Semester Hours: 3 or**

ISMG 4780 - Accounting IS Processes and Control. **Semester Hours: 3**

### **ISMG Electives**

Choose two:

ISMG 4500 - Database Management and Applications. **Semester Hours: 3**

ISMG 4600 - System Analysis and Design. **Semester Hours: 3**

ISMG 4900 - Project Management and Practice. **Semester Hours: 3**

## **Total: 27 Hours**

To further specialize, consider a graduate accounting program. Graduate study in accounting is receiving increasing emphasis by professional organizations and employers. Students meeting admission requirements should consider continuing their education at the graduate level.

Qualified undergraduates may petition for permission to take one or two graduate accounting courses as electives (e.g. ACCT 6800, Special Topics).

# **Anthropology BA**

Students majoring in anthropology for the BA degree must declare such by the time they have completed 60 semester hours. Majors must complete a minimum of 40 semester hours in

anthropology with a grade of C (2.0) or better in each course. At least 24 hours must be at the upper-division level and a minimum of 21 semester hours must be taken from Downtown Campus faculty. (Note that all upper-division courses have lower-division prerequisites.)

## Program Requirements

### Required Anthropology Courses

ANTH 1302 - Introduction to Archaeology: SS3. **Semester Hours: 4**

ANTH 1303 - Introduction to Biological Anthropology: SC1. **Semester Hours: 4**

ANTH 2102 - Culture and the Human Experience: SS3. **Semester Hours: 3**

### Choose three:

ANTH 3101 - Foundations of Cultural Anthropology. **Semester Hours: 3**

ANTH 3121 - Language and Communication. **Semester Hours: 3**

ANTH 3301 - World Prehistory. **Semester Hours: 3**

ANTH 3512 - Human Evolution. **Semester Hours: 3**

**Total: 20 Hours**

### Anthropology Electives

Recommend courses:

ANTH 4050 - Quantitative Methods in Anthropology. **Semester Hours: 3**

ANTH 4810 - Integrating Anthropology. **Semester Hours: 3**

**Total (minimum): 20**

**Major Total: 40 Hours**

### Accelerated Joint BA/MA Program

The department now offers an accelerated joint BA/MA degree option. See the description for Plan III in the ANTHROPOLOGY MA PLANS OF STUDY section for details.

## Biology BS

Biology students must declare their major by the time they have taken 60 semester hours. A minimum of 36 hours of biology must be completed, of which 18 hours are at the upper-division level and taken in residence with UC Denver Downtown Campus biology faculty. Included in the 36 hours are 22 semester hours of biology core courses, required of all majors. At least 14

hours of upper-division biology elective courses beyond the core are required to fulfill the remaining hours, including one 4000-level lecture course. A maximum of 6 semester hours of independent study (BIOL 3840/4840) **or** a combined maximum total of 6 hours of independent study (3 hours) and internship/cooperative education (BIOL 3939) (3 hours) can be counted toward the 14 hours of upper-division electives in biology. The minimum grade in each UC Denver biology course is C- (1.7). However, a GPA of 2.5 in biology courses taken at UC Denver is required to graduate. To ensure a proper background for the study of biology, majors are required to pass 31 hours of course work in ancillary disciplines, including two semesters of general chemistry laboratory, for which the minimum grade is C- (1.7). MATH 2830 and MATH 4830 may substitute for Calculus I (MATH 1401). All biology courses applied to the undergraduate biology major must be completed within 10 years of graduation. The following biology and ancillary courses are required and must be completed with a letter grade of C- (1.7) or higher:

## Requirements for the Major

### Biology Core Courses

- BIOL 2051 - General Biology I: SC1. **Semester Hours: 3**
- BIOL 2071 - General Biology Laboratory I: SC1. **Semester Hours: 1**
- BIOL 2061 - General Biology II: SC1. **Semester Hours: 3**
- BIOL 2081 - General Biology Laboratory II: SC1. **Semester Hours: 1**
- BIOL 3411 - Principles of Ecology. **Semester Hours: 3**
- OR-
- BIOL 3412 - Fundamentals of Applied Ecology. **Semester Hours: 3**
- BIOL 3611 - General Cell Biology. **Semester Hours: 3**
- BIOL 3832 - General Genetics. **Semester Hours: 4**

### One of the following structure/function courses:

- BIOL 3225 - Human Physiology. **Semester Hours: 4**
- BIOL 3244 - Human Anatomy. **Semester Hours: 4**
- BIOL 3654 - General Microbiology. **Semester Hours: 4**
- BIOL 4335 - Plant Science. **Semester Hours: 4**

**Total Biology Core: 22 Hours**

### Biology Electives

*Biology elective courses (3000 or 4000 level) \**

**Total Electives: 14 Hours**

**Biology (core and electives) Total: 36 Hours**

## Ancillary Core Courses

- CHEM 2031 - General Chemistry I: SC1. **Semester Hours: 3**  
CHEM 2038 - General Chemistry Laboratory I: SC1. **Semester Hours: 1**  
CHEM 2061 - General Chemistry II: SC1. **Semester Hours: 3**  
CHEM 2068 - General Chemistry Laboratory II: SC1. **Semester Hours: 2**  
CHEM 3411 - Organic Chemistry I. **Semester Hours: 4**  
CHEM 3421 - Organic Chemistry II. **Semester Hours: 4**  
-OR-  
CHEM 3810 - Biochemistry. **Semester Hours: 4**  
MATH 1401 - Calculus I: MA1. **Semester Hours: 4**  
-OR-  
MATH 2830 - Introductory Statistics: MA1. **Semester Hours: 3**  
*and* MATH 4830 - Applied Statistics. **Semester Hours: 3**  
PHYS 2010 - College Physics I. **Semester Hours: 4**  
PHYS 2030 - College Physics Lab I: SC1. **Semester Hours: 1**  
PHYS 2020 - College Physics II: SC1. **Semester Hours: 4**  
PHYS 2040 - College Physics Lab II: SC1. **Semester Hours: 1**

## Total Ancillary Core: 31-33 Hours

The following courses will **not** count toward the BS in biology:

- BIOL 1136 - Human Biology. **Semester Hours: 3**  
BIOL 1550 - Basic Biology: Ecology and the Diversity of Life: SC1. **Semester Hours: 4**  
BIOL 1560 - Basic Biology: From Cells to Organisms: SC1. **Semester Hours: 4**  
BIOL 3122 - Natural History of Colorado. **Semester Hours: 3**

## \* Biochemistry as a Biology Elective

Students who have taken both semesters of organic chemistry (CHEM 3411 and CHEM 3421) may use either biochemistry (CHEM 3810) or 4 hours of the general biochemistry series (CHEM 4810 and 4820 combined) as one of their required upper-division biology electives.

## Organismic Track

The organismic track was developed for biology majors interested in an integrative and holistic background in biology, which includes the diversity of organisms, how they evolved, how they function and how they interact with their environment. In addition to the core requirements for the biology major, students are expected to select one course from each of four knowledge areas when completing their upper-division electives. These areas are: (1) molecular biology and heredity, (2) cell biology, (3) diversity of form and function and (4) ecology and evolution.

This track is particularly valuable for students who want to pursue advanced degrees in the biological sciences or want to teach biology. Interested students should contact an undergraduate major advisor in the department for additional information and guidelines.

[Return to Department of Integrative Biology](#)

# Chemistry BS

## Requirements for Major

Students must declare their major by the time they have completed 60 semester hours. The chemistry major requires 45 semester hours in chemistry. Transfer students must take at least 14 upper-division chemistry hours, including CHEM 4128, 4518 or 4538, in residency at the Downtown Campus. A student who has declared a chemistry major at UC Denver may not take additional chemistry courses outside of the department for the purpose of applying those credits toward meeting the requirements of the major without prior written approval of the undergraduate advisor. Normally, no more than 3 additional hours of transfer credits will be allowed. The minimum grade in chemistry courses is C- (1.7) and a minimum chemistry GPA of 2.0 is required in chemistry and ancillary required courses. All majors must successfully complete the following core:

### TRADITIONAL CHEMISTRY MAJOR

#### Required Chemistry Courses

- CHEM 2031 - General Chemistry I: SC1. **Semester Hours: 3**
- CHEM 2038 - General Chemistry Laboratory I: SC1. **Semester Hours: 1**
- CHEM 2061 - General Chemistry II: SC1. **Semester Hours: 3**
- CHEM 2068 - General Chemistry Laboratory II: SC1. **Semester Hours: 2**
- CHEM 3011 - Inorganic Chemistry. **Semester Hours: 3**
- CHEM 3111 - Analytical Chemistry. **Semester Hours: 3**
- CHEM 3118 - Analytical Chemistry Laboratory. **Semester Hours: 2**
- CHEM 3411 - Organic Chemistry I. **Semester Hours: 4**
- CHEM 3418 - Organic Chemistry Laboratory I. **Semester Hours: 1**
- CHEM 3491 - Honors Organic Chemistry II. **Semester Hours: 4**
- CHEM 3498 - Honors Organic Chemistry Laboratory II. **Semester Hours: 2**
- CHEM 4121 - Instrumental Analysis. **Semester Hours: 3**
- CHEM 4128 - Instrumental Analysis Laboratory. **Semester Hours: 2**
- CHEM 4511 - Physical Chemistry I. **Semester Hours: 3**
- CHEM 4518 - Physical Chemistry I Laboratory. **Semester Hours: 2**

CHEM 4521 - Physical Chemistry II. **Semester Hours: 3**  
CHEM 4538 - Physical Chemistry II Laboratory. **Semester Hours: 2**

**And one of the following two courses:**

CHEM 3018 - Inorganic Chemistry Laboratory. **Semester Hours: 2**  
CHEM 4828 - Biochemistry Lab. **Semester Hours: 2**

**Total Required Courses: 45 Hours**

**Required Ancillary Courses**

MATH 1401 - Calculus I: MA1. **Semester Hours: 4**  
MATH 2411 - Calculus II: MA1. **Semester Hours: 4**  
MATH 3511 - Mathematics of Chemistry. **Semester Hours: 4**  
PHYS 2311 - General Physics I: Calculus-Based. **Semester Hours: 4**  
PHYS 2321 - General Physics Lab I. **Semester Hours: 1**  
PHYS 2331 - General Physics II: Calculus-Based. **Semester Hours: 4**  
PHYS 2341 - General Physics Lab II. **Semester Hours: 1**

**Total Required Ancillary Courses : 22 Hours**

**Recommended Electives**

CHEM 3018 - Inorganic Chemistry Laboratory. **Semester Hours: 2**  
CHEM 3810 - Biochemistry. **Semester Hours: 4**  
-OR-  
CHEM 4810 - General Biochemistry I. **Semester Hours: 3**  
CHEM 4700 - Environmental Chemistry. **Semester Hours: 3**  
CHEM 4820 - General Biochemistry II. **Semester Hours: 3**  
Any CHEM 5000-level lecture class (3-4 semester hours)

**Total Electives: 14-16 Hours**

**Chemistry Major Total: 81-83 Hours**

Students interested in the chemistry major should consult regularly with a chemistry advisor. A complete description of the chemistry major's program may be obtained in the Department of Chemistry office or department Web site.

Qualified majors are strongly urged to participate in independent study or departmental honors programs.

Students planning chemistry as a career should be familiar with the recommendations of the American Chemical Society for the professional training of chemists. For ACS certification,

students are required to take inorganic laboratory and at least one semester of biochemistry. No course with a grade of less than C (2.0) can be applied toward ACS certification. Students should check with a chemistry advisor for details. The Downtown Campus maintains an ACS chapter of student affiliates.

# Civil Engineering BS

## Program Objectives

The objectives of the bachelor of science in civil engineering program are to produce graduates who:

- are able to perform the technical analyses and design tasks of entry-level civil engineers
- can successfully work toward professional engineering licensure
- communicate effectively, both orally and in writing
- understand the importance of leadership skills, team building and ethical practice
- value lifelong learning and improvement through graduate degrees or professional study
- appreciate the importance of community involvement and social contribution
- civil engineers are dedicated to improving our living environment

Civil engineers are responsible for the planning, design and construction of buildings, bridges, highways, water distribution systems, wastewater collection and treatment systems, solid waste treatment and disposal systems, airports, railroads, pipelines, water treatment plants, dams, geographic information systems and other parts of our infrastructure systems. In preparing for work in such a broad field, the civil engineering student studies mathematics, basic science, communication, social science and humanities, engineering science and civil engineering design. UC Denver's civil engineering graduates usually find their first professional employment with consulting engineering firms, government agencies and various industries.

## Typical Curriculum for BS (Civil Engineering)

### Freshman Year

#### First Semester

CHEM 1130 - Engineering General Chemistry. **Semester Hours:** 5 (*see note 1*)

ENGL 1020 - Core Composition I: CO1. **Semester Hours:** 3

MATH 1401 - Calculus I: MA1. **Semester Hours:** 4

Core Curriculum Elective (*see note 2*) (3 semester hours)

**Total: 15 Hours**

## Second Semester

- C E 2212 - Plane Surveying. **Semester Hours: 3**
- ENGL 2030 - Core Composition II: CO2. **Semester Hours: 3**
- ENGR 1025 - Engineering Graphics and Computer-Aided Design. **Semester Hours: 3**
- MATH 2411 - Calculus II: MA1. **Semester Hours: 4**
- PHYS 2311 - General Physics I: Calculus-Based. **Semester Hours: 4**
- PHYS 2321 - General Physics Lab I. **Semester Hours: 1**

**Total: 18 Hours**

## Sophomore Year

### First Semester

- C E 2121 - Analytical Mechanics I. **Semester Hours: 3**
- C E 2200 - Computing Methods in Civil Engineering. **Semester Hours: 3**
- MATH 2421 - Calculus III: MA1. **Semester Hours: 4**
- PHYS 2331 - General Physics II: Calculus-Based. **Semester Hours: 4**
- Core Curriculum Elective (see *note 2*) (3 semester hours)

**Total: 17 Hours**

### Second Semester

- C E 3121 - Mechanics of Materials. **Semester Hours: 3**
- C E 3141 - Introduction to Structural Materials. **Semester Hours: 2**
- C E 3401 - Introduction to Environmental Engineering. **Semester Hours: 3**
- C E 4780 - Engineering Geology. **Semester Hours: 3 or**
- GEOL 1072 - Physical Geology: Surface Processes: SC1. **Semester Hours: 4 or**
- MATH 3800 - Probability and Statistics for Engineers. **Semester Hours: 3**
- MATH 3195 - Linear Algebra and Differential Equations. **Semester Hours: 4**

**Total: 15 Hours**

## Junior Year

### First Semester

- C E 3111 - Analytical Mechanics II. **Semester Hours: 3**
- C E 3313 - Theoretical Fluid Mechanics. **Semester Hours: 3**
- C E 3505 - Structural Analysis. **Semester Hours: 3**
- C E 3602 - Transportation Engineering. **Semester Hours: 3**
- Core Curriculum Elective (see *note 2*) (3 semester hours)

**Total: 15 Hours**

**Second Semester**

- C E 3323 - Applied Fluid Mechanics. **Semester Hours: 3**
- C E 3414 - Design of Water and Wastewater Systems. **Semester Hours: 3**
- C E 3708 - Introduction to Geotechnical Engineering. **Semester Hours: 3**
- C E 4718 - Intermediate Soils Engineering. **Semester Hours: 2**
- ENGR 3012 - Thermodynamics. **Semester Hours: 3**
- Core Curriculum Elective (*see note 2*) (3 semester hours)

**Total: 17 Hours**

**Senior Year**

**First Semester**

- C E 4000 - Senior Seminar. **Semester Hours: 0**
- E E 3030 - Electric Circuits and Systems. **Semester Hours: 3**
- Civil Engineering Design Electives (*see note 3*) (6 semester hours)
- Science, Math or Engineering Electives (*see note 4*) (6 semester hours)
- Core Curriculum Elective (*see note 2*) (3 semester hours)

**Total: 18 Hours**

**Second Semester**

- Civil Engineering Design Electives (*see note 3*) (6 semester hours)
- C E 4067 - Senior Design Project. **Semester Hours: 3**
- Core Curriculum Elective (*see note 2*) (3 semester hours)
- Science, Math or Engineering Electives (*see note 4*) (3 semester hours)

**Total: 15 Hours**

**Program Total: 130 Hours**

Or CHEM 2031 and CHEM 2038, which are required for students wishing to take CHEM 2061 and CHEM 2068 as general electives.

The communication, humanities and social science electives selected by the student and approved by his/her advisor must satisfy the college core curriculum.

Students must satisfactorily complete four of the six civil engineering design courses listed below:

C E 4427 - Storm Water System Design (3 semester hours)

C E 4565 - Timber Structure Design (3 semester hours)

C E 4575 - Structural Steel Design (3 semester hours)

C E 4585 - Reinforced Concrete Design (3 semester hours)

C E 4602 - Highway Engineering (3 semester hours)

C E 4738 - Intermediate Foundation Engineering (3 semester hours)

Science, math or engineering electives. The purpose of the electives is to extend the student's knowledge beyond the basic civil engineering requirements. Electives chosen should come from the areas of engineering, mathematics, chemistry, biology, physics or geology. In the case of mathematics, chemistry, physics or geology, the elective must be of higher level than courses in this field required by the civil engineering program. At least one elective must be a civil engineering course. Suggested courses are C E 4077, C E 4087, C E design courses or any 5000-level C E course.

# Communication BA

## Requirements for Admission

Undergraduates must declare their intention to major in communication by the time they have completed 60 semester hours and apply to the communication department to be accepted as a major.

## Program Requirements

The communication major requires that students take a total of 39 hours of course work in communication, 18 of which must be taken in residence at the Downtown Campus. At least 21 of the 39 hours must be upper division. Students must achieve a C- (1.7) or higher to receive credit for a course in the major and a minimum GPA of 2.0 in their communication courses.

### Core Courses

CMMU 1011 - Fundamentals of Communication: SS3. **Semester Hours: 3**  
CMMU 1021 - Fundamentals of Mass Communication: SS3. **Semester Hours: 3**  
CMMU 2041 - Interpersonal Communication. **Semester Hours: 3**  
CMMU 2050 - Business and Professional Speaking. **Semester Hours: 3**

-OR-

CMMU 2101 - Presentational Speaking. **Semester Hours: 3**

**Total: 12 Hours**

## **Electives**

### **Skill Area Electives**

In addition to the four communication core courses, students are required to complete two courses from each of four skill areas: creation of community, communication within systems, analysis of communication and production of communication.

**Total: 24 Hours**

### **Upper Division Elective**

Choose one upper-division communication elective course from departmental offerings

**Total: 3 Hours**

**Major Total: 39 Hours**

For more information, see the faculty advisor and the department's Web site.

# **Computer Science and Engineering BS**

## **Program Objectives**

The objectives of the bachelor of science degree in the computer science and engineering program are to:

- produce graduates who are successful professionals in computer science and engineering
- prepare students for graduate or professional study
- develop team building and leadership skills
- involve students in software design and projects

## **Measurable Outcomes**

To attain the educational objectives of the BS CSE program, the CSE department intends to produce the following measurable outcomes at the time of graduation. Graduates of the BS CSE program will have the following skills:

- an ability to apply knowledge of mathematics, science and engineering
- an ability to analyze a problem and identify and define the computing requirements appropriate to its solution
- an ability to design and conduct software and/or hardware experiments, as well as to analyze and interpret data
- an ability to design software and/or hardware to meet desired needs
- an ability to function on multidisciplinary teams
- an ability to identify, formulate and solve computer science and engineering problems
- an understanding of professional and ethical responsibility
- an ability to communicate effectively
- the broad education necessary to understand the impact of engineering and computer science solutions in a global and societal context
- a recognition of the need for, and an ability to engage in, lifelong learning
- a knowledge of contemporary issues
- an ability to use the techniques, skills and modern tools necessary for computer science and engineering practice
- an ability to display leadership

## Typical Curriculum for BS in Computer Science and Engineering

### Freshman Year

#### First Semester

- CHEM 1130 - Engineering General Chemistry. **Semester Hours:** 5 (*see note 2*)
- C SC 1410 - Fundamentals of Computing. **Semester Hours:** 3
- C SC 1510 - Logic Design. **Semester Hours:** 3
- ENGL 1020 - Core Composition I: CO1. **Semester Hours:** 3 (*see note 1*)
- MATH 1401 - Calculus I: MA1. **Semester Hours:** 4

**Total: 18 Hours**

#### Second Semester

- C SC 2312 - Intermediate Programming. **Semester Hours:** 3
- C SC 2421 - Data Structures and Program Design. **Semester Hours:** 3
- C SC 2531 - Logic Laboratory. **Semester Hours:** 1
- MATH 2411 - Calculus II: MA1. **Semester Hours:** 4

PHYS 2311 - General Physics I: Calculus-Based. **Semester Hours: 4**  
PHYS 2321 - General Physics Lab I. **Semester Hours: 1**

**Total: 16 Hours**

## **Sophomore Year**

### **First Semester**

C SC 2132 - Circuit Analysis I. **Semester Hours: 3**  
C SC 2511 - Discrete Structures. **Semester Hours: 3**  
C SC 2525 - Assembly Language and Computer Organization. **Semester Hours: 3**  
MATH 2421 - Calculus III: MA1. **Semester Hours: 4**  
PHYS 2331 - General Physics II: Calculus-Based. **Semester Hours: 4**  
PHYS 2341 - General Physics Lab II. **Semester Hours: 1**

**Total: 18 Hours**

### **Second Semester**

C SC 2142 - Circuit Analysis II. **Semester Hours: 3**  
C SC 3412 - Algorithms. **Semester Hours: 3**  
ENGL 2030 - Core Composition II: CO2. **Semester Hours: 3**  
MATH 3195 - Linear Algebra and Differential Equations. **Semester Hours: 4**  
Core Curriculum Elective (*see note 1*) (3 semester hours)

**Total: 16 Hours**

## **Junior Year**

### **First Semester**

General Science Elective (*see note 2*) (3 semester hours)  
C SC 3415 - Principles of Programming Languages. **Semester Hours: 3**  
C SC 3651 - Digital Hardware Design. **Semester Hours: 3**  
Core Curriculum Electives (*see note 1*) (6 semester hours)

**Total: 15 Hours**

### **Second Semester**

C SC 3453 - Operating System Concepts. **Semester Hours: 3**

C SC 3645 - Discrete Linear Systems. **Semester Hours: 3**  
C SE Technical Elective (*see note 3*) (3 semester hours)  
Core Curriculum Electives (*see note 1*) (6 semester hours)

**Total: 15 Hours**

**Senior Year**

**First Semester**

C SC 4508 - Introduction to Software Engineering. **Semester Hours: 3**  
C SC 4535 - Probability and Statistics. **Semester Hours: 3**  
C SC 4591 - Computer Architecture. **Semester Hours: 3**  
C SE Technical Elective (*see note 3*) (3 semester hours)  
MATH 4650 - Numerical Analysis I. **Semester Hours: 3**

**Total: 15 Hours**

**Second Semester**

C SC 4034 - Theoretical Foundations of Computer Science. **Semester Hours: 3**  
C SC 4735 - Computers, Society and Ethics. **Semester Hours: 3**  
C SC 4739 - Senior Design II. **Semester Hours: 3**  
C SE Technical Elective (*see note 3*) (3 semester hours)  
Core Curriculum Elective (*see note 1*) (3 semester hours)

**Total: 15 Hours**

**Program Total: 128 Hours**

In addition to planning for sequences of courses based on prerequisites, students should plan to complete sophomore-level courses before taking junior-level courses.

Downtown Campus core curriculum: core requirements of the College of Engineering and Applied Science are outlined in the section titled "Undergraduate Core Curriculum in Engineering" or at [www.cudenver.edu/cse](http://www.cudenver.edu/cse). In the communication area, students must pass ENGL 1020-3, Core Composition I, with a C- or better prior to taking either C SC 2421 or C SC 4739.

The chemistry sequence CHEM2031/CHEM2038 may be substituted for CHEM1130. In addition to the required chemistry and physics courses, students must take a general science elective chosen from basic or engineering science. Refer to the "CSE Undergraduate Advising Handbook" for further information.

Computer science and engineering technical electives: The student must take three courses (9 semester hours) chosen from any C SC 4000-level courses and/or any EE 4000-level computer engineering courses that are not part of the required bachelor of science in computer science and engineering (BSCSE) curriculum.

# Criminal Justice BA

**Program Director:** Mary Dodge, PhD

**Prospective Students:** 303-315-2227

**Current Students and Advising:** 303-315-2227

## Faculty

### Professors:

Mark Pogrebin, PhD, University of Iowa

Eric Poole, PhD, Washington State University

### Associate Professors:

Mary Dodge, PhD, University of California, Irvine

Angela Gover, PhD, University of Maryland

Paul Stretesky, PhD Florida State University

### Assistant Professor:

Deanna Perez, PhD, University of Maryland

### Associate Research Professor:

Jerry Williams, DPA, University of Colorado

The School of Public Affairs is excited to offer a new bachelor of arts program in criminal justice. It is an interdisciplinary program that combines specific course work in criminal justice with a liberal arts focus. The criminal justice degree offers training for specific occupations within criminal justice agencies and provides students with the critical thinking, writing and presentation skills necessary for career advancement and graduate study. The course work explores the complex nature of crime causation, criminal justice organizations and the implications of public policies that allow graduates to adapt to the evolving nature of the field.

As with all undergraduate degrees, students are required to complete the requirements of the Downtown Campus core curriculum, providing an education that draws heavily on social and

natural sciences as well as liberal arts. The program will not only provide a direct line to employment in the growing field of criminal justice, but will also facilitate the movement of outstanding students into SPA's MCJ and PhD graduate programs. Junior and senior criminal justice students may be permitted to enroll in a graduate level MCJ course by advisement. Students will be well prepared to pursue additional advanced degrees in fields where critical thinking and analytical skills are required.

## **Admissions Requirements**

Entering freshmen, current UC Denver students and transfer students are eligible for admission to the program. All students must meet the admission requirements described in the Information for Undergraduate Students chapter of this catalog.

## **Transfer Students**

Students who have attended another college or university are expected to meet general requirements for admission of transfer students as described in the Information for Undergraduate Students chapter. Transfer students with at least 30 semester hours of transferable credit who have been denied admission to the college by the Downtown Campus Office of Admissions, and who have special circumstances not covered by the regular admission policies, may petition the SPA Academic Standards for provisional admission. The Academic Standards Committee requires evidence of academic performance before provisional admission is granted. Policies and procedures for the SPA Academic Standards Committee are available through the SPA Advising Office.

## **Advising and Student Services**

Upon matriculation into the criminal justice program, students will receive advising from the undergraduate academic advisor. The academic advisor will assist students with registration, clarify university and department policy and facilitate the graduation checkout. Advising will ensure that students take appropriate courses in the core curriculum to provide a foundation for their course work in the program. Students will also be assigned a faculty advisor who will assist them with questions about their majors, concentrations and career directions.

## **The Internship Program**

Undergraduate students without experience in the field will be expected to complete an internship for credit under the direction of a faculty sponsor. Internships are helpful for career exploration early in a student's academic career or for job experience after developing academic content in the major. Students must have a minimum 2.0 cumulative GPA and a minimum of 15 semester hours completed at UC Denver before registering for the internship. A maximum of 3 semester hours of internship per semester and 6 semester hours total may be counted toward the 120 semester hours necessary for graduation.

Undergraduate students should contact the Experiential Learning Center for details on internship placements, paperwork and requirements.

## Program Requirements

Students completing a BA in criminal justice at UC Denver will complete a minimum of 120 semester hours including:

- 34–36 general education core curriculum semester hours
- 21 undergraduate criminal justice semester hours, including 16 upper-division semester hours
- 15 elective semester hours in criminal justice and ancillary fields for the selected area of concentration (including an internship)
- 46–48 elective semester hours, an optional CLAS or language minor (15-21 hours), optional electives or internship
- students without experience in the field of criminal justice must complete a 3-semester-hour internship

*Students must receive a minimum of a C (2.0) in each undergraduate course applied to satisfy degree requirements.*

## Required Criminal Justice Courses

- C J 1001 - Introduction to Criminal Justice. **Semester Hours: 3**
- C J 2041 - Crime Theory and Causes. **Semester Hours: 3**
- C J 3100 - Criminal Justice Research Methods. **Semester Hours: 3**
- C J 3150 - Statistics for Criminal Justice. **Semester Hours: 3**
- C J 4042 - Corrections. **Semester Hours: 3**
- C J 4043 - Law Enforcement. **Semester Hours: 3**
- C J 4044 - Courts and Judicial Process. **Semester Hours: 3**

**Total: 21**

## Criminal Justice Electives

*Criminal Justice Electives—15 semester hours, with 9 hours from the Department of Criminal Justice and 6 from other departments*

- C J 2110 - Drugs, Alcohol and Crime. **Semester Hours: 3**
- C J 2210 - Probation and Parole. **Semester Hours: 3**
- C J 2320 - Police-Community Relations. **Semester Hours: 3**
- C J 2510 - Juvenile Justice Administration. **Semester Hours: 3**
- C J 3160 - White-Collar Crime. **Semester Hours: 3**
- C J 3220 - Community-Based Corrections. **Semester Hours: 3**

C J 3250 - Violence in Society. **Semester Hours: 3**  
C J 3252 - Violent Offenders. **Semester Hours: 3**  
C J 3310 - Police in Contemporary Society. **Semester Hours: 3**  
C J 3420 - Pleas, Trials and Sentences. **Semester Hours: 3**  
C J 3540 - Crime and Delinquency Prevention. **Semester Hours: 3**  
C J 4120 - Race, Class and Crime. **Semester Hours: 3**  
C J 4130 - Poverty and Crime. **Semester Hours: 3**  
C J 4140 - Domestic Violence and Crime. **Semester Hours: 3**  
C J 4170 - Victim Studies. **Semester Hours: 3**  
C J 4180 - Comparative Study of Criminal Justice Systems. **Semester Hours: 3** (CJ 1001++)  
C J 4230 - Corrections and Treatment. **Semester Hours: 3**  
C J 4410 - Criminal Law and Constitutional Procedures. **Semester Hours: 3**  
C J 4430 - Law and Society. **Semester Hours: 3**  
C J 4440 - Courts and Social Policy. **Semester Hours: 3**  
C J 4520 - Gangs and Criminal Organizations. **Semester Hours: 3**  
C J 4530 - Families and Intergenerational Crime. **Semester Hours: 3**  
C J 4600 - Special Topics in CJ. **Semester Hours: 3** (CJ 1001, CJ 2041++)

**Total: 9 hours**

*++Prerequisite*

## **Other Department Electives\*\***

CMMU 4265 - Gender and Communication. **Semester Hours: 3**  
ECON 3300 - Economics Of Crime and Punishment. **Semester Hours: 3**  
P SC 3034 - Race, Gender, Law and Public Policy. **Semester Hours: 3**  
P SC 4124 - Denver Politics. **Semester Hours: 3**  
P SC 4185 - Corruption in the U.S. and Abroad. **Semester Hours: 3**  
P SC 4427 - Law, Politics and Justice. **Semester Hours: 3**  
P SC 4477 - Constitutional Law I. **Semester Hours: 3**  
P SC 4487 - Constitutional Law II. **Semester Hours: 3**  
P SC 4545 - Immigration Politics. **Semester Hours: 3**  
P SC 4837 - Contemporary Issues in Civil Liberties. **Semester Hours: 3**  
PSY 3135 - Organizational Psychology. **Semester Hours: 3**  
PSY 3205 - Human Development I: Child Psychology. **Semester Hours: 3**  
PSY 3215 - Human Development II: Adolescence and Adulthood. **Semester Hours: 3**  
PSY 3265 - Drugs, Brain and Behavior. **Semester Hours: 3**  
PSY 3305 - Abnormal Psychology. **Semester Hours: 3**  
PSY 3612 - Domestic Abuse. **Semester Hours: 3**  
SOC 2462 - Introduction to Social Psychology: SS3. **Semester Hours: 3**  
SOC 3020 - Race and Ethnicity in the U.S.. **Semester Hours: 3**  
SOC 3600 - Social Relations. **Semester Hours: 3**

SOC 3700 - Sociology of the Family. **Semester Hours: 3**  
SOC 4340 - Juvenile Delinquency. **Semester Hours: 3**  
SOC 4440 - Social Stratification. **Semester Hours: 3**  
SOC 4460 - Hate Groups and Group Violence. **Semester Hours: 3**  
SOC 4770 - Advanced Topics in Sociology. **Semester Hours: 3**

**Total: 6 hours**

\*\*Students must comply with departmental prerequisites.

## **Examples for Areas of Concentration**

### **Juvenile Justice**

C J 2510 - Juvenile Justice Administration. **Semester Hours: 3**  
C J 3540 - Crime and Delinquency Prevention. **Semester Hours: 3**  
C J 4520 - Gangs and Criminal Organizations. **Semester Hours: 3**  
SOC 3700 - Sociology of the Family. **Semester Hours: 3**  
SOC 4340 - Juvenile Delinquency. **Semester Hours: 3**

**Total: 15 hours**

### **Law and Society**

C J 3420 - Pleas, Trials and Sentences. **Semester Hours: 3**  
C J 4430 - Law and Society. **Semester Hours: 3**  
C J 4440 - Courts and Social Policy. **Semester Hours: 3**  
P SC 4427 - Law, Politics and Justice. **Semester Hours: 3**  
P SC 3034 - Race, Gender, Law and Public Policy. **Semester Hours: 3**

**Total: 15 hours**

### **Domestic Violence**

C J 4140 - Domestic Violence and Crime. **Semester Hours: 3**  
C J 4170 - Victim Studies. **Semester Hours: 3**  
C J 4530 - Families and Intergenerational Crime. **Semester Hours: 3**  
CMMU 4265 - Gender and Communication. **Semester Hours: 3**  
PSY 3612 - Domestic Abuse. **Semester Hours: 3**

**Total: 15 hours**

## **Economics BA**

## Requirements for Major

Students majoring in economics for the BA degree must declare such by the time they have completed 60 semester hours and complete a minimum of 40 semester hours in economics. The minimum grade in each UC Denver economics course is a C- (1.7), except that one D- in one economics elective is allowed. A GPA of 2.5 in economics courses taken at UC Denver is required to graduate. No pass/fail grades may count toward the major.

## Program Requirements

### Required Economics Courses

ECON 2012 - Principles of Economics: Macroeconomics: SS1. **Semester Hours: 3**  
ECON 2022 - Principles of Economics: Microeconomics: SS1. **Semester Hours: 3**  
ECON 3801 - Introduction to Mathematical Economics. **Semester Hours: 3**  
ECON 3811 - Statistics with Computer Applications. **Semester Hours: 4**  
ECON 4071 - Intermediate Microeconomic Theory. **Semester Hours: 3**  
ECON 4081 - Intermediate Macroeconomic Theory. **Semester Hours: 3**  
ECON 4091 - History of Economic Thought. **Semester Hours: 3**  
ECON 4811 - Introduction to Econometrics. **Semester Hours: 3**

**Total: 25 Hours**

### Electives

### Economics Courses

Any five 3-semester-hour courses taken in economics may satisfy this requirement, other than internships and independent studies which require the approval of the department chair.

### Political Science Course

One political science course. Suggested courses include but are not limited to P SC 1101, American Political System, and PSC 3022, Introduction to Comparative Politics.

**Electives Total: 18 Hours**

**Major Total: 43 Hours**

Graduating seniors must submit the three best papers that the student wrote in any three separate courses taken in the Department of Economics at UC Denver for the outcomes assessment of the economics program. The three papers should be handed in at one time in a folder to the economics office, before the first day of the month in which the student plans to graduate.

At least six of the major courses (18 semester hours), including at least three courses out of ECON 3801, 4071, 4081, 4091 and 4811, must be taken from economics faculty on the Downtown Campus.

Once a student has enrolled at UC Denver, no courses in the major may be taken outside the Downtown Campus economics department without permission from the undergraduate advisor. No math is formally required, except for the college algebra prerequisite for ECON 3811. Students desiring a recommendation to a graduate school in economics, however, should consult with economics faculty regarding additional mathematics courses.

[Return to Department of Economics](#)

# Electrical Engineering BS

## Undergraduate Program Objectives

Objectives of the bachelor of science in electrical engineering are to develop graduates:

- who are immediately productive engineers and can advance their careers on different professional tracks in the engineering industry
- who can pursue graduate education in engineering or other fields such as business, medicine and law

These objectives are consistent with the mission of the University of Colorado Denver, congruent with the goals of the College of Engineering and Applied Science and reflective of the mission of the Department of Electrical Engineering.

## Typical Curriculum for BS (Electrical Engineering)

### Freshman Year

#### First Semester

- CHEM 1130 - Engineering General Chemistry. **Semester Hours: 5**
- E E 1201 - Introduction to Electrical Engineering. **Semester Hours: 1**
- E E 1510 - Logic Design. **Semester Hours: 3**
- ENGL 1020 - Core Composition I: CO1. **Semester Hours: 3** (*see note 1*)

MATH 1401 - Calculus I: MA1. **Semester Hours: 4**

**Total: 16 Hours**

### **Second Semester**

E E 1520 - Embedded Systems Engineering I. **Semester Hours: 3**

E E 2531 - Logic Laboratory. **Semester Hours: 1**

MATH 2411 - Calculus II: MA1. **Semester Hours: 4**

PHYS 2311 - General Physics I: Calculus-Based. **Semester Hours: 4**

PHYS 2321 - General Physics Lab I. **Semester Hours: 1**

Core Curriculum Elective (*see note 1*) (3 semester hours)

**Total: 16 Hours**

### **Sophomore Year**

#### **First Semester**

E E 2132 - Circuit Analysis I. **Semester Hours: 3**

ENGL 2030 - Core Composition II: CO2. **Semester Hours: 3**

MATH 2421 - Calculus III: MA1. **Semester Hours: 4**

MATH 3195 - Linear Algebra and Differential Equations. **Semester Hours: 4**

PHYS 2331 - General Physics II: Calculus-Based. **Semester Hours: 4**

**Total: 18 Hours**

#### **Second Semester**

E E 2142 - Circuit Analysis II. **Semester Hours: 3**

E E 2552 - Sophomore Circuits Laboratory. **Semester Hours: 1**

E E 2651 - Introduction to Computer Engineering. **Semester Hours: 3**

Core Curriculum Elective (*see note 1*) (6 semester hours)

**Total: 13 Hours**

### **Junior Year**

#### **First Semester**

E E 3133 - Electromagnetic Fields. **Semester Hours: 3**

E E 3215 - Electronics I. **Semester Hours: 3**

E E 3316 - Linear Systems Theory. **Semester Hours: 3**

E E 3651 - Digital Hardware Design. **Semester Hours: 3**  
E E 3715 - Electronics Laboratory. **Semester Hours: 1**  
Core Curriculum Elective (*see note 1*) (3 semester hours)

**Total: 16 Hours**

### **Second Semester**

E E 3164 - Energy Conversion. **Semester Hours: 3**  
E E 3225 - Electronics II. **Semester Hours: 3**  
E E 3701 - Computer Architecture and RTOS. **Semester Hours: 3**  
E E 3724 - Power Laboratory I. **Semester Hours: 1**  
E E 3735 - Junior Laboratory. **Semester Hours: 1**  
E E 3817 - Engineering Probability and Statistics. **Semester Hours: 3**  
Core Curriculum Elective (*see note 1*) (3 semester hours)

**Total: 17 Hours**

### **Senior Year**

#### **First Semester**

E E 4309 - Senior Design Project I. **Semester Hours: 3**  
Professional Elective (*see note 3*) (3 semester hours)  
Engineering Science Elective (*see note 4*) (3 semester hours)  
E E Specialty and Laboratory (*see note 5*) (4 semester hours)  
E E Specialty Course (3 semester hours)

**Total: 16 Hours**

#### **Second Semester**

E E 4319 - Senior Design Project II. **Semester Hours: 3** (*see note 3*)  
Professional Elective (*see note 4*) (3 semester hours)  
E E Specialty and Laboratory (*see note 6*) (4 semester hours)  
E E Specialty (*see note 6*) (3 semester hours)  
Core Curriculum Elective (*see note 1*) (3 semester hours)

**Total: 16 Hours**

## Program Total: 128 Hours

The particular curriculum to be satisfied by each student is the one published in the catalog current at the time of his/her 30-hour senior checkout. A graduation agreement should be requested by each student after completing registration for his/her last semester. Additional information is contained in the "E E Advisement Guide." Students should also refer to the section in this catalog on "Academic Policies of the College of Engineering and Applied Science."

Common core requirements of the College of Engineering and Applied Science are outlined in the section titled "Undergraduate Core Curriculum in Engineering" in this catalog or in the "E E Advisement Guide."

All electrical engineering students must satisfactorily complete E E 4309, Senior Design Project I, and E E 4319, Senior Design Project II, in consecutive semesters.

Professional electives may be selected from an approved list of upper-division or graduate-level courses or cooperative education. The electrical engineering advisor must be consulted prior to the selection of these electives.

The engineering science elective may be satisfied by taking ENGR 3012, Thermodynamics. Seventeen semester hours of electrical engineering elective and specialty courses in association with the laboratories are required.

### Laboratory Requirements

Students are required to take at least two laboratories out of the following six groups. Theory components are either prerequisites or corequisites to the laboratory components. The theory component (without the laboratory) may be taken as a specialty course.

E E 4136 - Control Systems Analysis. **Semester Hours: 3**

E E 4276 - Digital Control Systems. **Semester Hours: 3**

E E 4406 - Control Systems Laboratory. **Semester Hours: 1**

E E 4225 - Advanced Electronics. **Semester Hours: 3**

E E 4435 - Advanced Electronics Laboratory. **Semester Hours: 1**

E E 4247 - Communication Theory. **Semester Hours: 3**

E E 4248 - Digital Communication Systems. **Semester Hours: 3**

E E 4467 - Communications Laboratory. **Semester Hours: 1**

E E 4133 - Advanced Electromagnetic Fields. **Semester Hours: 3**

E E 4423 - Microwave Laboratory. **Semester Hours: 1**

E E 4501 - Microprocessor-based Design. **Semester Hours: 3**

E E 4521 - Microprocessor Lab. **Semester Hours: 1**

E E 4511 - Hardware-Software Interface. **Semester Hours: 3**

E E 4561 - Hardware-Software Lab. **Semester Hours: 1**

**Other courses available (without any laboratory component) as electrical engineering specialty courses include the following:**

E E 4174 - Power Electronic Systems. **Semester Hours: 3**

E E 4184 - Power Systems Analysis. **Semester Hours: 3**

E E 4555 - VLSI Circuit Simulation. **Semester Hours: 3**

### **Computer Engineering Option**

Students can add a computer engineering emphasis to their electrical engineering degree program by making the following changes in the curriculum described above:

#### **Junior Year**

##### **First Semester**

Substitute E E 3651, Digital Hardware Design, for E E 3817, Engineering Probability and Statistics.

E E 3651 - Digital Hardware Design. **Semester Hours: 3**

##### **Second Semester**

Substitute E E 3817, Engineering Probability and Statistics, E E 3701, Computer Architecture and RTOS (real time operating system), for E E 3651, Digital Hardware Design, E E 3724, Power Laboratory, and a humanities and social sciences course.

E E 3817 - Engineering Probability and Statistics. **Semester Hours: 3**

E E 3701 - Computer Architecture and RTOS. **Semester Hours: 3**

#### **Senior Year**

##### **First Semester**

Choose E E 4501, Microprocessor-based Design, and E E 4521, Microprocessor Laboratory, as one electrical engineering specialty and laboratory selection.

E E 4501 - Microprocessor-based Design. **Semester Hours: 3**

E E 4521 - Microprocessor Lab. **Semester Hours: 1**

##### **Second Semester**

Choose E E 4511, Hardware-Software Interface Design, E E 4561, Hardware-Software Laboratory, and a humanities and social sciences elective as professional elective and electrical engineering specialty and laboratory selections.

E E 4511 - Hardware-Software Interface. **Semester Hours:** 3

E E 4561 - Hardware-Software Lab. **Semester Hours:** 1

## English BA

The course of study offered by the Department of English is designed to develop a student's ability to read literature responsibly and imaginatively, to foster an understanding and appreciation of our literary inheritance and to provide the historical perspective from which to evaluate contemporary writing. Careful study of the use of the English language also should help a student to resist the misuse and corruption of language in politics, the media and elsewhere. Students who complete the program in English are expected to have mastered the ability to express their ideas in clear and succinct prose.

### Requirements for the English Major

Students majoring in English must present a total of 39 hours in the literature, film and/or creative writing options (excluding ENGL 1010, 1020 and 2030), of which 27 hours must be earned in upper-division courses. None of the required 39 hours may be taken on a pass/fail basis. Only courses completed with a grade of C (2.0) or above may be counted toward the major. At least 15 upper-division hours of the student's work in English must be taken from English faculty on the Downtown Campus. Students planning to major in English literature must consult with an advisor as soon as possible. Students must choose one of the three options.

#### Literature Option

#### REQUIRED COURSES

ENGL 1400 - Introduction to Literary Studies. **Semester Hours:** 3

ENGL 3001 - Critical Writing. **Semester Hours:** 3

**Total: 6 Hours**

#### OPTION-SPECIFIC DISTRIBUTION REQUIREMENTS: Before the Mid-Nineteenth Century

Choose three:

\* ENGL 3330-3350 - Topics in Literature. **Semester Hours:** 3 (before 1850)

ENGL 3520 - Religious Narratives. **Semester Hours:** 3

ENGL 3661 - Shakespeare. **Semester Hours:** 3

ENGL 3700 - American Literature to the Civil War. **Semester Hours:** 3

\* ENGL 4000 - Studies of Major Authors. **Semester Hours:** 3

ENGL 4080 - History of the English Language. **Semester Hours: 3**

-OR-

ENGL 4400 - Old English I. **Semester Hours: 3**

ENGL 4200 - History of the English Novel I. **Semester Hours: 3**

ENGL 4500 - Medieval Literature. **Semester Hours: 3**

ENGL 4510 - Whores and Saints: Medieval Women. **Semester Hours: 3**

ENGL 4520 - English Renaissance. **Semester Hours: 3**

ENGL 4530 - Milton. **Semester Hours: 3**

ENGL 4540 - Restoration and the 18th Century. **Semester Hours: 3**

ENGL 4560 - English Romanticism. **Semester Hours: 3**

ENGL 4730 - Chaucer's Canterbury Tales. **Semester Hours: 3**

-OR-

ENGL 4731 - Chaucer's Early Poetry. **Semester Hours: 3**

**Total: 9 Hours**

\* Repeatable if topics differ

#### **OPTION-SPECIFIC DISTRIBUTION REQUIREMENTS: After the Mid-Nineteenth Century**

**Choose four:**

ENGL 3160 - Language Theory. **Semester Hours: 3**

\* ENGL 3300-3324 - Topics in Film. **Semester Hours: 3**

\* ENGL 3330-3350 - Topics in Literature. **Semester Hours: 3** (after 1850)

ENGL 3750 - American Literature from the Civil War. **Semester Hours: 3**

\* ENGL 4000 - Studies of Major Authors. **Semester Hours: 3** (after 1850)

ENGL 4166 - History of American Poetry. **Semester Hours: 3**

ENGL 4210 - History of the English Novel II. **Semester Hours: 3**

ENGL 4220 - African-American Literature. **Semester Hours: 3**

ENGL 4230 - The American Novel. **Semester Hours: 3**

ENGL 4235 - Faulkner. **Semester Hours: 3**

ENGL 4236 - The American Short Story. **Semester Hours: 3**

ENGL 4250 - Twentieth Century Fiction. **Semester Hours: 3**

-OR-

ENGL 4460 - Contemporary World Literature. **Semester Hours: 3**

-OR-

ENGL 4600 - Modernism. **Semester Hours: 3**

ENGL 4300 - History of British Drama. **Semester Hours: 3**

(can also be counted as before the mid-nineteenth century)

-OR-

ENGL 4350 - History of American Drama. **Semester Hours: 3**

ENGL 4320 - History of Poetry in English. **Semester Hours: 3**

(can also be counted as before the mid-nineteenth century)

ENGL 4580 - The Victorian Age. **Semester Hours: 3**

Any 3000- or 4000-level ENGL course in gender, race, ethnic or international literature

**Total: 12 Hours**

\* Repeatable if topics differ

### **REQUIRED AREA ELECTIVES**

Choose three courses in literature, film or creative writing (9 semester hours, *any level*)

**Total: 9 Hours**

### **LITERARY STUDIES SENIOR CAPSTONE**

ENGL 4000 - Studies of Major Authors. **Semester Hours: 3**

-OR-

ENGL 4999 - Literary Studies Senior Seminar. **Semester Hours: 3**

**Total: 3 Hours**

### **LITERATURE OPTION TOTAL: 39 Hours**

Additional courses, total not to exceed 48 hours (any level).

### **Creative Writing Option**

Students interested in pursuing careers or graduate work in creative writing should choose the creative writing option in literature.

### **OPTION-SPECIFIC REQUIREMENTS**

ENGL 1400 - Introduction to Literary Studies. **Semester Hours: 3**

ENGL 1601 - Telling Tales: Narrative Art in Literature and Film: AH2. **Semester Hours: 3**

-OR-

ENGL 2250 - Introduction to Film. **Semester Hours: 3**

ENGL 2154 - Introduction to Creative Writing. **Semester Hours: 3**

ENGL 3001 - Critical Writing. **Semester Hours: 3**

**Total: 12 Hours**

### **ADVANCED COURSE WORK**

Complete all courses in either poetry or fiction.

#### **Poetry**

ENGL 3020 - Poetry Workshop. **Semester Hours: 3**  
ENGL 4025 - Advanced Poetry Workshop. **Semester Hours: 3**  
ENGL 4080 - History of the English Language. **Semester Hours: 3**  
-OR-  
ENGL 4160 - Poetics. **Semester Hours: 3**  
ENGL 4166 - History of American Poetry. **Semester Hours: 3**  
-OR-  
ENGL 4320 - History of Poetry in English. **Semester Hours: 3**

**Total: 12 Hours**

### **Fiction**

ENGL 3050 - Fiction Workshop. **Semester Hours: 3**  
ENGL 4055 - Advanced Fiction Workshop. **Semester Hours: 3**  
ENGL 4200 - History of the English Novel I. **Semester Hours: 3**  
-OR-  
ENGL 4210 - History of the English Novel II. **Semester Hours: 3**  
ENGL 4230 - The American Novel. **Semester Hours: 3**  
-OR-  
ENGL 4236 - The American Short Story. **Semester Hours: 3**

**Total: 12 Hours**

### **REQUIRED AREA ELECTIVES**

**Choose three:**

ENGL 3160 - Language Theory. **Semester Hours: 3**  
-OR-  
ENGL 4080 - History of the English Language. **Semester Hours: 3**  
\* ENGL 3300-3324 - Topics in Film. **Semester Hours: 3**  
\* ENGL 3330-3350 - Topics in Literature. **Semester Hours: 3**  
ENGL 3520 - Religious Narratives. **Semester Hours: 3**  
ENGL 3661 - Shakespeare. **Semester Hours: 3**  
ENGL 3700 - American Literature to the Civil War. **Semester Hours: 3**  
ENGL 3750 - American Literature from the Civil War. **Semester Hours: 3**  
\* ENGL 4000 - Studies of Major Authors. **Semester Hours: 3**  
ENGL 4166 - History of American Poetry. **Semester Hours: 3**  
ENGL 4200 - History of the English Novel I. **Semester Hours: 3**  
ENGL 4210 - History of the English Novel II. **Semester Hours: 3**  
ENGL 4220 - African-American Literature. **Semester Hours: 3**  
ENGL 4230 - The American Novel. **Semester Hours: 3**  
ENGL 4235 - Faulkner. **Semester Hours: 3**  
ENGL 4236 - The American Short Story. **Semester Hours: 3**

ENGL 4250 - Twentieth Century Fiction. **Semester Hours: 3**  
-OR-  
ENGL 4460 - Contemporary World Literature. **Semester Hours: 3**  
-OR-  
ENGL 4600 - Modernism. **Semester Hours: 3**  
ENGL 4300 - History of British Drama. **Semester Hours: 3**  
-OR-  
ENGL 4350 - History of American Drama. **Semester Hours: 3**  
ENGL 4320 - History of Poetry in English. **Semester Hours: 3**  
ENGL 4500 - Medieval Literature. **Semester Hours: 3**  
ENGL 4510 - Whores and Saints: Medieval Women. **Semester Hours: 3**  
ENGL 4520 - English Renaissance. **Semester Hours: 3**  
ENGL 4530 - Milton. **Semester Hours: 3**  
ENGL 4540 - Restoration and the 18th Century. **Semester Hours: 3**  
ENGL 4560 - English Romanticism. **Semester Hours: 3**  
ENGL 4580 - The Victorian Age. **Semester Hours: 3**  
ENGL 4730 - Chaucer's Canterbury Tales. **Semester Hours: 3**  
-OR-  
ENGL 4731 - Chaucer's Early Poetry. **Semester Hours: 3**

**Total: 9 Hours**

\* Repeatable if topics differ

**Choose one:**

ENGL 2390 - Writing the Short Script. **Semester Hours: 3**  
ENGL 2415 - Introduction to Movie Writing. **Semester Hours: 3**  
ENGL 3020 - Poetry Workshop. **Semester Hours: 3**  
ENGL 3050 - Fiction Workshop. **Semester Hours: 3**  
ENGL 3084 - Advanced Composition. **Semester Hours: 3**  
ENGL 3154 - Technical Writing. **Semester Hours: 3**  
ENGL 3170 - Business Writing. **Semester Hours: 3**  
ENGL 3416 - Magazine Writing. **Semester Hours: 3**  
ENGL 4180 - Argumentation and Logic. **Semester Hours: 3**  
ENGL 4190 - Special Topics in Rhetoric and Writing. **Semester Hours: 3**  
ENGL 4701 - Multimedia in the Community. **Semester Hours: 3**

**Total: 3 Hours**

**INTERNSHIP OR SENIOR WRITING PROJECT IN CREATIVE WRITING OR FILM STUDIES**

ENGL 3939 - Internship/Cooperative Education. **Semester Hours: 1 to 3**  
-OR-  
ENGL 4990 - Senior Writing Project in Creative Writing or Film Studies. **Semester Hours: 3**

**Total: 3 Hours**

**CREATIVE WRITING OPTION TOTAL: 39 Hours**

Additional courses, total not to exceed 48 hours (any level).

### **Film Studies Option**

The film studies option within the English major is designed to prepare students for a range of professional careers in areas such as screenwriting, film criticism, video production and the teaching of film, as well as those students who plan to pursue graduate programs in film studies. Required courses give students a strong grounding in film history, verbal and visual narrative, and the critical terms and techniques used in both film and literary analysis. Electives give students the option of emphasizing either the creative approach or the critical approach to moving-image media, or a combination of the two. The film studies option also affords students the opportunity to create video productions using state-of-the-art digital video and editing equipment and the possibility of airing their productions on cable TV. Offered in cooperation with the College of Arts & Media, the film studies option can be completed entirely on the Auraria Campus.

### **OPTION-SPECIFIC REQUIREMENTS**

- ENGL 2250 - Introduction to Film. **Semester Hours: 3**
- ENGL 3070 - History of Silent Film. **Semester Hours: 3**
- ENGL 3080 - History of Sound Film. **Semester Hours: 3**
- ENGL 4420 - Film Theory and Criticism. **Semester Hours: 3**

**Total: 12 Hours**

### **REQUIRED AREA ELECTIVES**

Students may take courses in all areas. Fifteen of the 27-hour minimum must be at the 3000/4000 level. Production courses must be taken through the College of Arts & Media. Equivalent screenwriting courses may be taken through CAM.

#### **A. Critical Studies**

- ENGL 1400 - Introduction to Literary Studies. **Semester Hours: 3**
- ENGL 1601 - Telling Tales: Narrative Art in Literature and Film: AH2. **Semester Hours: 3**
- ENGL 3001 - Critical Writing. **Semester Hours: 3**
- \* ENGL 3075 - Film Genres. **Semester Hours: 3**
- \* ENGL 3085 - Film Directors. **Semester Hours: 3**
- ENGL 3200 - From Literature to Film. **Semester Hours: 3**
- \* ENGL 3300-3324 - Topics in Film. **Semester Hours: 3**
- \* ENGL 4190 - Special Topics in Rhetoric and Writing. **Semester Hours: 3**  
(film and media-focused only; e.g., Film and Rhetoric)

ENGL 4701 - Multimedia in the Community. **Semester Hours: 3**

\* ENGL 4770 - Topics in English: Film and Literature. **Semester Hours: 3**  
(film and media-focused only)

ENGL 4990 - Senior Writing Project in Creative Writing or Film Studies. **Semester Hours: 3**  
(can be taken under B or C)

May also choose from any single approved film course offered through another department or a single 3000/4000-level literature course (3 semester hours)

## **B. Screenwriting**

ENGL 2390 - Writing the Short Script. **Semester Hours: 3**

ENGL 2415 - Introduction to Movie Writing. **Semester Hours: 3**

ENGL 3415 - Screenwriting Workshop. **Semester Hours: 3**

## **C. Production**

FILM 2000 - Film/Video Production II. **Semester Hours: 3**

FILM 2150 - Film and Video Post-Production II. **Semester Hours: 3**

**Total: 27-28 Hours**

\* Repeatable if a different genre/director/topic.

**FILM STUDIES OPTION TOTAL: 39-40 Hours**

Additional courses, total not to exceed 48 hours (any level).

## **College Core Courses for English Majors**

Students must complete the College of Liberal Arts and Sciences core curriculum requirements as specified in the CLAS Core Curriculum/Graduation Requirements chart. Check the Web Schedule Planner for specific course offerings.

## **Electives**

Elective hours may be selected at the student's discretion, but students are urged to work with their advisor in outlining a program in which electives and requirements support each other. Six hours earned in the internship/cooperative education program may be counted toward the major.

Return to Department of English

# **English Writing BA**

Especially designed for future writers, the writing major offers a wide range of intensive writing experiences combining such areas as rhetoric, professional, general and creative writing.

## Requirements for the English Writing Major

Students majoring in writing must present a total of 39 hours for the major (excluding ENGL 1010, 1020 and 2030), of which 27 hours must be earned in upper-division courses. None of the required 39 hours may be taken on a pass/fail basis. Only courses completed with a grade of C (2.0) or above may be counted toward the major. At least 15 upper-division hours of the student's work in writing must be taken from English faculty on the Downtown Campus. Students planning to major in writing should consult with an advisor as soon as possible. This major is also available online.

### Required Courses

ENGL 2070 - Grammar, Rhetoric and Style. **Semester Hours: 3**

ENGL 2154 - Introduction to Creative Writing. **Semester Hours: 3**

ENGL 3084 - Advanced Composition. **Semester Hours: 3**

ENGL 3154 - Technical Writing. **Semester Hours: 3**

-OR-

ENGL 3170 - Business Writing. **Semester Hours: 3**

ENGL 3160 - Language Theory. **Semester Hours: 3**

-OR-

ENGL 4080 - History of the English Language. **Semester Hours: 3**

ENGL 4180 - Argumentation and Logic. **Semester Hours: 3**

ENGL 4190 - Special Topics in Rhetoric and Writing. **Semester Hours: 3**

**Total: 21 Hours**

### Advanced Course Work

Students pursuing a general writing degree may choose from all writing courses listed. Students pursuing a concentration in professional writing or teaching English as a second language must complete at least 9 hours in those areas.

### Professional Writing Concentration

Choose at least three:

ENGL 3154 - Technical Writing. **Semester Hours: 3**

ENGL 3170 - Business Writing. **Semester Hours: 3**

ENGL 3416 - Magazine Writing. **Semester Hours: 3**

ENGL 3939 - Internship/Cooperative Education. **Semester Hours: 1 to 3**

\* ENGL 4190 - Special Topics in Rhetoric and Writing. **Semester Hours: 3**  
(professional writing topic)

ENGL 4280 - Proposal and Grant Writing. **Semester Hours: 3**  
ENGL 4701 - Multimedia in the Community. **Semester Hours: 3**  
ENGL 4995 - Senior Writing Project. **Semester Hours: 3**

\* Repeatable when title/content differ.

### **Teaching English as a Second Language Concentration**

Choose at least three:

ENGL 3160 - Language Theory. **Semester Hours: 3**  
ENGL 4601 - Principles and Practices of Second Language Acquisition. **Semester Hours: 3**  
\* ENGL 3939 - Internship/Cooperative Education. **Semester Hours: 1 to 3**  
-OR-  
\* ENGL 4190 - Special Topics in Rhetoric and Writing. **Semester Hours: 3**  
-OR-  
\* ENGL 4995 - Senior Writing Project. **Semester Hours: 3**

\* TESOL topics only

### **General Writing Courses**

ENGL 3020 - Poetry Workshop. **Semester Hours: 3**  
ENGL 3050 - Fiction Workshop. **Semester Hours: 3**  
ENGL 3415 - Screenwriting Workshop. **Semester Hours: 3**  
ENGL 3939 - Internship/Cooperative Education. **Semester Hours: 1 to 3**  
ENGL 4025 - Advanced Poetry Workshop. **Semester Hours: 3**  
ENGL 4055 - Advanced Fiction Workshop. **Semester Hours: 3**  
ENGL 4190 - Special Topics in Rhetoric and Writing. **Semester Hours: 3**  
ENGL 4990 - Senior Writing Project in Creative Writing or Film Studies. **Semester Hours: 3**  
ENGL 4995 - Senior Writing Project. **Semester Hours: 3**

### **Total Advanced Course Work: 9-15 Hours**

\* Repeatable when title/content differ.

### **Electives**

Students may opt to replace two of the five required “advanced course work” courses with other English 3000-4000 level courses (writing, literature, film, creative writing) and/or approved writing courses from other departments.

### **Total: 0-6 Hours**

## Senior Capstone in Writing

Senior Writing Project in Creative Writing or Film Studies (ENGL 4990) and Senior Writing Project (ENGL 4995) are not courses *per se*, but rather independent studies in which the student undertakes a major writing project under the supervision of Downtown Campus English faculty. The student chooses the topic while the project supervisor helps refine it, guides the research, reviews and comments on student's drafts and grades the final product. The project may derive from study in a particular course or it may be based on a topic of interest which does not stem from course work. Forms are available in the English department office and must be signed by the supervising faculty member.

Choose one of the following courses:

ENGL 4990 - Senior Writing Project in Creative Writing or Film Studies. **Semester Hours: 3**

ENGL 4991 - Senior Seminar in Writing. **Semester Hours: 3**

ENGL 4995 - Senior Writing Project. **Semester Hours: 3**

## Major Total: 39 Hours

Additional courses, total not to exceed 48 hours (any level).

## College Core Courses for English Writing Majors

Students must complete the College of Liberal Arts and Sciences core curriculum requirements as specified in the CLAS Core Curriculum/Graduation Requirements chart. Check the Web Schedule Planner for specific course offerings.

## Electives

Elective hours may be selected at the student's discretion, but students are urged to work with their advisor in outlining a program in which electives and requirements support each other. Up to 6 hours earned in the cooperative education program may be counted toward the major.

[Return to Department of English](#)

# Financial Management and Information Systems Emphasis—BS in Business Administration

The financial management and information systems emphasis provides students with skills that they need to succeed in careers that bridge the fields of finance and information systems.

The financial management and information systems specialty incorporates knowledge of financial management and markets, accounting and information systems and technology. This specialization provides the manager with knowledge of financial information systems, databases, risk management and accounting systems.

Job opportunities include positions that require knowledge of both financial management and business information systems and databases. The specialization provides a solid accounting/finance and information systems background for other finance specialist and business analyst positions as well.

## Required Courses

### Finance

- FNCE 3500 - Management of Business Capital. **Semester Hours: 3**
- FNCE 4330 - Investment and Portfolio Management. **Semester Hours: 3**
- FNCE 4350 - Financial Markets and Institutions. **Semester Hours: 3**
- FNCE 4500 - Corporate Financial Decisions. **Semester Hours: 3**

### Accounting

- ACCT 3054 - Accounting Systems and Data Processing. **Semester Hours: 3**
- ACCT 3220 - Intermediate Financial Accounting I. **Semester Hours: 3**
- ACCT 3320 - Intermediate Cost Accounting. **Semester Hours: 3**
- ACCT 4780 - Accounting IS Processes and Control. **Semester Hours: 3** or
- ISMG 4780 - Accounting IS Processes and Control. **Semester Hours: 3**

### ISMG

- ISMG 4500 - Database Management and Applications. **Semester Hours: 3**
- ISMG 4600 - System Analysis and Design. **Semester Hours: 3**
- ISMG 4900 - Project Management and Practice. **Semester Hours: 3**

## Total: 33 Hours

In addition, students must complete FNCE 4370, International Finance, to fulfill the international studies requirement.

# Financial Management Emphasis—BS in Business Administration

The financial management emphasis provides students with the skills needed to succeed in careers in financial management. The business community has affirmed that students need skills in both the accounting and finance areas. The financial management specialty incorporates knowledge of corporate financial management, financial institutions and markets, investments, financial accounting and managerial accounting, accounting information systems and information technology. Career opportunities include corporate financial management, finance/accounting positions with financial institutions and accounting positions that are not CPA-track. The specialization provides a solid finance and accounting background for other business positions as well.

## Required Courses

- FNCE 3500 - Management of Business Capital. **Semester Hours: 3**
- FNCE 4330 - Investment and Portfolio Management. **Semester Hours: 3**
- FNCE 4350 - Financial Markets and Institutions. **Semester Hours: 3**
- FNCE 4500 - Corporate Financial Decisions. **Semester Hours: 3**
- ACCT 3054 - Accounting Systems and Data Processing. **Semester Hours: 3**
- ACCT 3220 - Intermediate Financial Accounting I. **Semester Hours: 3**
- ACCT 3320 - Intermediate Cost Accounting. **Semester Hours: 3**

## Total: 24 Hours

In addition, financial management students must complete FNCE 4370, International Finance, to fulfill the international studies requirement.

\* Students should note that all finance and accounting courses are not offered every semester. Students should take the ACCT 2200 and ACCT 2220 courses as soon as possible to avoid future problems in their schedules, since these are prerequisites for all courses in the specialization.

## Fine Arts BA — Art History

All students pursuing a BA in fine arts with an emphasis in art history must complete the 12 semester hours of visual arts foundation courses, the 18 semester hours of required art history emphasis courses and 15 semester hours of art history topic courses (one course from each of the five lists).

## General Requirements

- All major courses within the major must be completed with a C (2.0) or better.
- All upper-division F A courses must be taken at UC Denver unless approved by faculty.

27 semester hours of all F A credits (at any level) must be taken at UC Denver.  
18 semester hours of total F A courses must be upper division.

## Visual Arts Foundation Courses

- F A 1100 - Drawing I. **Semester Hours: 3**
- F A 1150 - Introduction to Photography. **Semester Hours: 3**
- F A 1400 - Two Dimensional Design. **Semester Hours: 3**
- F A 1810 - Digital Animation Foundations: Producing Animation. **Semester Hours: 3 ---or---**
- F A 2155 - Introduction to Digital Photography. **Semester Hours: 3 ---or---**
- F A 2405 - Introduction to Digital Design. **Semester Hours: 3**

**Total: 12 Hours**

## Art History Required Emphasis Courses

- F A 2600 - History of Art I (survey). **Semester Hours: 3**
  - F A 2610 - History of Art II (survey). **Semester Hours: 3**
  - F A 3600 - Art History Survey III: Non-Western Art. **Semester Hours: 3**
  - F A 4790 - Methods in Art History. **Semester Hours: 3**
  - F A 4951 - Bachelor of Art Thesis. **Semester Hours: 3**
- Nonwestern Cultural Experience (select one of the six options listed below)

**Total: 18 Hours**

Study abroad course that focuses on the art history or the language of host culture (consult art history faculty).

Any upper-division art history course in African, Latin American, Asian or African-American art. This cannot be used to fulfill any other degree requirement.

Third-semester study of a foreign language (consult the Department of Modern Languages if placement is needed).

FA 3939, Internship. Project must focus on cultures outside of mainstream United States, e.g., Native American, Latin American, women studies, gay/lesbian studies, etc. Consult art history faculty.

FA 4840, Independent Study. Project/research must focus on cultures outside of mainstream United States, e.g., Native American, Latin American, women studies, gay/lesbian studies, etc. Consult art history faculty.

Cultural course: CNST 1000, China and the Chinese; FR 1000, Introduction: Cultures: French Speaking World; GER 1000, Germany and the Germans; or RUSS 1000, Russia and Russians: Life, Culture, Arts.

## Upper-Division Art History Electives

Students must complete five upper-division (3000/4000 level) art history courses. (See <http://cam.ucdenver.edu/advising/forms> for a complete list.)

**Total: 15 Hours**

## **Fine Arts BA — Drawing, Painting, Photography, Sculpture**

All students pursuing a BA in studio fine arts must complete the 27 semester hours of visual arts foundation courses and then select an emphasis area, consisting of 21 semester hours. Students interested in pursuing a double emphasis (e.g., emphasis in drawing and painting) are encouraged to consult a CAM advisor to discuss required courses.

### **General Requirements**

- All major courses within the major must be completed with a C (2.0) or better.
- All upper-division F A courses must be taken at UC Denver unless approved by faculty.
- 27 semester hours of all F A credits (at any level) must be taken at UC Denver.
- 18 semester hours of total F A courses must be upper division.

### **Required Visual Arts Foundation and Required Courses**

To be completed by all BA-seeking students:

- F A 1015 - Interdisciplinary Foundations. **Semester Hours: 3**
- F A 1100 - Drawing I. **Semester Hours: 3**
- F A 1400 - Two Dimensional Design. **Semester Hours: 3**
- F A 1500 - Three-Dimensional Design. **Semester Hours: 3**
- F A 2015 - Intermedia Foundations. **Semester Hours: 3**
- F A 2600 - History of Art I (survey). **Semester Hours: 3**
- F A 2610 - History of Art II (survey). **Semester Hours: 3**
- F A 4990 - Contemporary Art - 1945 To the Present. **Semester Hours: 3**
- F A 4800 - Senior Art Seminar. **Semester Hours: 3**

**Total: 27 Hours**

### **Drawing Emphasis Courses**

- F A 2000 - Life Drawing. **Semester Hours: 3**
  - F A 3000 - Intermediate Drawing. **Semester Hours: 3**
  - F A 3310 - Drawing and the Printed Image. **Semester Hours: 3**
- or

- F A 4020 - Anatomy for the Artist. **Semester Hours: 3**
- F A 4000 - Advanced Drawing I. **Semester Hours: 3**
- F A \_\_\_\_ - UD Art History Elective (3 semester hours)
- F A \_\_\_\_ - Fine Art Elective (6 semester hours)

**Total: 21 Hours**

## **Painting Emphasis Courses**

- F A 2200 - Painting I. **Semester Hours: 3**
- F A 2210 - Painting II: Figure. **Semester Hours: 3**
- F A 3200 - Intermediate Painting I. **Semester Hours: 3**
- F A 3210 - Intermediate Painting II. **Semester Hours: 3**
- F A 4200 - Advanced Painting I. **Semester Hours: 3**
- F A \_\_\_\_ - UD Art History Elective (3 semester hours)
- F A \_\_\_\_ - Fine Art Elective (3 semester hours)

**Total: 21 Hours**

## **Photography Emphasis Courses**

- F A 1150 - Introduction to Photography. **Semester Hours: 3**
- F A 2155 - Introduction to Digital Photography. **Semester Hours: 3**
- F A 3155 - Digital Book Making/Narrative Strategies. **Semester Hours: 3**
- F A 3160 - Color and Studio Lighting Dynamics. **Semester Hours: 3**
- F A 3165 - Concepts and Processes in Photography. **Semester Hours: 3**
- F A 3170 - Photography: Constructing the Fine Print. **Semester Hours: 3**
- F A 3630 - History of Photography. **Semester Hours: 3**

**Total: 21 Hours**

## **Sculpture Emphasis Courses**

- F A 2500 - Bronze Casting and Metal Sculpture. **Semester Hours: 3**
- F A 3500 - Modeling and Casting the Figure. **Semester Hours: 3**
- F A 3510 - Installation Art. **Semester Hours: 3**
- F A 4500 - Kinetic Sculpture. **Semester Hours: 3**
- F A \_\_\_\_ - Fine Art Elective (6 semester hours)

**Total: 18 Hours**

# Fine Arts BFA — Drawing, 3-D Graphics and Animation, Digital Design, Painting, Photography, Sculpture

All students pursuing a BFA in fine arts must complete the 34 semester hours of visual arts foundation courses and then select an emphasis area, consisting of 39 semester hours. Students interested in pursuing a double emphasis (e.g., emphasis in drawing and painting) are encouraged to consult a CAM advisor to discuss required courses.

## General Requirements

- All major courses within the major must be completed with a C (2.0) or better.
- All upper-division F A courses must be taken at UC Denver unless approved by faculty.
- 27 semester hours of all F A credits (at any level) must be taken at UC Denver.
- 25 semester hours of total F A courses must be upper division.

## Required Visual Arts Courses

To be completed by all BFA-seeking students:

- F A 1015 - Interdisciplinary Foundations. **Semester Hours: 3**
- F A 1100 - Drawing I. **Semester Hours: 3**
- F A 1400 - Two Dimensional Design. **Semester Hours: 3**
- F A 1500 - Three-Dimensional Design. **Semester Hours: 3**
- F A 2015 - Intermedia Foundations. **Semester Hours: 3**
- F A 2600 - History of Art I (survey). **Semester Hours: 3**
- F A 2610 - History of Art II (survey). **Semester Hours: 3**
- F A 3600 - Art History Survey III: Non-Western Art. **Semester Hours: 3**
- F A 4990 - Contemporary Art - 1945 To the Present. **Semester Hours: 3**
- F A 4950 - BFA Thesis. **Semester Hours: 1** (pass/fail)

**Total: 28 Hours**

\* may include studio, lecture, internship or art history

## 3-D Graphics/Animation Emphasis

Entrance into the 3-D program is by portfolio review and entrance interview only. This review process happens during the spring semester of the student's freshman year. As a result, all visual arts majors may take F A 1810 and F A 1820. These two courses will be offered at the standard tuition rates.

Students who wish to enroll in F A 2810 or above must pass the portfolio review and be accepted into the 3-D animation program. Please note that F A 2810 through F A 4820 are offered through Extended Studies and have a higher tuition rate. For the 2008-2009 academic year, this rate is anticipated at \$4,050 per course. Please see [www.cu3d.org](http://www.cu3d.org) for information, or contact the program director, Howard Cook, at [howard.cook@ucdenver.edu](mailto:howard.cook@ucdenver.edu).

- F A 1810 - Digital Animation Foundations: Producing Animation. **Semester Hours: 3**
- F A 1820 - Digital Animation Foundations: Introduction to Digital 3D. **Semester Hours: 3**

For registration and tuition information, please consult [www.cu3d.org](http://www.cu3d.org).

- F A 2810 - Digital Animation Techniques: Surface Modeling. **Semester Hours: 3**
- F A 2820 - Digital Animation Techniques: Surface Properties. **Semester Hours: 3**
- F A 2830 - Digital Animation Techniques: Lighting. **Semester Hours: 3**
- F A 3810 - Digital Animation Studio: Set/Environment Production. **Semester Hours: 3**
- F A 3820 - Digital Animation Techniques: Rigging and Animation. **Semester Hours: 3**
- F A 3830 - Digital Animation Technique: Character Animation. **Semester Hours: 3**
- F A 3845 - Digital Animation Discovery and Preproduction Seminar. **Semester Hours: 3**
- F A 4810 - Digital Animation Studio: Animation Production I. **Semester Hours: 3**
- F A 4820 - Digital Animation Studio: Animation Production II. **Semester Hours: 3**

**The following courses are required for 3-D animation majors, but are offered at the standard tuition rates:**

- ENGL 2250 - Introduction to Film. **Semester Hours: 3**
- F A 4632 - Media History and Aesthetics. **Semester Hours: 3**
- F A 4950 - BFA Thesis. **Semester Hours: 1**
- F A Electives (9 semester hours)

**Total: 55 Hours**

## **Drawing Emphasis Courses**

- F A 2000 - Life Drawing. **Semester Hours: 3**
- F A 2020 - Drawing II: Spatial Thinking and Visualization. **Semester Hours: 3**
- F A 3000 - Intermediate Drawing. **Semester Hours: 3**
- F A 3310 - Drawing and the Printed Image. **Semester Hours: 3**
- F A 3230 - Abstract Drawing. **Semester Hours: 3**
- F A 4000 - Advanced Drawing I. **Semester Hours: 3**
- F A 4020 - Anatomy for the Artist. **Semester Hours: 3**
- F A 4100 - Painting and Drawing Theory. **Semester Hours: 3**
- F A 4800 - Senior Art Seminar. **Semester Hours: 3**
- Studio Art Electives (9 semester hours)
- F A Electives (6 semester hours)

Upper-Division Art History Elective (3 semester hours)

**Total: 54 Hours**

## Digital Design Emphasis Courses

- F A 2405 - Introduction to Digital Design. **Semester Hours: 3**
- F A 2415 - Typography Studio. **Semester Hours: 3**
- F A 3414 - Motion Design I. **Semester Hours: 3**
- F A 3424 - Interactive Media. **Semester Hours: 3**
- F A 3428 - Design Studio II. **Semester Hours: 3**
- F A 3434 - 3D Motion Design. **Semester Hours: 3**
- F A 3444 - Interactive Media II. **Semester Hours: 3**
- F A 3454 - Motion Design II. **Semester Hours: 3**
- F A 4400 - Design Studio III. **Semester Hours: 3**
- F A 4480 - The Practice of Design. **Semester Hours: 3**
- F A 4495 - Design Studio IV. **Semester Hours: 3**
- F A 4632 - Media History and Aesthetics. **Semester Hours: 3**
- F A/Studio Art Electives\* (15 semester hours)

**Total: 54 Hours**

\* consult advisor

## Painting Emphasis Courses

- F A 2000 - Life Drawing. **Semester Hours: 3**
- F A 2200 - Painting I. **Semester Hours: 3**
- F A 2210 - Painting II: Figure. **Semester Hours: 3**
- F A 3200 - Intermediate Painting I. **Semester Hours: 3**
- F A 3210 - Intermediate Painting II. **Semester Hours: 3**
- F A 3230 - Abstract Drawing. **Semester Hours: 3**
- F A 3300 - Painting and the Printed Image. **Semester Hours: 3**
- F A 4100 - Painting and Drawing Theory. **Semester Hours: 3**
- F A 4200 - Advanced Painting I. **Semester Hours: 3**
- F A 4210 - Advanced Painting II. **Semester Hours: 3**
- F A 4800 - Senior Art Seminar. **Semester Hours: 3**
- Upper-Division Art History Elective (3 semester hours)
- Studio Electives (9 semester hours)
- F A Electives (6 semester hours)

**Total: 54 Hours**

## **Photography Emphasis Courses**

Students must complete the first seven courses listed in the "Required Visual Arts" section and F A 1150 and F A 2155 before going onto the UD Photo courses. F A 3155-3170 may be completed in any order after having completed F A 2155 and must be completed prior to beginning the advanced photography sequence (F A 4195 and F A 4196). See additional prerequisites for F A 3165.

F A 1150 - Introduction to Photography. **Semester Hours: 3**

F A 2155 - Introduction to Digital Photography. **Semester Hours: 3**

F A 3155 - Digital Book Making/Narrative Strategies. **Semester Hours: 3**

F A 3160 - Color and Studio Lighting Dynamics. **Semester Hours: 3**

F A 3165 - Concepts and Processes in Photography. **Semester Hours: 3**

F A 3170 - Photography: Constructing the Fine Print. **Semester Hours: 3**

*Note: must be completed before F A 3165*

F A 4195 - Advanced Photography I/Creating a Personal Vision. **Semester Hours: 3**

F A 4196 - Advanced Photography II. **Semester Hours: 3**

F A 3630 - History of Photography. **Semester Hours: 3**

F A \_\_\_\_ - Studio Art Elective (12 semester hours)

**Total: 39 Hours**

## **Sculpture Emphasis Courses**

F A 2500 - Bronze Casting and Metal Sculpture. **Semester Hours: 3**

F A 2510 - Wood and Metal Sculpture. **Semester Hours: 3**

F A 3500 - Modeling and Casting the Figure. **Semester Hours: 3**

F A 3505 - Sculpture Topics. **Semester Hours: 3**

F A 3510 - Installation Art. **Semester Hours: 3**

F A 3515 - Public Art. **Semester Hours: 3**

F A 3525 - Environmental Sculpture. **Semester Hours: 3**

F A 3530 - Iron Casting. **Semester Hours: 3**

F A 4500 - Kinetic Sculpture. **Semester Hours: 3**

F A 4505 - Performance Art. **Semester Hours: 3**

F A 4510 - Advanced Sculpture. **Semester Hours: 3**

F A 4800 - Senior Art Seminar. **Semester Hours: 3**

UD Art History Elective (3 semester hours)

Studio Art Electives (9 semester hours)

F A Electives (6 semester hours)

**Total: 54 Hours**

## **Transmedia Emphasis Courses**

- F A 2405 - Introduction to Digital Design. **Semester Hours: 3**
  - F A 2510 - Wood and Metal Sculpture. **Semester Hours: 3**
  - F A 3414 - Motion Design I. **Semester Hours: 3**
  - F A 3424 - Interactive Media. **Semester Hours: 3**
  - F A 3434 - 3D Motion Design. **Semester Hours: 3**
  - F A 3438 - Text, Image and Electronic Art. **Semester Hours: 3**
  - F A 3441 - Narrative and Experience. **Semester Hours: 3**
  - F A 3505 - Sculpture Topics. **Semester Hours: 3**
  - F A 3510 - Installation Art. **Semester Hours: 3**
  - F A 3520 - Sculpture: Contemporary Artists and Concepts. **Semester Hours: 3**
  - F A 4434 - Virtual Landscapes. **Semester Hours: 3**
  - F A 4500 - Kinetic Sculpture. **Semester Hours: 3**
  - F A 4510 - Advanced Sculpture. **Semester Hours: 3**
  - F A 4632 - Media History and Aesthetics. **Semester Hours: 3**
- Studio Art Electives (12 semester hours)

**Total: 54 Hours**

## **French BA**

The French program offers courses in advanced language, linguistics, literature, civilization, culture and business, all taught exclusively in French. A minor is also offered. All French majors are strongly encouraged to participate in a study abroad program. Please see your French department advisor for information about opportunities to include study abroad as part of your major.

### **Admission and Grade Requirements**

To be admitted to major status in French, students must have an overall GPA of C+ (2.3). The minimum grade acceptable in any French course applied to a French major is C (2.0). The grade point average in all courses applied to a French major at UC Denver must be 2.5. No courses taken on a pass/fail basis may be credited toward a French major. Upon declaring a major in French, each student will be assigned to a faculty advisor with whom the student should consult at least once per semester thereafter. It is especially important that students have their transcripts reviewed by their advisor before enrolling in their final 30 credit hours at UC Denver. Failure to do so may result in delay of graduation. Students presenting four years of high school French (Level IV) for admission to UC Denver must see a French advisor before enrolling in courses for the major. Students with Advanced Placement credits from high school

must see a French advisor about course equivalencies. The Department of Modern Languages does not accept CLEP credits.

### **Honors in French**

Qualified majors will automatically graduate with regular honors in French. Faculty occasionally nominate students for extra course work leading to higher levels of honors in French. For information, consult the French advisor in the Department of Modern Languages.

### **Outcomes Assessment**

During their final semester in the language, French major students participate in an oral proficiency interview and take a written outcomes assessment exam to measure their level of proficiency and mastery of key concepts.

## **Residency Requirement**

All students majoring in French must complete 30 semester hours of upper-division French courses (courses numbered 3000 and above). A minimum of 18 of those semester hours must be taken from the faculty in French at the Downtown Campus. Courses taken at other institutions while a student is enrolled at UC Denver may be applied to the major only with departmental approval before enrollment in those courses. Students studying French for the professions must also take courses in other areas. Requirements for both tracks are outlined below.

## **Course Requirements for the Major**

### **Track A: Language, Literature and Culture**

Students wishing to improve their linguistic skills as well as their knowledge of Francophone literature and culture may choose this track.

### **Required Courses**

FR 3010 - French Phonetics and Pronunciation. **Semester Hours: 3**

FR 3020 - Oral Practice. **Semester Hours: 3**

FR 3050 - Advanced Grammar and Composition. **Semester Hours: 3**

FR 3060 - Advanced French Language Skills. **Semester Hours: 3**

**Total: 12 Hours**

### **Electives**

Three courses at the 4000 level: **9 semester hours**

Three electives at 3000 or 4000 level: **9 semester hours**

*Note:* students must take at least one literature course and at least one culture or civilization course.

**Total: 18 Hours**

**Track A Major Total: 30 Hours**

^Top

### **Track B: International Language and Culture for the Professions**

This option in the French major offers career possibilities, both in government and private industry, at home and abroad. Languages are useful in business, industry, commerce, civil service, law, library science, media, science, economics, health and social sciences. Students who follow this course of study could also qualify as teachers of general business subjects in bilingual as well as traditional school systems. Students interested in this track should contact the French advisor in the Department of Modern Languages as early as possible in their academic career, but not later than the second semester of the sophomore year.

### **Prerequisites**

(these courses do not count toward the major total of 48 hours)

ECON 2012 - Principles of Economics: Macroeconomics: SS1. **Semester Hours: 3**

ECON 2022 - Principles of Economics: Microeconomics: SS1. **Semester Hours: 3**

MATH 1070 - Algebra for Social Sciences and Business: MA1. **Semester Hours: 3**

-OR-

MATH 1110 - College Algebra: MA1. **Semester Hours: 3**

(or higher level math course)

### **Required French Courses**

FR 1000 - Introduction to Cultures of the French- Speaking World: AH1. **Semester Hours: 3**

FR 3020 - Oral Practice. **Semester Hours: 3**

FR 3050 - Advanced Grammar and Composition. **Semester Hours: 3**

FR 3060 - Advanced French Language Skills. **Semester Hours: 3**

FR 3082 - Introduction To Translation. **Semester Hours: 3**

(online course)

FR 3112 - Survey of French Literature I. **Semester Hours: 3**

-OR-

FR 3122 - Survey of French Literature II. **Semester Hours: 3**

FR 3130 - Current Topics of the French-Speaking World. **Semester Hours: 3**

-OR-

FR 3140 - Contemporary Francophone Cultures. **Semester Hours: 3**

FR 4050 - Advanced French for Business. **Semester Hours: 3**

FR 4210 - French Civilization - Twentieth and Twenty-First Centuries. **Semester Hours: 3**

**Total: 27 Hours**

### **French Electives**

Choose two (at least one at 4000 level) from:

FR 3120 - French Cultural Identities: Myths and Realities. **Semester Hours: 3**

FR 3130 - Current Topics of the French-Speaking World. **Semester Hours: 3**

FR 3140 - Contemporary Francophone Cultures. **Semester Hours: 3**

FR 4200 - French Civilization Through the Nineteenth Century. **Semester Hours: 3**

Any 3000- or 4000-level literature course (not already taken from required list)

**Total: 6 Hours**

### **Business Courses**

(please be aware of prerequisites in business course descriptions)

ACCT 2200 - Financial Accounting and Financial Statement Analysis. **Semester Hours: 3**

MGMT 1000 - Introduction to Business. **Semester Hours: 3**

MGMT 3000 - Managing Individuals and Teams. **Semester Hours: 3**

MKTG 3000 - Principles of Marketing. **Semester Hours: 3**

One 3000-level course in international business

**Total: 15 Hours**

### **Recommended**

Official proficiency exam (Paris Chamber of Commerce)

**Track B Major Total: 48 Hours**

## **Secondary Foreign Language Teacher Licensure Program**

With this option, students complete a major in French along with additional course work required for certification to teach French in the public schools. This program should be chosen early in the students' careers. For information, consult the CLAS Advising Office Web site (phone 303-556-2555 or visit North Classroom, 4002) and the French advisor.

[^Top](#)

[Return to Department of Modern Languages](#)

# Geography BA

## Requirements for Major in Geography

Students must declare a major by the time they have completed 60 semester hours of course work. The geography program (within the Department of Geography and Environmental Sciences) offers a BA degree that includes a full range of courses in the fundamentals of geography taught mainly by full-time faculty. Five degree options are available for the major in geography: general, environmental science, environmental studies, urban studies and planning and earth science. Total semester-hour requirements vary among the five options, but all options require a minimum of 24 hours of upper-division credit. In addition, for each option, at least 15 semester hours must be taken at the Downtown Campus.

- |                                |                                     |
|--------------------------------|-------------------------------------|
| Option 1—General Geography     | Option 4—Urban Studies and Planning |
| Option 2—Environmental Science | Option 5—Earth Science              |
| Option 3—Environmental Studies |                                     |

### Option 1—General Geography

**Option Advisors:** Frederick B. Chambers and Brian Page

#### OPTION 1 REQUIREMENTS

##### Lower division

- GEOG 1202 - Introduction to Physical Geography: SC2. **Semester Hours: 3**
- GEOG 1302 - Introduction to Human Geography. **Semester Hours: 3**

##### Upper division

- GEOG 3080 - Introduction to Mapping and Map Analysis. **Semester Hours: 3**
- GEOG 3232 - Weather and Climate. **Semester Hours: 3**
- GEOG 3411 - Globalization and Regional Development. **Semester Hours: 3**
  
- GEOG 4080 - Introduction to GIS. **Semester Hours: 3**
- OR-
- GEOG 5080 - Introduction to GIS. **Semester Hours: 3**

**Total: 18 Hours**

## **ADDITIONAL REQUIREMENTS**

Choose six additional courses, including at least one course from each of the following subfields:

### **Physical Geography**

- GEOG 3240 - Colorado Climates. **Semester Hours: 3**
- GEOG 4020 - Earth Environments and Human Impacts. **Semester Hours: 3**
- GEOG 4240 - Principles of Geomorphology. **Semester Hours: 3**
- GEOG 4270 - Glacial Geomorphology. **Semester Hours: 3**

### **Human Geography**

- ENVS 1342 - Introduction to Environment and Society: SS2. **Semester Hours: 3**
- GEOG 1602 - Introduction to Urban Studies: SS2. **Semester Hours: 3**
- GEOG 2202 - Natural Hazards: SS2. **Semester Hours: 3**
- GEOG 3430 - Geography of Tourism. **Semester Hours: 3**
- GEOG 3501 - Geography of Health. **Semester Hours: 3**
- GEOG 4265 - Sustainability in Resources Management. **Semester Hours: 3**
- OR-
- GEOG 5265 - Sustainability in Resources Management. **Semester Hours: 3**
- GEOG 4335 - Contemporary Environmental Issues. **Semester Hours: 3**
- OR-
- GEOG 5335 - Contemporary Environmental Issues. **Semester Hours: 3**
- GEOG 4350 - Environment and Society in the American Past. **Semester Hours: 3**
- OR-
- GEOG 5350 - Environment and Society in the American Past. **Semester Hours: 3**
- GEOG 4640 - Urban Geography: Denver and the U.S.. **Semester Hours: 3**
- OR-
- GEOG 5640 - Urban Geography: Denver and the U.S.. **Semester Hours: 3**

### **Regional Geography**

- GEOG 1102 - World Regional Geography: SS2. **Semester Hours: 3**
- GEOG 3100 - Geography of Colorado. **Semester Hours: 3**
- GEOG 3120 - Geography of Europe. **Semester Hours: 3**
- GEOG 3130 - Central America and the Caribbean. **Semester Hours: 3**
- GEOG 3140 - Geography of South America. **Semester Hours: 3**
- GEOG 3150 - Middle East. **Semester Hours: 3**
- GEOG 3160 - Geography of China. **Semester Hours: 3**

### **Techniques for Geographical Analysis**

GEOG 4060 - Remote Sensing I: Introduction to Environmental Remote Sensing. **Semester Hours: 3**

-OR-

GEOG 5060 - Remote Sensing I: Introduction to Environmental Remote Sensing. **Semester Hours: 3**

GEOG 4070 - Remote Sensing II: Advanced Remote Sensing. **Semester Hours: 3**

-OR-

GEOG 5070 - Remote Sensing II: Advanced Remote Sensing. **Semester Hours: 3**

GEOG 4081 - Introduction to Cartography and Computer Mapping. **Semester Hours: 3**

GEOG 4085 - GIS Applications for the Urban Environment. **Semester Hours: 3**

-OR-

GEOG 5085 - GIS Applications for the Urban Environment. **Semester Hours: 3**

GEOG 4090 - Environmental Modeling with Geographic Information Systems. **Semester Hours: 3**

-OR-

GEOG 5090 - Environmental Modeling with Geographic Information Systems. **Semester Hours: 3**

GEOG 4095 - Deploying GIS Functionality on the Web. **Semester Hours: 3**

-OR-

GEOG 5095 - Deploying GIS Functionality on the Web. **Semester Hours: 3**

GEOG 4220 - Environmental Impact Assessment. **Semester Hours: 3**

-OR-

GEOG 5220 - Environmental Impact Assessment. **Semester Hours: 3**

GEOG 4230 - Hazard Mitigation and Vulnerability Assessment. **Semester Hours: 3**

-OR-

GEOG 5230 - Hazard Mitigation and Vulnerability Assessment. **Semester Hours: 3**

GEOG 4235 - GIS Applications in the Health Sciences. **Semester Hours: 3**

-OR-

GEOG 5235 - GIS Applications in the Health Sciences. **Semester Hours: 3**

GEOG 4770 - Applied Statistics for the Natural Sciences. **Semester Hours: 3**

**Total: 18 Hours**

**OPTION TOTAL: 36 HOURS**

### **Option 2—Environmental Science**

**Option Advisor:** Frederick B. Chambers

Option 2 allows geography majors to concentrate on course work in environmental science.

### **ANCILLARY COURSES**

Option 2 students must take either a general biology sequence OR a general chemistry sequence, and an introductory statistics course to develop their science disciplinary skills.

BIOL 2051 - General Biology I: SC1. **Semester Hours: 3**  
and BIOL 2071 - General Biology Laboratory I: SC1. **Semester Hours: 1**  
(4 semester hours total), followed by:

BIOL 2061 - General Biology II: SC1. **Semester Hours: 3**  
and BIOL 2081 - General Biology Laboratory II: SC1. **Semester Hours: 1**  
(4 semester hours total)

**-OR-**

CHEM 2031 - General Chemistry I: SC1. **Semester Hours: 3**  
and CHEM 2038 - General Chemistry Laboratory I: SC1. **Semester Hours: 1**  
(4 semester hours total), followed by:

CHEM 2061 - General Chemistry II: SC1. **Semester Hours: 3**  
and CHEM 2068 - General Chemistry Laboratory II: SC1. **Semester Hours: 2**  
(5 semester hours total)

**-AND-**

One introductory statistics course (3 semester hours). Suitable courses include:

MATH 2830 - Introductory Statistics: MA1. **Semester Hours: 3**  
PSY 2090 - Statistics and Research Methods. **Semester Hours: 4**  
SOC 3121 - Statistics. **Semester Hours: 4**

## **OPTION 2 REQUIREMENTS**

### **Lower division**

ENVS 1042 - Introduction to Environmental Sciences: SC1. **Semester Hours: 4**  
GEOG 1202 - Introduction to Physical Geography: SC2. **Semester Hours: 3**  
GEOG 1302 - Introduction to Human Geography. **Semester Hours: 3**

**-OR-**

ENVS 1342 - Introduction to Environment and Society: SS2. **Semester Hours: 3**

### **Upper division**

GEOG 3080 - Introduction to Mapping and Map Analysis. **Semester Hours: 3**  
GEOG 3232 - Weather and Climate. **Semester Hours: 3**  
GEOG 3411 - Globalization and Regional Development. **Semester Hours: 3**

**-OR-**

GEOG 4335 - Contemporary Environmental Issues. **Semester Hours: 3**

**-OR-**

GEOG 5335 - Contemporary Environmental Issues. **Semester Hours: 3**

GEOG 4080 - Introduction to GIS. **Semester Hours: 3**

**-OR-**

GEOG 5080 - Introduction to GIS. **Semester Hours: 3**

**Total: 22 Hours**

## **ADDITIONAL REQUIREMENTS**

Choose six additional courses:

### **Environmental Science**

GEOG 4020 - Earth Environments and Human Impacts. **Semester Hours: 3**

GEOG 4265 - Sustainability in Resources Management. **Semester Hours: 3**

-OR-

GEOG 5265 - Sustainability in Resources Management. **Semester Hours: 3**

### **Plus one class from the following list:**

ENVS 3082 - Energy and the Environment. **Semester Hours: 3**

ENVS 5030 - Environmental Geology. **Semester Hours: 3**

GEOG 3240 - Colorado Climates. **Semester Hours: 3**

GEOG 4010 - Biogeochemical Cycles. **Semester Hours: 3**

GEOG 4240 - Principles of Geomorphology. **Semester Hours: 3**

GEOG 4270 - Glacial Geomorphology. **Semester Hours: 3**

### **Upper-Division Environmental-Oriented Biology or Chemistry (3 Hours)**

One upper-division biology or chemistry course related to the student's environmental science interest must be taken as part of the environmental science option.

### **Techniques for Environmental Analysis**

#### **Quantitative methods (one course):**

GEOG 4770 - Applied Statistics for the Natural Sciences. **Semester Hours: 3**

-OR-

GEOL 4770 - Applied Statistics for the Natural Sciences. **Semester Hours: 3**

#### **Geo-Spatial Analysis (one course):**

GEOG 4060 - Remote Sensing I: Introduction to Environmental Remote Sensing. **Semester Hours: 3**

-OR-

GEOG 5060 - Remote Sensing I: Introduction to Environmental Remote Sensing. **Semester Hours: 3**

GEOG 4085 - GIS Applications for the Urban Environment. **Semester Hours: 3**

-OR-

GEOG 5085 - GIS Applications for the Urban Environment. **Semester Hours: 3**

GEOG 4090 - Environmental Modeling with Geographic Information Systems. **Semester Hours: 3**

-OR-

GEOG 5090 - Environmental Modeling with Geographic Information Systems. **Semester Hours: 3**

GEOG 4230 - Hazard Mitigation and Vulnerability Assessment. **Semester Hours: 3**

-OR-

GEOG 5230 - Hazard Mitigation and Vulnerability Assessment. **Semester Hours: 3**

GEOG 4235 - GIS Applications in the Health Sciences. **Semester Hours: 3**

-OR-

GEOG 5235 - GIS Applications in the Health Sciences. **Semester Hours: 3**

**Total: 18 Hours**

**OPTION TOTAL: 40 HOURS**

### **Option 3—Environmental Studies**

**Option Advisors:** Rafael Moreno and Deborah Thomas

Option 3 gives geography majors the opportunity to concentrate on the topic of human-environmental interaction, emphasizing environmental policy, sustainability and social issues.

### **OPTION 3 REQUIREMENTS**

#### **Lower division**

ENVS 1042 - Introduction to Environmental Sciences: SC1. **Semester Hours: 4**

ENVS 1342 - Introduction to Environment and Society: SS2. **Semester Hours: 3**

GEOG 1302 - Introduction to Human Geography. **Semester Hours: 3**

#### **Upper division**

GEOG 3080 - Introduction to Mapping and Map Analysis. **Semester Hours: 3**

GEOG 3232 - Weather and Climate. **Semester Hours: 3**

GEOG 3411 - Globalization and Regional Development. **Semester Hours: 3**

GEOG 4080 - Introduction to GIS. **Semester Hours: 3**

-OR-

GEOG 5080 - Introduction to GIS. **Semester Hours: 3**

**Total: 22 Hours**

### **ADDITIONAL REQUIREMENTS**

Choose six additional courses:

### **Environmental Studies**

GEOG 4265 - Sustainability in Resources Management. **Semester Hours: 3**

-OR-

GEOG 5265 - Sustainability in Resources Management. **Semester Hours: 3**

GEOG 4335 - Contemporary Environmental Issues. **Semester Hours: 3**

-OR-

GEOG 5335 - Contemporary Environmental Issues. **Semester Hours: 3**

### **Plus one course from the following list:**

GEOG 3302 - Water Resources. **Semester Hours: 3**

GEOG 3430 - Geography of Tourism. **Semester Hours: 3**

GEOG 3501 - Geography of Health. **Semester Hours: 3**

GEOG 4350 - Environment and Society in the American Past. **Semester Hours: 3**

-OR-

GEOG 5350 - Environment and Society in the American Past. **Semester Hours: 3**

### **Environmental Policy and Planning**

Choose one:

GEOG 4220 - Environmental Impact Assessment. **Semester Hours: 3**

-OR-

GEOG 5220 - Environmental Impact Assessment. **Semester Hours: 3**

GEOG 4230 - Hazard Mitigation and Vulnerability Assessment. **Semester Hours: 3**

-OR-

GEOG 5230 - Hazard Mitigation and Vulnerability Assessment. **Semester Hours: 3**

GEOG 4260 - Natural Resource Planning and Management. **Semester Hours: 3**

-OR-

P AD 5631 - Seminar in Environmental Politics and Policy. **Semester Hours: 3**

P AD 5633 - Seminar in Natural Resource and Environmental Health Law. **Semester Hours: 3**

P SC 4354 - Environmental Politics. **Semester Hours: 3**

### **Techniques for Environmental Analysis**

Choose two:

GEOG 4060 - Remote Sensing I: Introduction to Environmental Remote Sensing. **Semester Hours: 3**

-OR-

GEOG 5060 - Remote Sensing I: Introduction to Environmental Remote Sensing. **Semester Hours: 3**

GEOG 4070 - Remote Sensing II: Advanced Remote Sensing. **Semester Hours: 3**  
-OR-  
GEOG 5070 - Remote Sensing II: Advanced Remote Sensing. **Semester Hours: 3**  
GEOG 4081 - Introduction to Cartography and Computer Mapping. **Semester Hours: 3**  
GEOG 4085 - GIS Applications for the Urban Environment. **Semester Hours: 3**  
-OR-  
GEOG 5085 - GIS Applications for the Urban Environment. **Semester Hours: 3**  
GEOG 4090 - Environmental Modeling with Geographic Information Systems. **Semester Hours: 3**  
-OR-  
GEOG 5090 - Environmental Modeling with Geographic Information Systems. **Semester Hours: 3**  
GEOG 4095 - Deploying GIS Functionality on the Web. **Semester Hours: 3**  
-OR-  
GEOG 5095 - Deploying GIS Functionality on the Web. **Semester Hours: 3**  
GEOG 4235 - GIS Applications in the Health Sciences. **Semester Hours: 3**  
-OR-  
GEOG 5235 - GIS Applications in the Health Sciences. **Semester Hours: 3**  
GEOG 4770 - Applied Statistics for the Natural Sciences. **Semester Hours: 3**

### **Community/Professional Experience**

(optional but highly recommended)

GEOG 3939 - Internship/Cooperative Education. **Semester Hours: 1 to 3**

**Total: 18 Hours**

### **OPTION TOTAL: 40 HOURS**

*Note:* Up to 4 semester hours of honors thesis course work or up to 3 semester hours of internships may be counted toward the 18 hours of additional requirements. Such substitutions must be approved by a program option advisor.

### **Option 4—Urban Studies and Planning**

**Option Advisors:** Brian Page and Amanda Weaver

Option 4 allows geography majors to concentrate on social and spatial aspects of metropolitan growth and change. Students are given the opportunity to take advanced planning courses in their junior and senior years.

### **OPTION 4 REQUIREMENTS**

## **Lower Division**

GEOG 1202 - Introduction to Physical Geography: SC2. **Semester Hours: 3**

GEOG 1302 - Introduction to Human Geography. **Semester Hours: 3**

GEOG 1602 - Introduction to Urban Studies: SS2. **Semester Hours: 3**

## **Upper division**

GEOG 3080 - Introduction to Mapping and Map Analysis. **Semester Hours: 3**

GEOG 3232 - Weather and Climate. **Semester Hours: 3**

GEOG 3411 - Globalization and Regional Development. **Semester Hours: 3**

GEOG 4080 - Introduction to GIS. **Semester Hours: 3**

-OR-

GEOG 5080 - Introduction to GIS. **Semester Hours: 3**

**Total: 21 Hours**

## **ADDITIONAL REQUIREMENTS**

Choose six additional courses:

### **Urban Studies and Planning**

GEOG 4640 - Urban Geography: Denver and the U.S.. **Semester Hours: 3**

-OR-

GEOG 5640 - Urban Geography: Denver and the U.S.. **Semester Hours: 3**

URP 5501 - Planning Issues and Processes. **Semester Hours: 3**

### **Plus two courses from the following list:**

GEOG 4220 - Environmental Impact Assessment. **Semester Hours: 3**

-OR-

GEOG 5220 - Environmental Impact Assessment. **Semester Hours: 3**

GEOG 4230 - Hazard Mitigation and Vulnerability Assessment. **Semester Hours: 3**

-OR-

GEOG 5230 - Hazard Mitigation and Vulnerability Assessment. **Semester Hours: 3**

GEOG 4260 - Natural Resource Planning and Management. **Semester Hours: 3**

-OR-

URP 6653 - Natural Resource Planning and Management. **Semester Hours: 3**

GEOG 4265 - Sustainability in Resources Management. **Semester Hours: 3**

-OR-

GEOG 5265 - Sustainability in Resources Management. **Semester Hours: 3**

GEOG 4400 - Regional Economic Development. **Semester Hours: 3**

-OR-

URP 6671 - Regional Economic Development. **Semester Hours: 3**

GEOG 4630 - Transportation Planning I: Transport Network Analysis. **Semester Hours: 3**

-OR-

URP 6673 - Transportation Planning I: Land Use and Transport. **Semester Hours: 3**

GEOG 4670 - Transportation Planning II: Urban Transportation Planning. **Semester Hours: 3**

-OR-

URP 6674 - Transportation Planning II. **Semester Hours: 3**

### **Techniques for Urban Analysis**

Choose two:

GEOG 4060 - Remote Sensing I: Introduction to Environmental Remote Sensing. **Semester Hours: 3**

-OR-

GEOG 5060 - Remote Sensing I: Introduction to Environmental Remote Sensing. **Semester Hours: 3**

GEOG 4070 - Remote Sensing II: Advanced Remote Sensing. **Semester Hours: 3**

-OR-

GEOG 5070 - Remote Sensing II: Advanced Remote Sensing. **Semester Hours: 3**

GEOG 4081 - Introduction to Cartography and Computer Mapping. **Semester Hours: 3**

GEOG 4085 - GIS Applications for the Urban Environment. **Semester Hours: 3**

-OR-

GEOG 5085 - GIS Applications for the Urban Environment. **Semester Hours: 3**

GEOG 4090 - Environmental Modeling with Geographic Information Systems. **Semester Hours: 3**

-OR-

GEOG 5090 - Environmental Modeling with Geographic Information Systems. **Semester Hours: 3**

GEOG 4095 - Deploying GIS Functionality on the Web. **Semester Hours: 3**

-OR-

GEOG 5095 - Deploying GIS Functionality on the Web. **Semester Hours: 3**

GEOG 4235 - GIS Applications in the Health Sciences. **Semester Hours: 3**

-OR-

GEOG 5235 - GIS Applications in the Health Sciences. **Semester Hours: 3**

### **Community/Professional Experience**

(optional but highly recommended)

GEOG 3939 - Internship/Cooperative Education. **Semester Hours: 1 to 3**

**Total: 18 Hours**

## **OPTION TOTAL: 39 HOURS**

*Note:* Up to 4 semester hours of honors thesis course work or up to 3 semester hours of internship may be counted toward the 18 hours of additional requirements. Such substitutions must be approved by a program option advisor.

### **Option 5—Earth Science**

**Option Advisor:** Ryan Sincavage

Option 5 allows geography majors to concentrate on studying natural and physical processes within and on the surface of the planet.

### **OPTION 5 REQUIREMENTS**

#### **Lower division**

ENVS 1342 - Introduction to Environment and Society: SS2. **Semester Hours: 3**

-OR-

GEOG 1302 - Introduction to Human Geography. **Semester Hours: 3**

GEOG 1072 - Physical Geology: Surface Processes: SC1. **Semester Hours: 4**

GEOG 1082 - Physical Geology: Internal Processes: SC1. **Semester Hours: 4**

#### **Upper division**

GEOG 3080 - Introduction to Mapping and Map Analysis. **Semester Hours: 3**

GEOG 3411 - Globalization and Regional Development. **Semester Hours: 3**

-OR-

GEOG 4335 - Contemporary Environmental Issues. **Semester Hours: 3**

-OR-

GEOG 5335 - Contemporary Environmental Issues. **Semester Hours: 3**

GEOG 4080 - Introduction to GIS. **Semester Hours: 3**

-OR-

GEOG 5080 - Introduction to GIS. **Semester Hours: 3**

**Total: 20 Hours**

### **ADDITIONAL REQUIREMENTS**

Choose six additional courses:

#### **Earth Science**

GEOG 3232 - Weather and Climate. **Semester Hours: 3**

GEOL 3011 - Mineralogy. **Semester Hours: 4**

GEOL 3421 - Sedimentation and Stratigraphy. **Semester Hours: 4**

**Plus two of the following courses:**

GEOG 3240 - Colorado Climates. **Semester Hours: 3**

GEOG 4010 - Biogeochemical Cycles. **Semester Hours: 3**

GEOG 4020 - Earth Environments and Human Impacts. **Semester Hours: 3**

GEOG 4240 - Principles of Geomorphology. **Semester Hours: 3**

GEOG 4270 - Glacial Geomorphology. **Semester Hours: 3**

ENVS 5030 - Environmental Geology. **Semester Hours: 3**

**Techniques for Earth Science Analysis**

Choose one:

GEOG 4060 - Remote Sensing I: Introduction to Environmental Remote Sensing. **Semester Hours: 3**

-OR-

GEOG 5060 - Remote Sensing I: Introduction to Environmental Remote Sensing. **Semester Hours: 3**

GEOG 4090 - Environmental Modeling with Geographic Information Systems. **Semester Hours: 3**

-OR-

GEOG 5090 - Environmental Modeling with Geographic Information Systems. **Semester Hours: 3**

GEOG 4770 - Applied Statistics for the Natural Sciences. **Semester Hours: 3**

-OR-

GEOL 4770 - Applied Statistics for the Natural Sciences. **Semester Hours: 3**

**Total: 20 Hours**

**OPTION TOTAL: 40 HOURS**

## **Senior Exit Examination**

*All majors are required to take a senior exit examination based on required courses in the discipline.*

# History BA

Students must declare a major by the time they have completed 60 semester hours of course work. For the BA in history, a minimum of 36 semester hours of history course work is required. Majors must complete at least 18 upper-division hours at the University of Colorado Denver. Not more than 48 hours of history will be counted toward graduation requirements. No grade below a C (2.0) will count toward major requirements to graduate.

## Course Requirements

### Required History Courses

HIST 3031 - Theory and Practice of History: An Introduction to the Major. **Semester Hours:**  
3

HIST 4839 - History Seminar. **Semester Hours:** 3

**Total: 6 Hours**

### Distribution Requirement

A minimum of 6 semester hours in each of the following areas: United States, Europe and world. At least 3 semester hours in each area must be upper-division.

**Total: 18 Hours**

### Electives

The degree requires a minimum of 12 additional semester hours of electives, which can be satisfied by a combination of additional history courses, internships or honors independent study for eligible students (see below for more information).

**Total: 12 Hours**

**Major Total: 36 Hours**

## BA in History with Secondary Licensure

Students seeking secondary social studies teacher licensure may pursue a BA in history. This option enables them to complete their history major as well as fulfill requirements for licensure

at the undergraduate level. Call 303-556-8316 for more information or see the Web site at: <http://thunder1.cudenver.edu/clas/history/BAtaching.html>

# Human Resources Management Emphasis—BS in Business Administration

Human resources management offers opportunities for students to develop professional competence in the areas of personnel administration and development. Students acquire an understanding of, and skills in, developing and implementing human resources systems, including recruitment, selection, evaluation, training, motivation and compensation.

## Required Course

MGMT 3010 - Managing People for a Competitive Advantage. **Semester Hours: 3**

## Electives

Choose two:

MGMT 4420 - Human Resources Management: Staffing. **Semester Hours: 3**

MGMT 4430 - Human Resources Management: Training. **Semester Hours: 3**

MGMT 4440 - Human Resource Management: Performance Management. **Semester Hours: 3**

MGMT 4450 - Human Resources Management: Compensation. **Semester Hours: 3**

## Management Electives

Choose three:

Any MGMT Course (3 semester hours)

BLAW 4120 - Legal Issues for Entrepreneurs. **Semester Hours: 3**

ENTP 3000 - Principles of Entrepreneurship. **Semester Hours: 3**

**Total: 18 Hours**

# Individually Structured Major BA

## Requirements for the Major

The ISM program plan requires course work over two or three disciplines. A discipline is defined as a single department or program such as biology, ethnic studies or math. The ISM program plan must comply with the following policies:

Between 48 and 54 semester hours are allowed for the program plan.

A minimum of 16 semester hours must be upper-division credit.

Each discipline requires a minimum of 15 semester hours, of which at least 3 must be upper-division hours.

A minimum of 6 semester hours in each discipline must be taken from Downtown Campus faculty.

A maximum of one discipline may be outside CLAS.

A third optional discipline may be a mixture of course work, excluding courses from the first and second disciplines.

An ISM title must be consistent with the academic theme and disciplines in the program plan.

The ISM program plan contract is approved by faculty for each discipline and submitted to the CLAS Advising Office, North Classroom, 4002, for college approval by the associate dean. The ISM program plan must be approved before one-third of the ISM course work is completed. Typically, a maximum of 18-21 hours of previously completed courses is allowed.

Graduation requirements for ISM students include a minimum 2.0 GPA for all ISM course work, a minimum 2.0 GPA in each discipline in the program plan and a minimum of 24 hours of course work taken from Downtown Campus faculty.

[Return to Individually Structured Major](#)

## Information Systems Emphasis—BS in Business Administration

The information systems program at the University of Colorado Denver is a nationally accredited program for students who want to design and implement effective solutions to meet organizational and management needs for information, control and decision making.

An information systems (ISMG) emphasis draws on a diverse set of skills and strengths requiring creative and innovative thinking at the intersections of disciplinary knowledge and practice. Information systems students learn how information technology, effective teamwork

and leadership and sound project management combine to enable innovation and change, to improve organizational agility and to add competitive value. Courses require extensive hands-on projects, teamwork and use of high-end technology. A combination of technical skills gained in class work with broad based business process knowledge enables our graduates to be ideally situated to take leading roles in shaping the technology-based future of employers in the Rocky Mountain region and the nation.

## **Undergraduate options**

The Business School at the University of Colorado Denver offers a bachelor of science in business administration where you may choose information systems as your primary core specialty:

Information Systems, Bachelor of Science in Business Administration degree

Or you may choose to add an information systems speciality to another business discipline.

Accounting and Information Systems emphasis

Financial Management Systems emphasis

Management and Information Systems emphasis

Marketing and Information Systems emphasis

## **Career Opportunities**

Careers in information systems continue to be one of the highest growth markets in the business world. A student completing the information systems program curriculum will be prepared for challenging careers as business analyst, database analyst, Web content manager, project manager, IT consultant and information auditing and compliance specialist. Employment possibilities include financial operations, health care, management consulting, service operations, transportation and logistics and government.

Information systems is becoming the foundation of all business activities, and a solid understanding of the role of information systems in business and in the national and global economy is now critical for every business student. The information systems emphasis focuses on effective use of information technology in business. You are equipped with logical and analytical thinking in all areas of business and a strong basis for continued career growth in a variety of growing professions. You will develop the technical skills, business know-how and administrative insights required for acquisition, deployment and management of IT resources and services development, operation and evolution of IS infrastructure for use in accounting, finance, marketing, management and other business processes.

## **Curriculum**

The courses emphasize both team and individual work, allowing students to gain critical thinking skills, knowledge and experience to analyze, design, program, implement and use information.

## Requirements for the Information Systems emphasis

### Lower Division

ISMG 2050 - Introduction to Business Problem Solving. **Semester Hours:** 3 (fall or spring)  
ISMG 2800 - Designing for the Web. **Semester Hours:** 3 (spring)

### Upper Division: Junior Year

ISMG 3000 - Principles of Information Systems. **Semester Hours:** 3  
ISMG 3500 - Enterprise Data and Content Management. **Semester Hours:** 3 (fall)  
ISMG 3600 - System Strategy, Architecture and Design. **Semester Hours:** 3 (spring)

### Upper Division: Senior Year

ISMG 4200 - Building Business Applications. **Semester Hours:** 3 (fall)  
ISMG 4700 - Business Data Communications and Networking. **Semester Hours:** 3 (spring)  
ISMG 4900 - Project Management and Practice. **Semester Hours:** 3 (fall or spring)

### Important note

It is particularly important to take the required courses in the proper sequence to fulfill the prerequisites and ensure you can complete your degree within four years. Please refer to the sample degree plan for the recommended course sequence.

### Information Systems Electives

ACCT 3054 - Accounting Systems and Data Processing. **Semester Hours:** 3  
C SC 2312 - Intermediate Programming. **Semester Hours:** 3  
C SC 2421 - Data Structures and Program Design. **Semester Hours:** 3  
ISMG 4300 - Information Security and Compliance. **Semester Hours:** 3  
ISMG 4750 - Business Intelligence and Financial Modeling. **Semester Hours:** 3  
ISMG 4760 - Customer Relationship Management. **Semester Hours:** 3

## Specialization in a minor area

You may also choose a secondary business minor area to support your career objectives.

### Accounting

Choose two from the following:

ACCT 3054 - Accounting Systems and Data Processing. **Semester Hours:** 3  
ACCT 3220 - Intermediate Financial Accounting I. **Semester Hours:** 3  
ACCT 3230 - Intermediate Financial Accounting II. **Semester Hours:** 3

ACCT 4780 - Accounting IS Processes and Control. **Semester Hours: 3**

### **Finance**

Choose two from the following:

FNCE 3500 - Management of Business Capital. **Semester Hours: 3**

FNCE 4330 - Investment and Portfolio Management. **Semester Hours: 3**

FNCE 4350 - Financial Markets and Institutions. **Semester Hours: 3**

FNCE 4750 - Business Intelligence and Financial Modeling. **Semester Hours: 3**

### **Human Resource Management**

Choose two from the following:

MGMT 3010 - Managing People for a Competitive Advantage. **Semester Hours: 3**

MGMT 4420 - Human Resources Management: Staffing. **Semester Hours: 3**

MGMT 4430 - Human Resources Management: Training. **Semester Hours: 3**

MGMT 4450 - Human Resources Management: Compensation. **Semester Hours: 3**

MGMT 4770 - Human Resource Information Systems. **Semester Hours: 3**

### **Management**

Choose two from the following:

MGMT 4350 - Leading Organizational Change. **Semester Hours: 3**

MGMT 4370 - Organization Design. **Semester Hours: 3**

MGMT 4400 - Environments of International Business. **Semester Hours: 3**

### **Marketing**

Choose two from the following:

MKTG 3100 - Marketing Research. **Semester Hours: 3**

MKTG 3200 - Buyer Behavior. **Semester Hours: 3**

MKTG 4050 - Applied Marketing Management. **Semester Hours: 3**

MKTG 4760 - Customer Relationship Management. **Semester Hours: 3**

### **NOTE:**

All information systems courses are not offered every semester.

# **International Business Emphasis—BS in Business Administration**

Increasingly, businesses are reorienting their thinking, planning and operations to capitalize on opportunities that exist in the world marketplace. Every phase of business is affected by this reorientation. For individuals with the appropriate skills, training and interest, international business provides excellent career opportunities.

The international business curriculum is designed to enhance and build on thorough training in basic business skills and to provide students with additional skills and knowledge appropriate to international business.

## Required Foundation Courses

MGMT 4370 - Organization Design. **Semester Hours: 3**

MKTG 4050 - Applied Marketing Management. **Semester Hours: 3**

## Required Emphasis Courses

FNCE 4370 - International Financial Management. **Semester Hours: 3**

MGMT 4400 - Environments of International Business. **Semester Hours: 3**

MGMT 4410 - Operations of International Business. **Semester Hours: 3**

MKTG 4200 - International Marketing. **Semester Hours: 3**

## Total: 18 Hours

A second area of emphasis in business is highly recommended. In addition, serious consideration should be given to advanced study of a foreign language and to either a minor or a certificate in international affairs, offered by the College of Liberal Arts and Sciences.

## Elective Business Emphasis Courses (9 credit Hours)

Three business courses (3000 or 4000 level), 3 semester hours each  
Students are strongly recommended to take courses within the same business discipline, including internationally-oriented courses within the discipline such as MKTG 4220 (Asian Business Development and Marketing) and ACCT 4370 (Internationally Accounting)

# International Studies BA

## Program Requirements

The major consists of 48 to 51 semester hours, structured as follows:

complete 9 semester hours from a list of introductory courses listed below

choose three thematic concentrations from the following five:

language and culture, international relations and comparative politics, economics and

development, international commerce, and regional societies and history. Majors complete 12 hours in each theme (except international commerce, which requires 15). Below is a list of preapproved courses in each concentration. Students wishing to apply courses not on the list may do so with the approval of the program director.

a capstone seminar (3 semester hours) for students in their last year  
the major is interdisciplinary, and students must take classes in at least three different disciplines (anthropology, economics, geography, history, international commerce/business, modern languages, political science or religious studies). No more than 18 hours in any one discipline will be accepted toward the major.  
students are expected to develop a regional specialization. They must choose courses from the introductory and thematic concentration lists that contribute to an understanding of a world region.

all international studies majors must demonstrate a proficiency in a language other than English. This may be fulfilled with the fourth semester of a foreign language course sequence. Students must receive a grade of C or better in all language courses; they also have the option of testing out of this requirement.

majors must complete at least half (24 hours) of the semester hours at the Downtown Campus. A cumulative GPA of 2.5 or better is required, with a minimum grade of C- earned in all major courses to graduate.

## Required Courses

### Introductory Courses

Choose one course from each of the following three groups:

#### Choose one:

ECON 2012 - Principles of Economics: Macroeconomics: SS1. **Semester Hours: 3**  
GEOG 1102 - World Regional Geography: SS2. **Semester Hours: 3**

#### Choose one:

P SC 3022 - Introduction to Comparative Politics. **Semester Hours: 3**  
P SC 3042 - Introduction to International Relations. **Semester Hours: 3**

#### Choose one:

ANTH 2102 - Culture and the Human Experience: SS3. **Semester Hours: 3**  
HIST 3451 - Introduction to African History. **Semester Hours: 3**  
HIST 3460 - Introduction to Latin American History. **Semester Hours: 3**  
HIST 3470 - Introduction to Asian History. **Semester Hours: 3**  
HIST 3480 - Introduction to European History. **Semester Hours: 3**  
HIST 3483 - Introduction to Modern South Asia. **Semester Hours: 3**

RLST 2660 - World Religions: AH3. **Semester Hours: 3**

**Total: 9 Hours**

### **Thematic Concentrations**

Students must take a minimum of four upper-division courses in each of three of the following five concentrations, for a total of 36 semester hours (12 hours in each concentration). Please note that the concentration in international commerce requires five courses rather than four, for a total of 39 semester hours. The list below does not include all the international courses applicable to the major, only the ones frequently taught. It is expected to change as departments develop new courses and hire new faculty in different areas.

*Note:* Concentrations are interdisciplinary and are not the same as academic departments. Students must take courses in at least three different academic departments and no more than 18 semester hours in any one department.

### **Language, Culture and Literature**

This concentration aims at deepening the student's understanding of the cultural underpinnings and worldviews of different societies.

Modern languages: any upper-division courses in the Department of Modern Languages except Methods of Teaching French/German/Spanish. We have not listed the courses individually because there are so many upper-division courses on world literature and culture available in modern languages.

ANTH 3121 - Language and Communication. **Semester Hours: 3**

ANTH 4130 - Comparative Religious Systems. **Semester Hours: 3**

-OR-

RLST 4010 - Comparative Religious Systems. **Semester Hours: 3**

PHIL 4650 - Differing Concepts of God. **Semester Hours: 3**

-OR-

RLST 4400 - Differing Concepts of God. **Semester Hours: 3**

### **International Relations and Comparative Politics**

Courses in this concentration stress comparative approaches, diplomacy and conflict resolution. Students will have an understanding of how different societies make decisions and manage international relations. How do other cultures conceive of and practice power?

ANTH 4180 - The Nature of Power. **Semester Hours: 3**

HIST 3121 - The World at War, 1914-1945. **Semester Hours: 3**

HIST 4032 - Globalization in World History Since 1945. **Semester Hours: 3**

HIST 4220 - U.S. Foreign Policy Since 1912. **Semester Hours: 3**

HIST 4412 - Mexico and the United States: People and Politics on the Border. **Semester Hours: 3**

HIST 4471 - The Second World War. **Semester Hours: 3**  
HIST 4475 - The Vietnam War. **Semester Hours: 3**  
\* P SC 3022 - Introduction to Comparative Politics. **Semester Hours: 3**  
\* P SC 3042 - Introduction to International Relations. **Semester Hours: 3**  
P SC 4057 - Religion and Politics. **Semester Hours: 3**

-OR-

RLST 4500 - Religion and Politics. **Semester Hours: 3**  
P SC 4105 - Comparative Politics: Europe. **Semester Hours: 3**  
P SC 4146 - Indigenous Politics. **Semester Hours: 3**  
P SC 4156 - The Arab-Israeli Peace Process. **Semester Hours: 3**  
P SC 4185 - Corruption in the U.S. and Abroad. **Semester Hours: 3**  
P SC 4216 - International Politics: Human Rights. **Semester Hours: 3**  
P SC 4217 - Human Rights in Theory and Practice. **Semester Hours: 3**  
P SC 4225 - Democracy and Democratization. **Semester Hours: 3**  
P SC 4226 - The United Nations in World Affairs. **Semester Hours: 3**  
P SC 4236 - American Foreign Policy. **Semester Hours: 3**  
P SC 4266 - International Law. **Semester Hours: 3**  
P SC 4286 - International Relations: War or Peace? **Semester Hours: 3**  
P SC 4726 - Russian and Chinese Foreign Policy. **Semester Hours: 3**  
P SC 4736 - The Middle East in World Affairs. **Semester Hours: 3**  
P SC 4807 - Revolution and Political Violence. **Semester Hours: 3**  
P SC 4995 - Travel Study Topics. **Semester Hours: 1 to 3**

\* If not taken to fulfill the introductory major requirements.

### **Economics, Development and Environment**

Students taking this concentration will develop an understanding of economic processes in an international context. The courses offer comparative approaches and cultural perspectives on development and environment.

*Note:* Students in this concentration must take ECON 2012 - Principles of Economics: Macroeconomics as one of their three introductory courses.

### **Required economics course**

ECON 2022 - Principles of Economics: Microeconomics: SS1. **Semester Hours: 3**

### **Choose three upper division courses from the following:**

ANTH 4010 - Global Health Studies I: The Biocultural Basis of Health. **Semester Hours: 3**  
ANTH 4070 - Culture of Development and Globalization. **Semester Hours: 3**  
ANTH 4140 - Principles of Economic Anthropology. **Semester Hours: 3**  
ANTH 4170 - Culture and the Environment. **Semester Hours: 3**  
ANTH 4390 - Laboratory Methods in Archaeology. **Semester Hours: 3**

ECON 4081 - Intermediate Macroeconomic Theory. **Semester Hours: 3**  
ECON 4230 - Law and Economics. **Semester Hours: 3**  
ECON 4410 - International Trade. **Semester Hours: 3**  
ECON 4420 - International Finance. **Semester Hours: 3**  
ECON 4540 - Environmental Economics. **Semester Hours: 3**  
ECON 4770 - Economic Development--Theory and Problems. **Semester Hours: 3**  
GEOG 3411 - Globalization and Regional Development. **Semester Hours: 3**  
GEOG 3430 - Geography of Tourism. **Semester Hours: 3**  
GEOG 4265 - Sustainability in Resources Management. **Semester Hours: 3**  
P SC 4085 - Comparative Public Policy. **Semester Hours: 3**  
P SC 4126 - Introduction to International Political Economy. **Semester Hours: 3**  
P SC 4235 - Politics and Markets in Latin America. **Semester Hours: 3**  
P SC 4248 - Gender, Globalization and Development. **Semester Hours: 3**  
P SC 4326 - Advanced International Political Economy: Globalization. **Semester Hours: 3**  
P SC 4365 - Global Ecological Crises. **Semester Hours: 3**  
P SC 4555 - International Women's Resistance. **Semester Hours: 3**

### **International Commerce**

The objective of this concentration is to give students an introduction to international business practices.

ECON 2012 and ECON 2022 are prerequisites for most of these courses. Note that the first three courses are prerequisites for MGMT 4400 and MKTG 4200. Students opting for this concentration must take both MGMT 4400 and MKTG 4200. Students must meet Business School entrance requirements for the international commerce concentration, with a 3.0 GPA overall or in the last 24 hours.

*Note:* This concentration requires 15 hours, not 12.

ACCT 2200 - Financial Accounting and Financial Statement Analysis. **Semester Hours: 3**  
(MATH 1070 or MATH 1110 prerequisite and sophomore standing).  
\* MGMT 3000 - Managing Individuals and Teams. **Semester Hours: 3**  
\* MKTG 3000 - Principles of Marketing. **Semester Hours: 3**  
\* MGMT 4400 - Environments of International Business. **Semester Hours: 3**  
\* MKTG 4200 - International Marketing. **Semester Hours: 3**

\* Students must have junior standing to take the 3000-level courses and must be formally to the international studies program to take the 4000-level courses.

### **Regional Societies and History**

Students in this concentration are expected to develop a historical understanding of how nations and political systems develop. To understand why international actors behave in a given way, one needs to understand the historical background of those actors; this concentration will familiarize students with that background.

ANTH 4220 - Community in Global Context. **Semester Hours:** 3  
ANTH 4250 - Culture Change in the Modern World. **Semester Hours:** 3  
ANTH 4740 - Ethnography of Mexico and Central America. **Semester Hours:** 3  
ANTH 4995 - Travel Study. **Semester Hours:** 3 to 9  
GEOG 3120 - Geography of Europe. **Semester Hours:** 3  
GEOG 3130 - Central America and the Caribbean. **Semester Hours:** 3  
GEOG 3140 - Geography of South America. **Semester Hours:** 3  
GEOG 3150 - Middle East. **Semester Hours:** 3  
HIST 3350 - Colonial Latin America. **Semester Hours:** 3  
HIST 3500 - African History in Novels and Films. **Semester Hours:** 3  
HIST 3995 - Travel Study Topics. **Semester Hours:** 1 to 15  
HIST 4024 - Nineteenth Century Europe. **Semester Hours:** 3  
HIST 4025 - Twentieth Century Europe. **Semester Hours:** 3  
HIST 4027 - The Enlightenment: Eighteenth Century Intellectual History. **Semester Hours:**  
3  
HIST 4028 - After the Revolution: Nineteenth Century Intellectual History. **Semester Hours:**  
3  
HIST 4029 - Fin de Siecle: Late Nineteenth and Early Twentieth Century Intellectual History.  
**Semester Hours:** 3  
HIST 4046 - Victorians and Victorianism. **Semester Hours:** 3  
HIST 4051 - Great Britain: 1760-1914. **Semester Hours:** 3  
HIST 4062 - Modern France, 1789 to the Present. **Semester Hours:** 3  
HIST 4071 - Modern Germany. **Semester Hours:** 3  
HIST 4074 - Post-War Germany. **Semester Hours:** 3  
HIST 4082 - Reform and Revolution in Russia: The 1860s to 1917. **Semester Hours:** 3  
HIST 4083 - Russia Since 1917. **Semester Hours:** 3  
HIST 4086 - Eastern Europe. **Semester Hours:** 3  
HIST 4303 - Sex and Gender in Modern Britain. **Semester Hours:** 3  
HIST 4411 - Modern Mexico. **Semester Hours:** 3  
HIST 4414 - Nationalism and State Building in Latin America, 1750-1850. **Semester Hours:**  
3  
HIST 4415 - Social Revolutions in Latin America. **Semester Hours:** 3  
HIST 4421 - Modern China. **Semester Hours:** 3  
HIST 4451 - Southern Africa. **Semester Hours:** 3  
HIST 4455 - African Struggle for Independence. **Semester Hours:** 3  
HIST 4460 - The Islamic Golden Age. **Semester Hours:** 3  
-OR-  
HIST 4461 - The Modern Middle East. **Semester Hours:** 3  
HIST 4621 - Explorers and Exploration. **Semester Hours:** 3  
P SC 3125 - Introduction to Latin American Society. **Semester Hours:** 3  
P SC 4155 - Political Systems of the Middle East and North Africa. **Semester Hours:** 3  
P SC 4165 - Islamic Politics and Culture. **Semester Hours:** 3  
-OR-  
RLST 3100 - Islamic Politics and Culture. **Semester Hours:** 3

P SC 4175 - Politics and Governments of the Pacific Rim. **Semester Hours: 3**  
P SC 4505 - The Post-Soviet World: Origins and Present Condition. **Semester Hours: 3**  
P SC 4554 - Chicano and Latino Politics. **Semester Hours: 3**  
P SC 4615 - Politics and Government of China. **Semester Hours: 3**  
RLST 3400 - Asian Philosophies and Religions. **Semester Hours: 3**  
-OR-  
PHIL 3666 - Asian Philosophies and Religions. **Semester Hours: 3**  
RLST 3500 - Religions of India. **Semester Hours: 3**  
RLST 3660 - Chinese Philosophy and Culture. **Semester Hours: 3**  
-OR-  
PHIL 3981 - Chinese Philosophy and Culture. **Semester Hours: 3**

### **International Studies Capstone Course**

All majors must take a 3-semester-hour seminar focusing on a global issue. Currently the designated capstone courses are:

HIST 4417 - Commodities and Globalization: Dessert in World History. **Semester Hours: 3**  
P SC 4126 - Introduction to International Political Economy. **Semester Hours: 3**

[Return to International Studies](#)

# **Management Emphasis—BS in Business Administration**

The management curriculum provides the foundation for careers in supervision and general management in a wide variety of organizations. It develops skills in management practice through an understanding of general management principles, individual and group behavior, organizational change and design and human resources management.

## **Required Foundation Courses**

MKTG 4050 - Applied Marketing Management. **Semester Hours: 3**

## **Required Emphasis Courses**

MGMT 3010 - Managing People for a Competitive Advantage. **Semester Hours: 3**  
MGMT 4350 - Leading Organizational Change. **Semester Hours: 3**  
MGMT 4370 - Organization Design. **Semester Hours: 3**

**Choose two:**

Any upper-division MGMT course (3 semester hours)  
BLAW 4120 - Legal Issues for Entrepreneurs. **Semester Hours: 3**  
ENTP 3000 - Principles of Entrepreneurship. **Semester Hours: 3**

## **Total: 18 Hours**

These 6 hours must be in addition to MGMT courses that were used to satisfy the international business or diversity requirements.

## **Management/Information Systems (MGIS)**

Within the management curriculum students can choose to add additional courses in information systems to complement their individual interests as well as prior education and work experiences.

### *Required Information System courses*

ISMG 4500 - Database Management and Applications. **Semester Hours: 3**  
ISMG 4600 - System Analysis and Design. **Semester Hours: 3**  
ISMG 4900 - Project Management and Practice. **Semester Hours: 3**

## **Total: 9 Hours**

# **Marketing Emphasis—BS in Business Administration**

Marketing is concerned with directing the activities of the organization toward the satisfaction of customer wants and needs. This involves understanding customers, identifying those wants and needs that the organization can best serve, guiding the development of specific products or services, planning and implementing ways to take products or services to the market, securing the customer's order and finally, monitoring customer response in order to guide future activities.

In most organizations, marketing is a major functional area that provides a wide variety of career opportunities in such fields as personal selling and sales management, advertising and sales promotion, public relations, marketing research, physical distribution, product management, market management, marketing information systems and retail management. Increasingly, career opportunities exist in service businesses and nonprofit organizations.

## **Required Foundation Courses**

BLAW 4120 - Legal Issues for Entrepreneurs. **Semester Hours: 3**

MGMT 4370 - Organization Design. **Semester Hours: 3**

## Required Emphasis Courses

MKTG 3100 - Marketing Research. **Semester Hours: 3**

MKTG 4050 - Applied Marketing Management. **Semester Hours: 3**

MKTG required 3 courses (9 semester hours): CHOOSE FROM:

## Electives

Choose three:

MKTG 3200 - Buyer Behavior. **Semester Hours: 3**

MKTG 4000 - Advertising. **Semester Hours: 3**

MKTG 4200 - International Marketing. **Semester Hours: 3**

MKTG 4220 - Asian Business Development and Marketing. **Semester Hours: 3**

MKTG 4580 - International Transportation. **Semester Hours: 3**

MKTG 4700 - Personal Selling and Sales Management. **Semester Hours: 3**

MKTG 4950 - Special Topics. **Semester Hours: 3**

## Total: 21 Hours

In addition to the three required courses beyond the core, students may select marketing electives, business electives and nonbusiness electives that support their particular career orientations. The marketing faculty advisor can assist the student in choosing an appropriate set of electives to fit career objectives.

Marketing courses that were used to satisfy the international business requirement cannot be applied to the marketing area of emphasis.

## Marketing/Information Systems (MKIS)

Within the marketing curriculum students can choose to add courses in information systems to complement their individual interests as well as prior education and work experiences.

### Required Information System Courses

ISMG 4500 - Database Management and Applications. **Semester Hours: 3**

ISMG 4600 - System Analysis and Design. **Semester Hours: 3**

ISMG 4900 - Project Management and Practice. **Semester Hours: 3**

### Required Emphasis Courses

MKTG 3100 - Marketing Research. **Semester Hours: 3**  
MKTG 4050 - Applied Marketing Management. **Semester Hours: 3**  
ISMG 4760 - Customer Relationship Management. **Semester Hours: 3** or  
MKTG 4760 - Customer Relationship Management. **Semester Hours: 3**

**Choose two:**

MKTG 3200 - Buyer Behavior. **Semester Hours: 3**  
MKTG 4000 - Advertising. **Semester Hours: 3**  
MKTG 4220 - Asian Business Development and Marketing. **Semester Hours: 3**  
MKTG 4700 - Personal Selling and Sales Management. **Semester Hours: 3**  
MKTG 4720 - Internet Marketing. **Semester Hours: 3**  
MKTG 4950 - Special Topics. **Semester Hours: 3**

**Total: 24 Hours**

Marketing courses that were used to satisfy the international business requirement cannot be applied to the marketing area of emphasis.

# Mathematics BS

## Degree Requirements

### Required Core Courses for All Mathematics Majors

MATH 1401 - Calculus I: MA1. **Semester Hours: 4**  
MATH 2411 - Calculus II: MA1. **Semester Hours: 4**  
MATH 2421 - Calculus III: MA1. **Semester Hours: 4**  
MATH 3000 - Introduction to Abstract Mathematics. **Semester Hours: 3**  
MATH 3191 - Applied Linear Algebra. **Semester Hours: 3**  
MATH 3200 - Elementary Differential Equations. **Semester Hours: 3**  
-OR-  
MATH 4408 - Applied Graph Theory. **Semester Hours: 3**  
MATH 3250 - Problem Solving Tools. **Semester Hours: 3**  
MATH 3800 - Probability and Statistics for Engineers. **Semester Hours: 3**  
-OR-  
MATH 4810 - Probability. **Semester Hours: 3**  
MATH 4779 - Math Clinic. **Semester Hours: 3**

**TOTAL REQUIRED CORE: 30 HOURS**

### Core Areas

Choose one course from each of the following three areas:

### **Analysis**

Choose one:

- MATH 3200 - Elementary Differential Equations. **Semester Hours: 3**
- MATH 4201 - Topology. **Semester Hours: 3**
- MATH 4310 - Introduction to Real Analysis I. **Semester Hours: 4**
- MATH 4450 - Complex Variables. **Semester Hours: 3**
- MATH 4650 - Numerical Analysis I. **Semester Hours: 3**
- MATH 4733 - Partial Differential Equations. **Semester Hours: 3**

### **Modeling**

Choose one:

- MATH 4387 - Regression Analysis, Modeling and Time Series. **Semester Hours: 3**
- MATH 4791 - Continuous Modeling. **Semester Hours: 3**
- MATH 4792 - Probabilistic Modeling. **Semester Hours: 3**
- MATH 4793 - Discrete Math Modeling. **Semester Hours: 3**
- MATH 4794 - Optimization Modeling. **Semester Hours: 3**

### **Discrete Math**

Choose one:

- MATH 3140 - Introduction to Modern Algebra. **Semester Hours: 3**
- MATH 3301 - Introduction to Operations Research I - Deterministic Systems. **Semester Hours: 3**
- MATH 4408 - Applied Graph Theory. **Semester Hours: 3**
- MATH 4409 - Applied Combinatorics. **Semester Hours: 3**

### **TOTAL CORE AREAS: 9 HOURS**

### **Electives Mathematics Majors Must Complete**

Mathematics majors must take three upper-division mathematics courses, excluding MATH 3040, chosen to provide depth and breadth. Depth is obtained by taking a two-semester sequence of upper-division courses, one of which may be a course taken for the core area requirement.

### **Portfolio, Interview, Survey**

In the semester of graduation, students must:

submit a portfolio consisting of two papers, typically written for previous courses, that demonstrate mathematical and writing proficiency  
participate in an exit interview, which may be scheduled by the department administrative assistant  
complete a senior survey, available from the department administrative assistant

### **Math Majors Considering Graduate Study**

Mathematics majors who are considering graduate study in mathematics should plan to take the following courses as part of their major:

MATH 4310 - Introduction to Real Analysis I. **Semester Hours: 4**  
-and-  
MATH 4320 - Introduction to Real Analysis II. **Semester Hours: 4**

### **Required Courses for Each Option**

#### **PURE MATHEMATICS OPTION**

All core courses (30 semester hours), plus the following:

MATH 3140 - Introduction to Modern Algebra. **Semester Hours: 3**  
MATH 4201 - Topology. **Semester Hours: 3**  
MATH 4310 - Introduction to Real Analysis I. **Semester Hours: 4**  
MATH 4320 - Introduction to Real Analysis II. **Semester Hours: 4**  
Two approved math electives (6 semester hours)  
**Pure Mathematics Option Total: 50 Hours**

#### **APPLIED MATHEMATICS OPTION**

All core courses with MATH 3200 and 4810 chosen (30 semester hours), plus the following:

MATH 3301 - Introduction to Operations Research I - Deterministic Systems. **Semester Hours: 3**  
-OR-  
MATH 4408 - Applied Graph Theory. **Semester Hours: 3**  
MATH 4650 - Numerical Analysis I. **Semester Hours: 3**  
Two modeling courses, chosen from:  
MATH 4387 - Regression Analysis, Modeling and Time Series. **Semester Hours: 3**  
MATH 4791 - Continuous Modeling. **Semester Hours: 3**  
MATH 4792 - Probabilistic Modeling. **Semester Hours: 3**  
MATH 4793 - Discrete Math Modeling. **Semester Hours: 3**  
MATH 4794 - Optimization Modeling. **Semester Hours: 3**  
Two approved math electives: **6 semester hours**

## **Applied Mathematics Option Total: 48 Hours**

### **COMPUTER SCIENCE OPTION**

All core courses with MATH 4408 chosen (30 semester hours), plus the following:

C SC 2421 - Data Structures and Program Design. **Semester Hours: 3**

MATH 3140 - Introduction to Modern Algebra. **Semester Hours: 3**

MATH 4650 - Numerical Analysis I. **Semester Hours: 3**

MATH 4660 - Numerical Analysis II. **Semester Hours: 3**

-OR-

MATH 4674 - Parallel Computing and Architectures. **Semester Hours: 3**

One modeling course, chosen from:

MATH 4387 - Regression Analysis, Modeling and Time Series. **Semester Hours: 3**

MATH 4791 - Continuous Modeling. **Semester Hours: 3**

MATH 4792 - Probabilistic Modeling. **Semester Hours: 3**

MATH 4793 - Discrete Math Modeling. **Semester Hours: 3**

MATH 4794 - Optimization Modeling. **Semester Hours: 3**

Two approved math electives: **6 semester hours**

**Computer Science Option Total: 51 Hours**

### **DISCRETE MATHEMATICS OPTION**

This option allows students and advisors to create a program that differs from the pre-approved option.

Such a program must be approved by the advisor at least one year before graduation.

MATH 1401 - Calculus I: MA1. **Semester Hours: 4**

MATH 2411 - Calculus II: MA1. **Semester Hours: 4**

MATH 2421 - Calculus III: MA1. **Semester Hours: 4**

MATH 3000 - Introduction to Abstract Mathematics. **Semester Hours: 3**

MATH 3140 - Introduction to Modern Algebra. **Semester Hours: 3**

MATH 3191 - Applied Linear Algebra. **Semester Hours: 3**

MATH 3250 - Problem Solving Tools. **Semester Hours: 3**

MATH 3800 - Probability and Statistics for Engineers. **Semester Hours: 3**

-OR-

MATH 4810 - Probability. **Semester Hours: 3**

MATH 4201 - Topology. **Semester Hours: 3**

-OR-

MATH 4310 - Introduction to Real Analysis I. **Semester Hours: 4**

MATH 4408 - Applied Graph Theory. **Semester Hours: 3**

MATH 4409 - Applied Combinatorics. **Semester Hours: 3**

MATH 4779 - Math Clinic. **Semester Hours: 3**

MATH 4793 - Discrete Math Modeling. **Semester Hours: 3**

-OR-

MATH 4794 - Optimization Modeling. **Semester Hours: 3**

Choose one course from the following

MATH 3210 - Higher Geometry I. **Semester Hours: 3**

MATH 4110 - Theory of Numbers. **Semester Hours: 3**

MATH 4220 - Higher Geometry II. **Semester Hours: 3**

MATH 4410 - Mathematics of Coding Theory. **Semester Hours: 3**

One math elective numbered above MATH 3000, excluding MATH 3040.

**Discrete Mathematics Option Total: 48-49 Hours**

## **PROBABILITY AND STATISTICS OPTION**

All core courses with MATH 3200 and 4810 chosen (30 semester hours), plus the following:

MATH 4650 - Numerical Analysis I. **Semester Hours: 3**

MATH 4792 - Probabilistic Modeling. **Semester Hours: 3**

MATH 4820 - Statistics. **Semester Hours: 3**

One course from the discrete mathematics area: **3 semester hours**

Two approved math electives: **6 semester hours**

**Probability and Statistics Option Total: 48 Hours**

## **ACTUARIAL SCIENCE OPTION**

All core courses with MATH 3200 and 4810 chosen (30 semester hours), plus the following:

MATH 3301 - Introduction to Operations Research I - Deterministic Systems. **Semester Hours: 3**

-OR-

MATH 4408 - Applied Graph Theory. **Semester Hours: 3**

MATH 4387 - Regression Analysis, Modeling and Time Series. **Semester Hours: 3**

MATH 4650 - Numerical Analysis I. **Semester Hours: 3**

MATH 4820 - Statistics. **Semester Hours: 3**

One modeling course, chosen from:

MATH 4791 - Continuous Modeling. **Semester Hours: 3**

MATH 4792 - Probabilistic Modeling. **Semester Hours: 3**

MATH 4793 - Discrete Math Modeling. **Semester Hours: 3**

MATH 4794 - Optimization Modeling. **Semester Hours: 3**

Approved math elective: **3 semester hours**

**Actuarial Science Option Total: 48 Hours**

**Suggested minor for actuarial science major option:**

Actuaries need a background in business, particularly accounting, economics and finance. You are strongly advised to do a minor in one of these areas. Recommended classes are:

ACCT 2200 - Financial Accounting and Financial Statement Analysis. **Semester Hours: 3**

ECON 2012 - Principles of Economics: Macroeconomics: SS1. **Semester Hours: 3**

ECON 2022 - Principles of Economics: Microeconomics: SS1. **Semester Hours: 3**

FNCE 3000 - Principles of Finance. **Semester Hours: 3**

## **MATHEMATICS EDUCATION OPTION**

All core courses with MATH 3800 and 4408 chosen (30 semester hours), plus the following:

MATH 3140 - Introduction to Modern Algebra. **Semester Hours: 3**

MATH 3210 - Higher Geometry I. **Semester Hours: 3**

MATH 4010 - History of Mathematics. **Semester Hours: 3**

MATH 4201 - Topology. **Semester Hours: 3**

One modeling course, chosen from:

MATH 4387 - Regression Analysis, Modeling and Time Series. **Semester Hours: 3**

MATH 4791 - Continuous Modeling. **Semester Hours: 3**

MATH 4792 - Probabilistic Modeling. **Semester Hours: 3**

MATH 4793 - Discrete Math Modeling. **Semester Hours: 3**

MATH 4794 - Optimization Modeling. **Semester Hours: 3**

Approved math elective: **3 semester hours**

**Mathematics Education Option Total: 48 Hours**

### **Note:**

Certification by the School of Education and Human Development is required for public school teaching. Contact the school for details.

# **Mechanical Engineering BS**

## **Program Objectives**

The program offered by the Department of Mechanical Engineering of the University of Colorado Denver can be completed in the afternoon and evening hours to accommodate both working and traditional students. The department seeks to graduate a diverse population of students with bachelor's and master's degrees, enabling them to:

be employed by a diverse group of industries, research laboratories and educational institutions

pursue careers in traditional engineering, interdisciplinary areas, research and education  
pursue postgraduate education and advanced degrees

## Typical Curriculum for BS (Mechanical Engineering—see note 5)

### Freshman Year

#### First Semester

CHEM 1130 - Engineering General Chemistry. **Semester Hours: 5**  
ENGL 1020 - Core Composition I: CO1. **Semester Hours: 3** (*see note 2*)  
ENGR 1025 - Engineering Graphics and Computer-Aided Design. **Semester Hours: 3**  
MATH 1401 - Calculus I: MA1. **Semester Hours: 4**

**Total: 15 Hours**

#### Second Semester

MATH 2411 - Calculus II: MA1. **Semester Hours: 4**  
M E Technical Elective—lower level (*see note 4*) (3 semester hours)  
PHYS 2311 - General Physics I: Calculus-Based. **Semester Hours: 4**  
PHYS 2321 - General Physics Lab I. **Semester Hours: 1**  
Core Curriculum Elective (*see note 1*) (3 semester hours)

**Total: 15 Hours**

### Sophomore Year

#### First Semester

MATH 2421 - Calculus III: MA1. **Semester Hours: 4**  
M E 2023 - Statics. **Semester Hours: 3** (*see note 3*)  
PHYS 2331 - General Physics II: Calculus-Based. **Semester Hours: 4**  
PHYS 2341 - General Physics Lab II. **Semester Hours: 1**  
Core Curriculum Electives (*see note 1*) (6 semester hours)

**Total: 18 Hours**

#### Second Semester

ENGL 2030 - Core Composition II: CO2. **Semester Hours: 3**  
ENGR 3012 - Thermodynamics. **Semester Hours: 3**  
MATH 3195 - Linear Algebra and Differential Equations. **Semester Hours: 4**  
M E 2033 - Dynamics. **Semester Hours: 3** (*see note 3*)  
M E 3030 - Electric Circuits and Systems. **Semester Hours: 3**  
M E 3032 - Electric Circuits and Systems Lab. **Semester Hours: 1**

**Total: 17 Hours**

## **Junior Year**

### **First Semester**

M E 3010 - Elementary Numerical Methods and Programming. **Semester Hours: 3**  
M E 3021 - Introduction to Fluid Mechanics. **Semester Hours: 3**  
M E 3022 - Thermodynamics II. **Semester Hours: 3**  
M E 3027 - Measurements. **Semester Hours: 3**  
M E 3028 - Laboratory of Mechanical Measurements. **Semester Hours: 1**  
M E 3043 - Strength of Materials. **Semester Hours: 3**

**Total: 16 Hours**

### **Second Semester**

M E 3023 - System Dynamics I: Vibrations. **Semester Hours: 3**  
M E 3024 - Introduction to Materials Science. **Semester Hours: 3**  
M E 3031 - Fluids/Thermal Laboratory. **Semester Hours: 1**  
M E 3034 - Properties of Engineering Materials. **Semester Hours: 1**  
M E 3035 - Design of Mechanical Elements. **Semester Hours: 3**  
M E 3042 - Heat Transfer. **Semester Hours: 3**  
M E 3065 - Intermediate Dynamics. **Semester Hours: 3**

**Total: 17 Hours**

## **Senior Year**

### **First Semester**

M E 3145 - Manufacturing Processes Design. **Semester Hours: 3**  
M E 4023 - System Dynamics II: Controls. **Semester Hours: 3**  
M E 4035 - Senior Design I. **Semester Hours: 3**  
M E Technical Electives (3 semester hours)  
Core Curriculum Elective (*see note 1*) (3 semester hours)

**Total: 15 Hours**

### **Second Semester**

M E 4045 - Senior Design II. **Semester Hours: 3**

M E Technical Electives (6 semester hours)

Core Curriculum Electives (*see note 1*) (6 semester hours)

**Total: 15 Hours**

## **Program Total: 128 Hours**

Students should check with departmental advisors to determine their degree requirements. The particular curriculum to be satisfied by each student is the one published in the catalog *current* at the time of their matriculation. For additional information, see the departmental advisor.

Students should refer to the section in this chapter on “Academic Policies” of the College of Engineering and Applied Science. In addition to planning for sequences of courses based on prerequisites, students should plan to complete sophomore-level courses before taking junior level courses and should have completed their junior-level mechanical engineering courses before starting their senior-level mechanical engineering electives. All students should see their advisors at least once each semester.

Common core requirements of the College of Engineering and Applied Science. Refer to the “Undergraduate Core Curriculum in Engineering” in this catalog or to the “Common Core Requirements” guide available from your advisor for further information.

The communication requirements include ENGL 1020, Core Composition I, and ENGL 2030, Core Composition II.

C E 2121 and 3111 may be substituted for ME 2023 and 2033.

Not all courses may be offered every semester. Students should check the current *Schedule Planner*.

Students enrolled prior to fall 2006 may choose either the new core curriculum or the old core curriculum.

## **Music BS**

CAM Core Requirements

### **Undergraduate Degree Requirements**

Please refer to the MEIS *Student Handbook* at <http://cam.ucdenver.edu/meis> for additional guidelines and information.

Students complete the 54 semester hours of music foundation and then select one of the emphasis areas. Students must pass a musical audition as part of application process and pass varying levels of performance proficiency. All courses within the major must be completed with a C (2.0) or better.

## Music Foundation Courses

MUS 2470 - Music Applications on the Computer. **Semester Hours: 3**

MUS 2540 - Audio Production I. **Semester Hours: 3**

MUS 2700 - Introduction to Music Business. **Semester Hours: 3**

MUS 4720 - Music Management. **Semester Hours: 3** or

MUS 4750 - Music and Entertainment Marketing. **Semester Hours: 3**

PMUS 1023 - Piano Class. **Semester Hours: 1** Level I

PMUS 1023 - Piano Class. Level II

PMUS 1023 - Piano Class. Level III

PMUS 1023 - Piano Class. Level IV

PMUS 1100 - Music Theory I. **Semester Hours: 3**

PMUS 1110 - Ear Training and Sight Singing I. **Semester Hours: 1**

PMUS 1200 - Music Theory II. **Semester Hours: 3**

PMUS 1210 - Ear Training and Sight Singing II. **Semester Hours: 1**

PMUS 1500 - General Recital. **Semester Hours: 0**

PMUS 1500 - General Recital.

PMUS 1500 - General Recital.

PMUS 1500 - General Recital.

PMUS 1 \_\_\_\_ - Applied Music (2 semester hours)

PMUS 1 \_\_\_\_ - Applied Music (2 semester hours)

PMUS 1 \_\_\_\_ - Applied Music (2 semester hours)

PMUS 1 \_\_\_\_ - Applied Music (2 semester hours)

PMUS 2000 - Music Ensembles. **Semester Hours: 1**

PMUS 2000 - Music Ensembles.

PMUS 2000 - Music Ensembles.

PMUS 2000 - Music Ensembles.

PMUS 2000 - Music Ensembles. or

PMUS 4000 - Music Ensembles. **Semester Hours: 1**

PMUS 2000 - Music Ensembles. or

PMUS 4000 - Music Ensembles.

PMUS 2100 - Music Theory III. **Semester Hours: 3**

PMUS 2110 - Ear Training and Sight Singing III. **Semester Hours: 1**

PMUS 2200 - Contemporary Styles. **Semester Hours: 3**

PMUS 3830 - History and Literature of Music I. **Semester Hours: 3**

PMUS 3831 - History and Literature of Music II. **Semester Hours: 3**

PMUS \_\_\_\_ - UD Music History Elective\* (3 semester hours)

**Total: 54 Hours**

\* UD = upper division (3000- or 4000- level course)

## **Performance Emphasis Courses**

PMUS 1500 - General Recital. **Semester Hours: 0**

PMUS 1500 - General Recital.

PMUS 1500 - General Recital.

PMUS 1500 - General Recital.

PMUS 3300 - Advanced Sight Reading and Improvisation. **Semester Hours: 2**

PMUS 3 \_\_\_\_ - Applied Music (3 semester hours)

PMUS 3 \_\_\_\_ - Applied Music (3 semester hours)

PMUS 3 \_\_\_\_ - Applied Music (3 semester hours)

PMUS 3 \_\_\_\_ - Applied Music (3 semester hours)

PMUS 4000 - Music Ensembles. **Semester Hours: 1**

PMUS 4000 - Music Ensembles.

PMUS 4200 - Senior Recital. **Semester Hours: 2**

**Total: 22 Hours**

## **Music Business Emphasis Courses**

MUS 2560 - Audio Production II. **Semester Hours: 4**

MUS 3720 - Law and the Music Industry. **Semester Hours: 3**

MUS 4501 - Music Business Senior Seminar. **Semester Hours: 3**

MUS 4720 - Music Management. **Semester Hours: 3 or**

MUS 4750 - Music and Entertainment Marketing. **Semester Hours: 3**

MUS 4740 - Music Business Analysis. **Semester Hours: 3**

MUS 4770 - Concert Promotion, Tour and Venue Management. **Semester Hours: 3**

MUS \_\_\_\_ - UD Music Business Elective (6 semester hours)

**Total: 25 Hours**

## **Recording Emphasis Courses**

Students must be accepted into the recording arts emphasis before being able to take any of the upper-division courses in this area. Please consult a CAM advisor for details.

MUS 2560 - Audio Production II. **Semester Hours: 4**

MUS 3540 - Recording Studio Maintenance and Calibration. **Semester Hours: 3**

MUS 3550 - Critical Listening for Recording Arts. **Semester Hours: 3**

MUS 4505 - Audio Sweetening. **Semester Hours: 4 or**

MUS 4575 - Surround Sound. **Semester Hours: 4**  
MUS 4550 - Audio Production III. **Semester Hours: 4**  
MUS 4580 - Audio Production Seminar. **Semester Hours: 3** (Junior Project)  
    MUS 4580 - Audio Production Seminar. (Senior Project)  
    MUS \_\_\_\_ - Recording Arts Elective (1 semester hours)  
PHYS 3620 - Sound and Music. **Semester Hours: 3**

**Total: 28 Hours**

# Music Industry Studies Emphasis—BS in Music

CAM Core Requirements

## Undergraduate Degree Requirements

Please refer to the MEIS Student Handbook at <http://cam.ucdenver.edu/meis> for additional guidelines and information.

Students complete the 14 semester hours of music performance courses, 20 semester hours of musicianship courses, 13 semester hours of MIS core courses and 26 semester hours of their music business or music technology courses. While no audition is required as part of the application process, students are required to complete the performance and musicianship courses. All major courses must be passed with a C (2.0) or better.

## Music Performance, Musicianship and MIS Core Courses

MUS 2300 - Introduction to Songwriting. **Semester Hours: 3**  
MUS 2470 - Music Applications on the Computer. **Semester Hours: 3**  
MUS 2540 - Audio Production I. **Semester Hours: 3**  
MUS 2560 - Audio Production II. **Semester Hours: 4**  
MUS 2700 - Introduction to Music Business. **Semester Hours: 3**  
MUS 4720 - Music Management. **Semester Hours: 3**  
    or  
MUS 4750 - Music and Entertainment Marketing. **Semester Hours: 3**  
PMUS 1023 - Piano Class. **Semester Hours: 1** Level I  
    PMUS 1023 - Piano Class. Level II  
    PMUS \_\_\_\_ - Piano III or Guitar I or Voice I (1 semester hour)  
    PMUS \_\_\_\_ - Piano III or Guitar I or Voice II (1 semester hour)  
PMUS 1100 - Music Theory I. **Semester Hours: 3**  
PMUS 1110 - Ear Training and Sight Singing I. **Semester Hours: 1**  
PMUS 1200 - Music Theory II. **Semester Hours: 3**

PMUS 1210 - Ear Training and Sight Singing II. **Semester Hours: 1**  
PMUS 1310 - Beginning Sight Reading and Improvisation. **Semester Hours: 2**  
PMUS 1400 - Group Applied Lessons. **Semester Hours: 2**  
PMUS 1500 - General Recital. **Semester Hours: 0**  
    PMUS 1500 - General Recital.  
PMUS 1800 - Applied Music: Music Industry Studies. **Semester Hours: 2**  
PMUS 2000 - Music Ensembles. **Semester Hours: 1**  
    PMUS 2000 - Music Ensembles.  
PMUS 2200 - Contemporary Styles. **Semester Hours: 3**  
    or  
MUS 2220 - Commercial Electronic Music Composition. **Semester Hours: 3**  
    or  
MUS 3310 - Songwriting II. **Semester Hours: 3**  
PMUS 3830 - History and Literature of Music I. **Semester Hours: 3**  
PMUS 3831 - History and Literature of Music II. **Semester Hours: 3**  
    \_\_\_\_ \_\_\_\_ - Electives in Performance (2 semester hours)

**Total: 50 Hours**

Students select either music business or music technology and complete all listed courses and elective credits.

## **Music Business Focus Courses**

MUS 3720 - Law and the Music Industry. **Semester Hours: 3**  
MUS 4501 - Music Business Senior Seminar. **Semester Hours: 3**  
MUS 4720 - Music Management. **Semester Hours: 3**  
    or  
MUS 4750 - Music and Entertainment Marketing. **Semester Hours: 3**  
MUS 4740 - Music Business Analysis. **Semester Hours: 3**  
MUS 4770 - Concert Promotion, Tour and Venue Management. **Semester Hours: 3**  
    \_\_\_\_ \_\_\_\_ - Music Business Electives (11 semester hours)

**Total: 26 Hours**

## **Music Technology Focus Courses**

Students must be accepted into the MIS/tech focus before being able to take any of the upper-division courses in this area. Please consult CAM advisor for more details.

MUS 3540 - Recording Studio Maintenance and Calibration. **Semester Hours: 3**  
MUS 3550 - Critical Listening for Recording Arts. **Semester Hours: 3**

MUS 4505 - Audio Sweetening. **Semester Hours: 4**  
or  
MUS 4575 - Surround Sound. **Semester Hours: 4**  
MUS 4550 - Audio Production III. **Semester Hours: 4**  
MUS 4580 - Audio Production Seminar. **Semester Hours: 3** (Junior Project)  
MUS 4580 - Audio Production Seminar. (Senior Project)  
PHYS 3620 - Sound and Music. **Semester Hours: 3**  
\_\_\_\_ - Music Technology Electives (3 semester hours)

**Total: 26 Hours**

## Philosophy BA

Students must declare a major by the time they have completed 60 semester hours of course work. A total of 36 semester hours must be completed for the philosophy major, at least 18 of which must be taken at the Downtown Campus. A minimum grade of C (2.0) is required in each course. For those students who qualify for and fulfill the requirements for graduation with honors, a total of at least 39 hours is required. A total of 18 upper-division semester hours are required for the major.

Unless otherwise noted, registration for 4000-level courses in philosophy require a minimum grade of C (2.0) in every prior philosophy course and completion of at least PHIL 3002 or PHIL 3022 or permission of instructor.

## Program Requirements

### Required Courses

PHIL 2441 - Logic and Language: AH3. **Semester Hours: 3**  
PHIL 3002 - Ancient Greek Philosophy. **Semester Hours: 3**  
PHIL 3022 - Modern Philosophy. **Semester Hours: 3**  
(It is recommended, but not required, that PHIL 3002 be taken before PHIL 3022)  
PHIL 4735 - Rationalism. **Semester Hours: 3**  
-OR-  
PHIL 4740 - Empiricism. **Semester Hours: 3**  
-OR-  
PHIL 4760 - Kant. **Semester Hours: 3**

**Total: 12 Hours**

**Additional required course subject areas**

(upper-division courses)

One course in 19th century philosophy (may be a single figure course)

One course in 20th century philosophy (may be a single figure course)

One course in metaphysics or epistemology

One course in ethics or social and political philosophy

**Total: 12 Hours**

### **Additional electives**

Choose four (maximum of 6 hours in religious studies)

**Total: 12 Hours**

## **Major Total: 36 Hours**

### **Course work required for graduation with honors:**

3-6 semester hours taken over two semesters of:

PHIL 4950 - Honors Thesis. **Semester Hours:** 3 to 6

Return to Department of Philosophy

# **Physics BS**

## **Program Requirements**

Students must declare their intention to major in physics by the time they have completed 60 semester hours and complete between 47 and 51 semester hours (depending on the track chosen) in physics and related topics. Additionally, all tracks require 16 semester hours in math ancillary courses. No grade below a C (2.0) can be used to meet the requirements for the major. At least 12 semester hours of the requirements for the major must be completed at the Downtown Campus.

A senior thesis, usually from participation in research, is *required* for all students wishing to graduate with departmental honors. All other students are encouraged to do research leading to a project report or senior thesis.

### **Required Courses Common to All Tracks**

## Required Physics Courses

PHYS 2311 - General Physics I: Calculus-Based. **Semester Hours: 4**  
PHYS 2331 - General Physics II: Calculus-Based. **Semester Hours: 4**  
PHYS 2371 - Topic-Driven Physics Lab. **Semester Hours: 3**  
PHYS 2711 - Vibrations and Waves. **Semester Hours: 3**  
PHYS 2811 - Modern Physics I. **Semester Hours: 4**  
PHYS 3120 - Methods of Mathematical Physics. **Semester Hours: 3**  
PHYS 3711 - Junior Laboratory I. **Semester Hours: 2**  
PHYS 3811 - Quantum Mechanics. **Semester Hours: 3**

*Note:* The department will accept the following combination of independent study and introductory lab courses in lieu of PHYS 2371. However, PHYS 2371 is strongly recommended because it provides explicit preparation for upper division lab courses.

PHYS 1840 - Independent Study. **Semester Hours: 1 to 3**  
PHYS 2321 - General Physics Lab I. **Semester Hours: 1**  
PHYS 2341 - General Physics Lab II. **Semester Hours: 1**

**Total physics courses required for all tracks: 26 Hours**

## Required Ancillary Courses

MATH 1401 - Calculus I: MA1. **Semester Hours: 4**  
MATH 2411 - Calculus II: MA1. **Semester Hours: 4**  
MATH 2421 - Calculus III: MA1. **Semester Hours: 4**  
MATH 3195 - Linear Algebra and Differential Equations. **Semester Hours: 4**

*Note:* The department will accept the following combination of math courses in place of MATH 3195:

MATH 3191 - Applied Linear Algebra. **Semester Hours: 3**  
MATH 3200 - Elementary Differential Equations. **Semester Hours: 3**

**Total ancillary math courses required for all tracks: 16 Hours**

**Total required semester hours for all physics major tracks: 42 Hours**

<sup>^</sup>Top

## Pure and Applied Physics (Track 1)

Take in addition to the courses common to all tracks:

PHYS 3211 - Analytical Mechanics. **Semester Hours: 4**  
PHYS 3411 - Thermal Physics. **Semester Hours: 3**

PHYS 3721 - Junior Laboratory II. **Semester Hours: 2**

PHYS 4331 - Principles of Electricity and Magnetism. **Semester Hours: 4**

*Note:* Students who must *retake* PHYS 4331 may fulfill this requirement by obtaining a C or better in

PHYS 4351 - Bioelectromagnetism. **Semester Hours: 4**

PHYS 4711 - Senior Laboratory I. **Semester Hours: 2**

(or a course in computational physics approved by advisor)

### **Elective Physics Courses**

Six semester hours of physics-related electives at 3000-level or above approved by advisor, including up to 3 hours of independent study

### **Total Track 1 Specific Courses: 21 Hours**

### **Biophysics and Medical Physics (Track 2)**

Take in addition to the courses common to all tracks:

PHYS 3251 - Biophysics of the Body. **Semester Hours: 4**

PHYS 3411 - Thermal Physics. **Semester Hours: 3**

PHYS 4351 - Bioelectromagnetism. **Semester Hours: 4**

(recommended option)

-OR-

PHYS 4331 - Principles of Electricity and Magnetism. **Semester Hours: 4**

### **Biophysics electives (8-9 hours)**

Biophysics electives at the 3000-level or above approved by advisor (including up to 3 semester hours independent study and/or two courses, PHYS 3151 and PHYS 3161, listed below)

-OR-

The following four courses (an option primarily for pre-med physics majors):

\* BIOL 2051 - General Biology I: SC1. **Semester Hours: 3**

\* BIOL 2061 - General Biology II: SC1. **Semester Hours: 3**

PHYS 3151 - Biophysics Outlook I. **Semester Hours: 1**

PHYS 3161 - Biophysics Outlook II. **Semester Hours: 1**

PHYS 3721 - Junior Laboratory II. **Semester Hours: 2**

-OR-

The following two courses (an option primarily for pre-med physics majors):

\* BIOL 2071 - General Biology Laboratory I: SC1. **Semester Hours: 1**

\* BIOL 2081 - General Biology Laboratory II: SC1. **Semester Hours: 1**

Numerical modeling or probability and statistics course approved by advisor: **3 semester hours**

**Total Track 2 Specific Courses: 25 Hours**

**Major Total: 63-67 Hours**

### **Pre-Med Students**

*Note:* courses above marked \* are generally required for medical school admissions. In addition, the following are generally required for medical school admissions but NOT for the biophysics and medical physics track:

- \* CHEM 2031 - General Chemistry I: SC1. **Semester Hours: 3**
- \* CHEM 2038 - General Chemistry Laboratory I: SC1. **Semester Hours: 1**
- \* CHEM 2061 - General Chemistry II: SC1. **Semester Hours: 3**
- \* CHEM 2068 - General Chemistry Laboratory II: SC1. **Semester Hours: 2**
- \* CHEM 3411 - Organic Chemistry I. **Semester Hours: 4**
- \* CHEM 3418 - Organic Chemistry Laboratory I. **Semester Hours: 1**
- \* CHEM 3421 - Organic Chemistry II. **Semester Hours: 4**
- \* CHEM 3428 - Organic Chemistry Laboratory II. **Semester Hours: 1**

**Total additional pre-med (but not required for Track 2): 19 hours**

[Return to Department of Physics](#)

## **Political Science BA**

Undergraduate students must declare their intention to major in political science by the time they have completed 60 semester hours, and must complete a minimum of 36 semester hours in political science, of which at least 21 must be upper-division courses. Fifteen of the 36 hours must be taken from Downtown Campus faculty. Courses are distributed among the primary fields as listed in this section, i.e., American politics, comparative politics, international relations, political theory and public policy and administration. To count for the major, all course work must be completed with a grade of C (2.0) or better. Two cognate courses (which don't count toward the 36 hours) from the list below must also be completed.

### **Required Political Science Courses**

## Required Core

P SC 1001 - Introduction to Political Science: The Quest for Freedom and Justice: SS1.

**Semester Hours: 3**

P SC 1101 - American Political System: SS1. **Semester Hours: 3**

P SC 3011 - Research Methods. **Semester Hours: 3**

-OR-

P SC 4011 - GIS in Political Science. **Semester Hours: 3**

**Total: 9 Hours**

## Choose two:

P SC 4207 - Theories of Social and Political Change. **Semester Hours: 3**

P SC 4407 - Early Political Thought. **Semester Hours: 3**

P SC 4417 - Modern Political Thought. **Semester Hours: 3**

P SC 4427 - Law, Politics and Justice. **Semester Hours: 3**

P SC 4437 - Coercion and the State. **Semester Hours: 3**

P SC 4457 - American Political Thought. **Semester Hours: 3**

**Total: 6 Hours**

## One 4000-level course in each of three fields:

American politics, comparative politics, and international relations

**Total: 9 Hours**

## Experiential-Learning Requirement

### Choose one:

P SC 3914 - The Urban Citizen. **Semester Hours: 3**

P SC 3939 - Internship/Cooperative Education. **Semester Hours: 1 to 3**

P SC 4934 - CU at the Capitol. **Semester Hours: 3**

Experiential learning project in any P SC class: **3 semester hours**

**Total: 3 Hours**

## Electives

Three political science elective courses

**Total: 9 Hours**

## **Political Science Total: 36 Hours**

### **Required Cognate Courses**

In addition to the 36 hours above, choose two of the following cognate courses:

ECON 2012 - Principles of Economics: Macroeconomics: SS1. **Semester Hours: 3**

ECON 2022 - Principles of Economics: Microeconomics: SS1. **Semester Hours: 3**

HIST 1016 - World History to 1500. **Semester Hours: 3**

HIST 1026 - World History Since 1500. **Semester Hours: 3**

HIST 1211 - Western Civilization I. **Semester Hours: 3**

HIST 1212 - Western Civilization II. **Semester Hours: 3**

HIST 1361 - U.S. History to 1876: HI1. **Semester Hours: 3**

HIST 1362 - U.S. History Since 1876: HI1. **Semester Hours: 3**

**Total: 6 Hours**

## **Major Total: 42 Hours**

### **Public Policy Option**

This option was designed for students who specifically desire to pursue careers in public policy and/or public administration in the public or nonprofit sectors. Grounded in basic political science theory and familiarity with American, comparative and international politics, this BA track emphasizes the specifically political aspects of public policy processes and settings. Cases will emphasize key policy issues confronting U.S. local, state and national decision makers and citizens. A focus on politics and the policy making process will prepare students conceptually and methodologically to move beyond partisan politics to address how leaders can best mobilize resources to achieve constituent goals consistent with the public interest. The course requirements for this concentration are on the department's Web site: <http://thunder1.cudenver.edu/clas/polisci/major.html#publicPolicy>.

Return to Department of Political Science

## **Psychology BA**

Students should consult with the advisor when they declare a psychology major, which must be done once they have completed 60 semester hours of course work. Psychology BA major requirements include at least 37 and not more than 48 semester hours in psychology. Of these, at least 15 hours must be in upper-division courses completed at the Downtown Campus. No grade below C (2.0) will be accepted toward the major requirements. Note that a prior college-level algebra course is strongly recommended for PSY 2090.

PSY 3939, Internship/Cooperative Education, does NOT count toward the 37-hour minimum or the 15-hour upper-division requirement, but it does count as elective psychology credit.

## Program Requirements

### Required Courses

- PSY 1000 - Introduction to Psychology I: SS3. **Semester Hours: 3**
- PSY 1005 - Introduction to Psychology II: SS3. **Semester Hours: 3**
- PSY 2090 - Statistics and Research Methods. **Semester Hours: 4**
- PSY 2220 - Biological Basis of Behavior: SC2. **Semester Hours: 3**

**Total: 13 Hours**

**Choose three, including one or both PSY 3222 and PSY 4144:**

- PSY 3104 - Behavioral Genetics. **Semester Hours: 3**
- PSY 3222 - Principles of Learning and Behavior. **Semester Hours: 3**
- PSY 3254 - Introduction to Animal Behavior. **Semester Hours: 3**
- PSY 3262 - Health Psychology. **Semester Hours: 3**
- PSY 3263 - Hormones and Behavior. **Semester Hours: 3**
- PSY 3265 - Drugs, Brain and Behavior. **Semester Hours: 3**
- PSY 3724 - Developmental Psychobiology. **Semester Hours: 3**
- PSY 3810 - Neuropsychology. **Semester Hours: 3**
- PSY 3822 - Aging, Brain and Behavior. **Semester Hours: 3**
- PSY 4054 - Behavioral Neuroscience. **Semester Hours: 3**
- PSY 4144 - Human Cognition. **Semester Hours: 3**
- PSY 4164 - Psychology of Perception. **Semester Hours: 3**

**Total: 9 Hours**

**Choose four, including at least two or all three of PSY 3205, PSY 3305, and PSY 4415:**

- PSY 3090 - Research Methods in Experimental Psychology. **Semester Hours: 4**
- PSY 3135 - Organizational Psychology. **Semester Hours: 3**
- PSY 3205 - Human Development I: Child Psychology. **Semester Hours: 3**
- PSY 3215 - Human Development II: Adolescence and Adulthood. **Semester Hours: 3**
- PSY 3235 - Human Sexuality. **Semester Hours: 3**
- PSY 3305 - Abnormal Psychology. **Semester Hours: 3**
- PSY 3405 - Family Psychology. **Semester Hours: 3**
- PSY 3505 - Psychology and the Law. **Semester Hours: 3**
- PSY 3610 - Psychological Trauma. **Semester Hours: 3**
- PSY 3611 - Psychology of Women. **Semester Hours: 3**
- PSY 3612 - Domestic Abuse. **Semester Hours: 3**

PSY 4415 - Experimental Social Psychology. **Semester Hours: 3**  
PSY 4455 - Theories of Personality. **Semester Hours: 3**  
PSY 4485 - Psychology of Cultural Diversity. **Semester Hours: 3**  
PSY 4500 - Psychotherapy. **Semester Hours: 3**  
PSY 4645 - Industrial Psychology. **Semester Hours: 3**  
PSY 4730 - Clinical Psychology: Ethics and Issues. **Semester Hours: 3**

**Total: 12-13 Hours**

**One integrative course:**

PSY 4511 - History of Psychology. **Semester Hours: 3**

**Total: 3 Hours**

**BA Major Total: 37-38 Hours**

## **PSYCHOLOGY BS REQUIREMENTS**

Return to Department of Psychology

# **Psychology BS**

Students must declare a major by the time they have completed 60 semester hours of course work. To be admitted to the BS major, students must have sophomore standing and have received grades of *B* or better in General Biology I and II for majors with laboratory, or the equivalent. Students must take at least 48 hours and a maximum of 56 semester hours in psychology, biology and chemistry that will count toward graduation. A minimum of 15 upper-division semester hours must be taken from Downtown Campus faculty. No grade below *C* is acceptable toward the major requirements; i.e., psychology, biology or chemistry courses in which a student earns a *C*- or below will not count toward the major.

## **Psychology Requirements**

### **Required Psychology Courses**

PSY 1000 - Introduction to Psychology I: SS3. **Semester Hours: 3**  
PSY 1005 - Introduction to Psychology II: SS3. **Semester Hours: 3**  
PSY 2090 - Statistics and Research Methods. **Semester Hours: 4**  
PSY 2220 - Biological Basis of Behavior: SC2. **Semester Hours: 3**  
PSY 4054 - Behavioral Neuroscience. **Semester Hours: 3**

**Total: 16 Hours**

**Choose two:**

PSY 3090 - Research Methods in Experimental Psychology. **Semester Hours: 4**

PSY 3104 - Behavioral Genetics. **Semester Hours: 3**

PSY 3222 - Principles of Learning and Behavior. **Semester Hours: 3**

PSY 3254 - Introduction to Animal Behavior. **Semester Hours: 3**

PSY 3263 - Hormones and Behavior. **Semester Hours: 3**

PSY 3265 - Drugs, Brain and Behavior. **Semester Hours: 3**

PSY 3724 - Developmental Psychobiology. **Semester Hours: 3**

PSY 3810 - Neuropsychology. **Semester Hours: 3**

PSY 3822 - Aging, Brain and Behavior. **Semester Hours: 3**

PSY 4164 - Psychology of Perception. **Semester Hours: 3**

**Total: 6-7 Hours**

### **Experiential Learning Requirement**

Students must complete at least one of the following (all require consultation with BS advisor AND permission of instructor):

PSY 3939 - Internship/Cooperative Education. **Semester Hours: 1 to 3** (2.75 GPA required)

PSY 4840 - Independent Study. **Semester Hours: 1 to 3**

Honors Project in Psychology (3.5 GPA required): **3 Semester Hours**

**Total: 3 Hours**

### **Physical and Biological Science Requirements**

#### **Required Courses**

BIOL 2051 - General Biology I: SC1. **Semester Hours: 3**

BIOL 2061 - General Biology II: SC1. **Semester Hours: 3**

BIOL 2071 - General Biology Laboratory I: SC1. **Semester Hours: 1**

BIOL 2081 - General Biology Laboratory II: SC1. **Semester Hours: 1**

CHEM 2031 - General Chemistry I: SC1. **Semester Hours: 3**

CHEM 2038 - General Chemistry Laboratory I: SC1. **Semester Hours: 1**

CHEM 2061 - General Chemistry II: SC1. **Semester Hours: 3**

CHEM 2068 - General Chemistry Laboratory II: SC1. **Semester Hours: 2**

**Total: 17 Hours**

**Choose two:**

BIOL 3225 - Human Physiology. **Semester Hours: 4**  
BIOL 3244 - Human Anatomy. **Semester Hours: 4**  
BIOL 3611 - General Cell Biology. **Semester Hours: 3**  
BIOL 3654 - General Microbiology. **Semester Hours: 4**  
BIOL 3832 - General Genetics. **Semester Hours: 4**  
BIOL 4134 - Human Genetics. **Semester Hours: 3**  
BIOL 4165 - Neurobiology. **Semester Hours: 3**  
BIOL 4621 - Immunology. **Semester Hours: 3**  
CHEM 4810 - General Biochemistry I. **Semester Hours: 3**

**Total: 6-8 Hours**

## **BS Major Total: 48-51 Hours**

Additional elective courses in psychology, biology and chemistry may be taken up to the maximum of 56 hours.

### **PSYCHOLOGY BA REQUIREMENTS**

[^Top](#)

[Return to Department of Psychology](#)

## **Sociology BA**

Students must declare a major by the time they have completed 60 semester hours of course work. The major requires a total of 34 hours with an average grade of C (2.0) in all courses. At least 16 of the 34 hours must be upper-division (3000-4000 level) courses. The maximum number of hours allowed in sociology is 48.

### **Course Requirements**

#### **Core Courses**

The core consists of the following group of courses, all of which must be completed with a grade of C (2.0) or better:

- SOC 1001 - Introduction to Sociology: SS3. **Semester Hours: 3**
- SOC 3001 - Urban Sociology. **Semester Hours: 3**
- \* SOC 3111 - Research Methods. **Semester Hours: 3**
- \* SOC 3121 - Statistics. **Semester Hours: 4**
- \* SOC 4150 - History of Sociological Theory. **Semester Hours: 3**

\* SOC 4160 - Contemporary Sociological Theory. **Semester Hours: 3**

**Total: 19 Hours**

\*Must be taken from Downtown Campus faculty

**Electives: 15 Hours**

Choose a minimum of 15 hours and a maximum of 29 hours of electives in sociology, with an average grade of C (2.0) in all courses.

**Major Total: 34 Hours**

All prospective majors should contact the department as early in their academic careers as possible for information and for assignment to a major advisor. Transfer or returning students should consult with the department chairman concerning completion of the core courses.

The department requires that at least 13 hours of sociology be taken from Downtown Campus faculty, including the following courses: SOC 3111, 3121, 4150 and 4160.

[Return to Department of Sociology](#)

## **Spanish BA**

The Spanish program studies the language, linguistics, literature, culture and civilization of Spain, Spanish America and the Spanish-speaking areas of the United States.

### **Admission and Grade Requirements**

To be admitted to major status in Spanish, students must have an overall GPA of C+ (2.3). The minimum grade acceptable in any course applied to a Spanish major or minor is a C (2.0). The GPA in all courses applied to a Spanish major or minor at UC Denver must be 2.5. No courses taken on a pass/fail basis may be credited toward a Spanish major or minor.

### **Residency Requirement**

The BA in Spanish requires 30 semester hours of upper-division course work in Spanish and 6 additional hours in related fields. A minimum of 18 semester hours of Spanish course work for the major, and 9 hours for the minor, must be taken from Spanish faculty at the Downtown

Campus. Courses taken at other institutions while a student is enrolled at UC Denver may be applied to the major only with departmental approval before enrollment in those courses.

## Proficiency Requirement

Before enrolling in their final semester in the language, Spanish majors must be evaluated by the faculty in oral and written skills. Students must see their Spanish advisor for specific information.

## Course Requirements for the Major

Students majoring in Spanish for the BA degree must complete 30 semester hours of upper-division course work, at least 12 of which must be at the 4000 level. All course work applied to the 30-semester hour minimum must be taught in Spanish. In addition, students must complete 6 semester hours in courses in related fields outside the curriculum in Spanish.

## Program Requirements

### Literature

SPAN 3252 - Introduction to the Study of Literature. **Semester Hours: 3**

At least one course on the literature of Spain: **3 semester hours**

At least one course on the literature of Spanish America: **3 semester hours**

**Total: 9 Hours**

### Language skills and theory

SPAN 3060 - Hispanic Phonetics: Theory and Practice. **Semester Hours: 3**

6 additional hours in language skills and theory

**Total: 9 Hours**

### Culture and civilization of Spain or Spanish America

#### Choose two:

SPAN 3070 - Bilingual Communities: Spanish as a Language of Contact. **Semester Hours: 3**

SPAN 3212 - Spanish American Culture and Civilization. **Semester Hours: 3**

SPAN 3221 - Culture and Civilization of Spain I. **Semester Hours: 3**

SPAN 3222 - Culture and Civilization of Spain II. **Semester Hours: 3**

SPAN 4230 - Modern Culture of Spain through Film and Narrative. **Semester Hours: 3**

**Total: 6 Hours**

### **Related fields**

**Choose 2 courses from the following fields of study:**

Latin American studies (from fields such as history, geography, political science, art history)

Hispanic American studies

Linguistics (in the fields of anthropology or English)

Comparative literature

Upper-division courses in another foreign language

**Total: 6 Hours**

**Major Total: 30 Hours**

## **International Language and Culture for the Professions Track**

This option in the Spanish major offers career possibilities, both in government and private industry, at home and abroad. Languages are useful in business, industry, commerce, civil service, law, library science, media, science, economics, health and social sciences. Students who follow this course of study could also qualify as teachers of general business subjects in bilingual as well as traditional school systems. (However, students who wish to be certified to teach Spanish in the public schools should consult the department for information concerning the undergraduate language licensure program.)

International Spanish for the professions is a controlled-enrollment major that takes two years to complete. Interested students should contact the Spanish advisor in the Department of Modern Languages to declare the major. This should be done as early as possible in the student's academic career, but not later than the second semester of the sophomore year.

### **Prerequisites**

**(These courses do not count toward the major total of 45 semester hours)**

ECON 2012 - Principles of Economics: Macroeconomics: SS1. **Semester Hours: 3**

ECON 2022 - Principles of Economics: Microeconomics: SS1. **Semester Hours: 3**

MATH 1070 - Algebra for Social Sciences and Business: MA1. **Semester Hours: 3**

-OR-

MATH 1110 - College Algebra: MA1. **Semester Hours: 3**

(or higher level math course)

SPAN 2110 - Second Year Spanish I. **Semester Hours: 3**

-OR-

SPAN 2120 - Second Year Spanish II. **Semester Hours: 3**

## **Required Spanish Courses**

- SPAN 3082 - Introduction to Translation I. **Semester Hours: 3**
- SPAN 3252 - Introduction to the Study of Literature. **Semester Hours: 3**
- SPAN 3700 - Spanish for International Business I. **Semester Hours: 3**
- SPAN 3710 - Spanish for International Business II. **Semester Hours: 3**

**Total: 12 Hours**

## **Two of the following language skills and theory courses:**

- SPAN 3010 - Advanced Conversation and Composition I. **Semester Hours: 3**
- SPAN 3020 - Advanced Conversation and Composition II. **Semester Hours: 3**
- SPAN 3060 - Hispanic Phonetics: Theory and Practice. **Semester Hours: 3**
- SPAN 3310 - Spanish Writing and Grammar I. **Semester Hours: 3**

**Total: 6 Hours**

## **Two of the following culture courses:**

- SPAN 3070 - Bilingual Communities: Spanish as a Language of Contact. **Semester Hours: 3**
- SPAN 3212 - Spanish American Culture and Civilization. **Semester Hours: 3**
- SPAN 3222 - Culture and Civilization of Spain II. **Semester Hours: 3**

**Total: 6 Hours**

## **Electives**

Two SPAN electives, to be taken at the 4000 level.

**Total: 6 Hours**

**Spanish Total: 30 Hours**

## **Business Courses**

(please be aware of prerequisites in business course descriptions)

- ACCT 2200 - Financial Accounting and Financial Statement Analysis. **Semester Hours: 3**
- MGMT 1000 - Introduction to Business. **Semester Hours: 3**
- MGMT 3000 - Managing Individuals and Teams. **Semester Hours: 3**
- MGMT 4400 - Environments of International Business. **Semester Hours: 3**
- MKTG 3000 - Principles of Marketing. **Semester Hours: 3**

**Business Total: 15 Hours**

**Spanish Business Option Total: 45 Hours**

**Recommended:**

Language study abroad / international travel or field study  
Internship in target language  
Official proficiency exam

## **Undergraduate Licensure Program in Spanish**

With this option, students complete a major in Spanish along with additional course work required for certification to teach Spanish in the public schools. This program should be chosen early in the students' careers. For information, consult the CLAS Advising Office Web site (phone 303-556-2555 or visit North Classroom, 4002) and the Spanish advisor.

## **Honors in Spanish**

Students who complete all the requirements for the Spanish major (as outlined above) and meet the following criteria are encouraged to talk with the Spanish faculty about participation in the honors program. Successful completion of this program by students majoring in Spanish leads to graduation with the distinction of *cum laude*, *magna cum laude* or *summa cum laude*.

*Cum laude*

Overall GPA of 3.5 or better and Spanish GPA of 3.8 or better

### **Magna cum laude or summa cum laude**

Overall GPA of 3.5 or better and Spanish GPA of 3.8 or better  
—and—

6 semester hours of *Spanish 4840, Independent Study*, spread over two semesters. The candidate must present the independent study topic for approval by the faculty honors committee by the end of the semester preceding the independent study. At the end of the independent study project, and at least one month before the end of the second semester, the candidate shall submit a **written thesis** to the faculty honors committee.

The designation of *magna* or *summa* will be the decision of the faculty honors committee.

Return to Department of Modern Languages

# Theatre, Film and Television 2+2 BFA

CAM Core Requirements

Cinematography  
Post-Production  
Writing/Directing

Students first apply to the Community College of Aurora (CCA) and take the film and video technology (FVT) courses as a CCA student. Students then transfer to UC Denver to complete the upper-division FILM courses. Students must apply for transfer admission and meet all transfer requirements. All major courses must be completed with a C (2.0) or better. Students entering UC Denver in fall 2008 who desire the BFA program will enter as a BA student. The BFA curriculum for the following year is currently under revision. For the most current information please check the TFVP Web site or contact the department office at 303-556-6352.

# Theatre, Film and Television BA

CAM Core Requirements

## Degree Requirements

All major courses and other arts courses must be completed with a C (2.0) or better.

## Curriculum for the BA in Theatre, Film and Television

### Required Courses

FILM 2090 - Production Management Techniques. **Semester Hours: 3**  
FILM 3820 - Production Process. **Semester Hours: 2 \***  
THTR 1100 - Introduction to Theatre, Film and Television. **Semester Hours: 3**  
THTR 1110 - Production Design: Theatre, Film and Video. **Semester Hours: 3**  
THTR 1550 - Scriptwriting I. **Semester Hours: 3** or  
FILM 1550 - Scriptwriting I. **Semester Hours: 3**  
THTR 1611 - Acting Lab I. **Semester Hours: 3** or  
FILM 1611 - Acting Lab I. **Semester Hours: 3**  
THTR 3540 - Directing: Text and Analysis. **Semester Hours: 3**  
THTR 3820 - Production Process. **Semester Hours: 2 \***  
THTR 3910 - BA Junior Project. **Semester Hours: 1** or  
FILM 3910 - BA Junior Project. **Semester Hours: 1**  
THTR 4910 - BA Senior Project. **Semester Hours: 1** or

FILM 4910 - BA Senior Project. **Semester Hours:** 1 (\*class must be taken two times)

**One of the following two are required:**

FILM 1050 - Video Production/Post-Production I. **Semester Hours:** 4

FILM 1060 - Camera/Multi-Media Production. **Semester Hours:** 3

**Two of the following four are required:**

ENGL 3070 - History of Silent Film. **Semester Hours:** 3

ENGL 3080 - History of Sound Film. **Semester Hours:** 3

THTR 3610 - Performance: Theory/History/Criticism I. **Semester Hours:** 3

THTR 4610 - Performance: Theory/History/Criticism II. **Semester Hours:** 3

**Total: 37-38 Hours**

(\*is taken four times at 2 semester hours each)

**Electives**

Choose from the following:

ENGL 3070 - History of Silent Film. **Semester Hours:** 3

ENGL 3080 - History of Sound Film. **Semester Hours:** 3

FILM 3111 - Shooting Action and Physical Effects. **Semester Hours:** 3

FILM 3222 - The Film and Video Business. **Semester Hours:** 3

FILM 3264 - Advanced Digital Effects. **Semester Hours:** 3

FILM 3270 - Film/Video Production III. **Semester Hours:** 3

FILM 3275 - Film and Video Postproduction III. **Semester Hours:** 3

FILM 3939 - Cooperative Education. **Semester Hours:** 1 to 3

FILM 4209 - Advanced Production Management. **Semester Hours:** 3

FILM 4270 - Film and Video Production IV. **Semester Hours:** 3

FILM 4280 - Film and Video Postproduction IV. **Semester Hours:** 3

FILM 4840 - Independent Study: Film. **Semester Hours:** 1 to 3

THTR 2530 - Acting: Character and Staging. **Semester Hours:** 3

THTR 2560 - Topics in Theatre. **Semester Hours:** 1 to 6

THTR 2700 - Art for the Theatre. **Semester Hours:** 3

THTR 2840 - Independent Study. **Semester Hours:** 1 to 3

THTR 3010 - Stage and Production Management. **Semester Hours:** 3

THTR 3530 - Acting: Character and Text. **Semester Hours:** 3

**Total: 15 Hours**

**Total for Program: 52-53 Hours**

# Theatre, Film and Television BFA

CAM Core Requirements

## BFA Curriculum

Students entering in fall 2008 who desire the BFA program will enter as BA students. The BFA curriculum for the following year is currently under revision. For most current information please check the TFVP Web site or contact the department office at 303-556-6352.

# Educational Studies/Teacher Licensure

## Undergraduate Minors

# Anthropology Minor

A minimum of 18 semester hours in anthropology must be completed with an average of C (2.0) or better. Nine of the 18 hours must be upper division and 9 hours must be taken from Downtown Campus faculty.

## Program Requirements

### Required Courses

Choose a minimum of three courses from the following:

- ANTH 1302 - Introduction to Archaeology: SS3. **Semester Hours: 4**
- ANTH 1303 - Introduction to Biological Anthropology: SC1. **Semester Hours: 4**
- ANTH 2102 - Culture and the Human Experience: SS3. **Semester Hours: 3**
- ANTH 3101 - Foundations of Cultural Anthropology. **Semester Hours: 3**
- ANTH 3121 - Language and Communication. **Semester Hours: 3**
- ANTH 3301 - World Prehistory. **Semester Hours: 3**
- ANTH 3512 - Human Evolution. **Semester Hours: 3**

**Total: 9-11 Hours**

### Elective Courses

**Total: 7-9 Hours**

**Minor total: 18 Hours**

Return to Department of Anthropology

## Art History Minor

CAM Core Requirements

To declare a CAM minor, please see the College of Arts & Media's Office of Advising and Student Services in Arts Building, 177.

Student may transfer up to 6 semester hours of non-UC Denver courses toward a minor. All other courses must be taken at UC Denver. Students pursuing a BA or BFA in fine arts may use up to 6 semester hours to fulfill major and minor requirements; the remaining semester hours must be taken in addition to the major requirements. Consult a CAM advisor for details.

### Program Requirements

F A 2600 - History of Art I (survey). **Semester Hours: 3**

F A 2610 - History of Art II (survey). **Semester Hours: 3**

F A \_\_\_\_ - Studio Art Elective (3 semester hours)

F A \_\_\_\_ - UD Art History Elective (9 semester hours)

**Total: 18 Hours**

## Astrophysics Minor

Astrophysics is an important and well-represented subdiscipline of physics. It includes the study of the solar system, galactic and extra-galactic astrophysics, as well as cosmology. A minor in this field combines a theoretical approach with observational analysis. There is also opportunity to do research in this field.

While the Department of Physics offers minors in both physics and astrophysics, it is not possible to receive minors in both fields. Physics majors may elect to receive only the astrophysics minor from the department.

The astrophysics minor requires a total of 17 semester hours, in which no grade below a C (2.0) may be used to meet the requirements for the minor. At least 6 semester hours taken for the minor must be completed at the Downtown Campus. Requirements for the minor in astrophysics may be used to fulfill the requirements of the major in physics. However, a student majoring in physics who wants to minor in astrophysics needs to take 15 semester hours in astrophysics that do not overlap with the major.

# Program Requirements

## Required Physics Courses:

PHYS 1052 - General Astronomy I: SC1. **Semester Hours: 4**

## Either of the following two sequences:

PHYS 2010 - College Physics I. **Semester Hours: 4**

PHYS 2020 - College Physics II: SC1. **Semester Hours: 4**

PHYS 2030 - College Physics Lab I: SC1. **Semester Hours: 1**

PHYS 2040 - College Physics Lab II: SC1. **Semester Hours: 1**

**Sequence Total: 10 Hours**

-OR-

PHYS 2311 - General Physics I: Calculus-Based. **Semester Hours: 4**

PHYS 2321 - General Physics Lab I. **Semester Hours: 1**

PHYS 2331 - General Physics II: Calculus-Based. **Semester Hours: 4**

PHYS 2341 - General Physics Lab II. **Semester Hours: 1**

**Sequence Total: 10 Hours**

## Elective Physics Courses

Choose one:

GEOL 1302 - Introduction to Astrogeology. **Semester Hours: 3**

PHYS 3040 - Modern Cosmology. **Semester Hours: 3**

PHYS 3050 - General Astronomy II. **Semester Hours: 3**

PHYS 3060 - Astronomical Image Processing Lab. **Semester Hours: 3**

\* PHYS 3840 - Independent Study. **Semester Hours: 1 to 3**

PHYS 3939 - Internship/Cooperative Education. **Semester Hours: 1 to 3**

\* PHYS 4840 - Independent Study. **Semester Hours: 1 to 3**

\* PHYS 4920 - Advanced Undergraduate Seminar. **Semester Hours: 1**

\* PHYS 4931 - Internship in Applied Physics. **Semester Hours: 2 to 4**

\* PHYS 4980 - Advanced Physics Topics. **Semester Hours: 1 to 3**

**Total: 3 Hours**

**Minor Total: 17 Hours**

\*Topics in these classes vary. See departmental advisor for approval.

^Top

Return to Department of Physics

# Biology Minor

For a biology minor, students must complete all biology core requirements (22 hours), of which a minimum of 9 hours must be completed in residence on the UC Denver Downtown Campus. The minimum grade in each UC Denver course is C- (1.7); however, a GPA of 2.5 is required in biology courses taken at UC Denver to complete the minor. In addition, students must complete one year of general chemistry including laboratory with a grade of C- (1.7) or higher.

[Return to Department of Integrative Biology](#)

# Business Administration Minor

Students in other undergraduate schools and colleges at the Downtown Campus wishing to take a minor in business administration must have a 2.0 GPA to enter as a business minor plus a 2.0 GPA in business courses.

## Prerequisites

ISMG 2050 - Introduction to Business Problem Solving. **Semester Hours: 3**

MATH 1070 - Algebra for Social Sciences and Business: MA1. **Semester Hours: 3** or  
MATH 1110 - College Algebra: MA1. **Semester Hours: 3** and  
MATH 1080 - Polynomial Calculus: MA1. **Semester Hours: 3**

DSCI 2010 - Business Statistics. **Semester Hours: 3** or  
a statistics class approved by the Business School and  
ECON 2022 - Principles of Economics: Microeconomics: SS1. **Semester Hours: 3**

## Required Courses

MGMT 1000 - Introduction to Business. **Semester Hours: 3**  
ACCT 2200 - Financial Accounting and Financial Statement Analysis. **Semester Hours: 3**  
BLAW 3000 - Legal and Ethical Environments of Business I. **Semester Hours: 3**  
MKTG 3000 - Principles of Marketing. **Semester Hours: 3**  
FNCE 3000 - Principles of Finance. **Semester Hours: 3**  
MGMT 3000 - Managing Individuals and Teams. **Semester Hours: 3**

Twelve of these 18 hours must be taken while in residence at the Downtown Campus. If the student has already taken the equivalent of one or more of these courses, other higher-level business courses may be substituted with Business School approval. Up to

6 hours of the 18 required business courses may be taken at another institution. Transfer credit will be granted on the same basis that transfer credit is granted for courses taken by business majors.

## Chemistry Minor

The objective of the chemistry minor is to provide broad introductory course work and laboratory experience to science majors without the more technical mathematical and chemical prerequisites required of the chemistry major. The chemistry minor is open to all CLAS students and should prove beneficial for science majors, pre-professional health science majors and students seeking science education certification.

There are course work and grade requirements that must be satisfied to obtain a chemistry minor. Students must take a minimum of 20 semester hours of chemistry courses with a minimum of 10 upper-division chemistry hours. Upper-division course work must include three of the six subdisciplines that comprise chemistry: analytical, biochemistry, inorganic, organic, physical and environmental chemistry. All chemistry minor courses must be taken for a letter grade rather than with the pass/fail grading option. A minimum 2.0 GPA in the chemistry minor courses must be earned. To satisfy the department residency requirement, a minimum of 7 upper-division hours of chemistry must be taken at the Downtown Campus. A complete description of the chemistry minor may be obtained in the department office or Web site:

[http://www.cudenver.edu/chemistry/minor\\_requirements.html](http://www.cudenver.edu/chemistry/minor_requirements.html)

## Chinese Studies Minor

The minor requires a total of 21 semester hours. A minimum of 15 semester hours must be taken from Downtown Campus faculty. All courses must be completed with a grade of C (2.0) or better.

### Requirements for the Minor

#### Required Courses

- CHIN 1010 - Beginning Chinese I. **Semester Hours: 5**
- \* CNST 1000 - China and the Chinese: AH1. **Semester Hours: 3**
- \* CNST 4000 - Senior Seminar in Chinese Studies. **Semester Hours: 3**

**Total: 11 Hours**

*\*Note:* CNST 1000 should be taken toward the beginning of the minor, and CNST 4000 should be taken toward the completion of required course work. Note that students must take a minimum of 5 semester hours of Chinese language courses.

### **Additional Courses**

An additional 10 hours of course work should be selected from the following list of courses:

- ANTH 4000 - Special Topics in Anthropology. **Semester Hours:** 1 to 4
- ANTH 4995 - Travel Study. **Semester Hours:** 3 to 9
- CHIN 1020 - Beginning Chinese II. **Semester Hours:** 5
- CHIN 2110 - Second Year Chinese I. **Semester Hours:** 5
- CHIN 2120 - Second Year Chinese II. **Semester Hours:** 5
- F A 4750 - Arts of China. **Semester Hours:** 3
- GEOG 3160 - Geography of China. **Semester Hours:** 3
- HIST 4420 - Traditional China: China to 1600. **Semester Hours:** 3
- HIST 4421 - Modern China. **Semester Hours:** 3
- P SC 4186 - East Asia in World Affairs. **Semester Hours:** 3
- P SC 4615 - Politics and Government of China. **Semester Hours:** 3
- P SC 4726 - Russian and Chinese Foreign Policy. **Semester Hours:** 3
- PHIL 3666 - Asian Philosophies and Religions. **Semester Hours:** 3
- PHIL 3981 - Chinese Philosophy and Culture. **Semester Hours:** 3

**Total: 10 Hours**

**Minor Total: 21 Hours**

\* New courses may not appear in the course description section of this catalog. Contact the department for further information.

[Return to Chinese Studies](#)

## **Communication Minor**

Knowledge in an area of study such as business, biology or sociology means little unless it can be communicated effectively. The minor in communication is designed to provide students who are not communication majors with knowledge and skills in communication that are useful in any discipline or profession.

The minor in communication requires 18 semester hours, with 15 hours of required courses and 3 hours of electives.

# Requirements

## Core Courses

CMMU 1011 - Fundamentals of Communication: SS3. **Semester Hours: 3**

CMMU 2041 - Interpersonal Communication. **Semester Hours: 3**

CMMU 2101 - Presentational Speaking. **Semester Hours: 3**

CMMU 4151 - Group Communication. **Semester Hours: 3**

CMMU 4200 - Persuasion. **Semester Hours: 3**

**Total: 15 Hours**

## Elective Courses

In addition to the five courses specified above, students must take one upper-division course (3000 level or above) to be selected with the aid of the undergraduate advisor in communication.

**Total: 3 Hours**

**Minor Total: 18 Hours**

## Grade and Residency Requirements for Minors

A grade of C- or better must be earned in each course completed as part of the minor. No more than 6 of the semester hours for the minor may be transferred from another university.

Return to Department of Communication

# Community Health Science Minor

To earn a minor in community health science, a minimum of 18 semester hours are required, of which 12 must be upper-division. Students must achieve no less than a C (2.0) in each course applied toward minor requirements. At least 12 semester hours must be taken from the Downtown Campus faculty. Note that additional HBSC courses are currently being developed to provide additional choices. As they are approved, these courses will appear on the HBS Web site, the online course descriptions and term schedule planner. (Note: HBS courses, in general, are 3 semester hours under the prefix HBSC.)

# Program Requirements

## Community Health Science Courses

Choose two:

HBSC 2001 - Introduction to Community and Population Health Science: SS3. **Semester Hours: 3**

HBSC 3021 - Fundamentals of Health Promotion. **Semester Hours: 3**

HBSC 3031 - Health, Human Biology and Behavior. **Semester Hours: 3**

HBSC 3041 - Health, Culture and Society. **Semester Hours: 3**

**Total: 6 Hours**

## Methods Courses

Choose at least two:

GEOG 4235 - GIS Applications in the Health Sciences. **Semester Hours: 3**

HBSC 4001 - Introduction to Epidemiology. **Semester Hours: 3**

HBSC 4021 - Community Health Assessment. **Semester Hours: 3**

**Total: 6 Hours**

## Community Health Emphasis Courses

Choose at least two:

ANTH 4040 - Anthropology of Food and Nutrition. **Semester Hours: 3**

ANTH 4060 - Evolutionary Medicine. **Semester Hours: 3**

ANTH 4090 - Political Economy of Drug Culture. **Semester Hours: 3**

ANTH 4260 - Human Reproductive Ecology. **Semester Hours: 3**

ANTH 4560 - Human Ecology. **Semester Hours: 3**

CMMU 4500 - Health Communication. **Semester Hours: 3**

CMMU 4620 - Health Risk Communication. **Semester Hours: 3**

GEOG 4020 - Earth Environments and Human Impacts. **Semester Hours: 3**

GEOG 4230 - Hazard Mitigation and Vulnerability Assessment. **Semester Hours: 3**

HBSC 3010 - Evolution of Human Sexuality. **Semester Hours: 3**

HBSC 4010 - Global Health Studies I: The Biocultural Basis of Health. **Semester Hours: 3**

HBSC 4020 - Global Health Studies II: Comparative Health Systems. **Semester Hours: 3**

HBSC 4080 - Global Health Practice. **Semester Hours: 3**

HBSC 4200 - The Global HIV/AIDS Epidemic. **Semester Hours: 3**

HIST 4345 - Gender, Science, and Medicine: 1600 to the Present. **Semester Hours: 3**

HIST 4346 - Medicine and Society: the Ancients to the Present. **Semester Hours: 3**

HIST 4503 - Topics in History of Science. **Semester Hours: 3**

PSY 3235 - Human Sexuality. **Semester Hours: 3**

PSY 3262 - Health Psychology. **Semester Hours: 3**

**Total: 6 Hours**

**Total: 18 Hours**

Check the department Web site for additional course offerings.

## Computer Science Minor

The Department of Computer Science and Engineering offers a minor in computer science. The requirements for the minor are listed below.

### Program Requirements

1. Any undergraduate student currently enrolled in a UC Denver degree program with a major other than computer science and engineering may earn a minor in computer science. This includes students from the College of Engineering and Applied Science, the College of Liberal Arts and Sciences, the Business School, the College of Arts & Media and the School of Public Affairs.

2. The student must complete the following classes with a grade of C- or better:

C SC 1410 - Fundamentals of Computing. **Semester Hours: 3**

C SC 2421 - Data Structures and Program Design. **Semester Hours: 3**

C SC 2511 - Discrete Structures. **Semester Hours: 3**

MATH 1401 - Calculus I: MA1. **Semester Hours: 4**

MATH 2411 - Calculus II: MA1. **Semester Hours: 4**

3. The student must complete (with a C- or better) three additional computer science courses at the 3000 level or higher with the approval of an undergraduate advisor.

*Note:* Some courses at the 3000 level and above require additional prerequisites. A student must fulfill all prerequisites for the courses he/she selects. See the catalog course descriptions for prerequisite information for each course.

4. All computer science courses 3000 level and above must be taken at the Downtown Campus of UC Denver.

5. At the time of graduation, the student must have a UC Denver cumulative GPA of 2.0 and must have a 2.0 GPA for the eight classes taken for the minor.

6. The student must file a minor declaration form with an undergraduate advisor or with the Engineering Student Services office in North Classroom, 3024. For more information or an advising appointment, contact the Department of Computer Science and Engineering in North Classroom, 2605, or by phone at 303-556-4314.

# Creative Writing Minor

The creative writing minor gives students the opportunity to complement their area of major study with experience writing and reading poetry or fiction.

Students minoring in creative writing must complete a total of 15 hours. None of the required courses may be taken pass/fail. Only courses completed with a grade of C (2.0) or better may be counted toward the minor. All upper-division courses must be taken with Downtown Campus English faculty. Students should take ENGL 1020 before beginning the minor.

## Courses

### Required Courses

- ENGL 1400 - Introduction to Literary Studies. **Semester Hours: 3**
- ENGL 2154 - Introduction to Creative Writing. **Semester Hours: 3**

**Total: 6 Hours**

### Electives for students interested in poetry

- ENGL 3020 - Poetry Workshop. **Semester Hours: 3**
- ENGL 4025 - Advanced Poetry Workshop. **Semester Hours: 3**
- ENGL 4160 - Poetics. **Semester Hours: 3**
- OR-
- ENGL 4166 - History of American Poetry. **Semester Hours: 3**
- OR-
- ENGL 4320 - History of Poetry in English. **Semester Hours: 3**

**Total: 9 Hours**

### Electives for students interested in fiction

- ENGL 3050 - Fiction Workshop. **Semester Hours: 3**
- ENGL 4055 - Advanced Fiction Workshop. **Semester Hours: 3**
- ENGL 4200 - History of the English Novel I. **Semester Hours: 3**
- OR-
- ENGL 4210 - History of the English Novel II. **Semester Hours: 3**
- OR-
- ENGL 4230 - The American Novel. **Semester Hours: 3**
- OR-
- ENGL 4236 - The American Short Story. **Semester Hours: 3**

**Total: 9 Hours**

**Minor Total: 15 Hours**

Return to Department of English

## **Criminal Justice Minor**

### **Program Requirements**

A minor in criminal justice requires 18 semester hours of course work including the following:

C J 1001 - Introduction to Criminal Justice. **Semester Hours: 3**

C J 2041 - Crime Theory and Causes. **Semester Hours: 3**

**Total: 6 Hours**

**At least one of the following**

C J 4042 - Corrections. **Semester Hours: 3**

C J 4043 - Law Enforcement. **Semester Hours: 3**

C J 4044 - Courts and Judicial Process. **Semester Hours: 3**

**Total: 3-9 Hours**

One to three additional elective courses in criminal justice or ancillary fields.

## **Digital Design Minor**

CAM Core Requirements

To declare a CAM minor, please see the College of Arts & Media's Office of Advising and Student Services in Arts Building, 177.

Student may transfer up to 6 semester hours of non-UC Denver courses toward a minor. All other courses must be taken at UC Denver. Students pursuing a BA or BFA in fine arts may use up to 6 semester hours to fulfill major and minor requirements; the remaining semester hours must be taken in addition to the major requirements. Consult a CAM advisor for details.

### **Program Requirements**

F A 2405 - Introduction to Digital Design. **Semester Hours: 3**

F A 3424 - Interactive Media. **Semester Hours: 3**

F A 4632 - Media History and Aesthetics. **Semester Hours: 3**

Digital Design Electives (9 semester hours)

**Total: 21 Hours**

## Economics Minor

Students minoring in economics must complete a minimum of 15 semester hours in economics. All course work must be completed at the Downtown Campus, or the Department of Economics reserves the right to test the student's competence in the material covered. No grade below C- will be counted toward the minor requirements.

### Courses

ECON 2012 - Principles of Economics: Macroeconomics: SS1. **Semester Hours: 3**

ECON 2022 - Principles of Economics: Microeconomics: SS1. **Semester Hours: 3**

—plus—

Three upper-division electives in economics: **9 semester hours**

(ECON 3100 - Economics of Race and Gender. is acceptable)

**Total: 15 Hours**

At least two upper-division courses must not overlap with courses required in the student's major program.

[Return to Department of Economics](#)

## Educational Studies Minor

The preparation of high-quality K–12 teachers is dependent on both content knowledge and teaching methodologies. The College of Liberal Arts and Sciences, in cooperation with the School of Education & Human Development, offers an educational studies minor to assist undergraduate students unable to fit licensure course work into their bachelor's degree and to prepare them for the graduate-level licensure programs.

The CLAS educational studies minor is flexible in design and individually tailored for each student to complete some content requirements required for admission into the graduate-level

teacher licensure programs at UC Denver. The educational studies minor requires course work in psychology and human development, democratic schooling principles, a K–12 internship and undergraduate course work required for licensure outside college and major requirements.

The educational studies minor is open to all Downtown Campus undergraduate students. For more information, students should contact the CLAS Advising Office, North Classroom, 4002, 303-556-2555.

## Environmental Sciences Minor

The environmental sciences minor offers students exposure to the breadth of environmental issues. Students may emphasize the natural/physical sciences, the social sciences and humanities or structure their own mixed emphasis.

### Program Requirements

#### Lecture/Laboratory Courses

**Choose two lecture/laboratory courses (see Note 2):**

- BIOL 2051 - General Biology I: SC1. **Semester Hours: 3**
- and* BIOL 2071 - General Biology Laboratory I: SC1. **Semester Hours: 1**
- BIOL 2061 - General Biology II: SC1. **Semester Hours: 3**
- and* BIOL 2081 - General Biology Laboratory II: SC1. **Semester Hours: 1**
- CHEM 2031 - General Chemistry I: SC1. **Semester Hours: 3**
- and* CHEM 2038 - General Chemistry Laboratory I: SC1. **Semester Hours: 1**
- CHEM 2061 - General Chemistry II: SC1. **Semester Hours: 3**
- and* CHEM 2068 - General Chemistry Laboratory II: SC1. **Semester Hours: 2**
- ENVS 1042 - Introduction to Environmental Sciences: SC1. **Semester Hours: 4**
- GEOL 1072 - Physical Geology: Surface Processes: SC1. **Semester Hours: 4**
- GEOL 1082 - Physical Geology: Internal Processes: SC1. **Semester Hours: 4**
- PHYS 2010 - College Physics I. **Semester Hours: 4**
- and* PHYS 2030 - College Physics Lab I: SC1. **Semester Hours: 1**
- PHYS 2020 - College Physics II: SC1. **Semester Hours: 4**
- and* PHYS 2040 - College Physics Lab II: SC1. **Semester Hours: 1**

**Total: 8-10 Hours**

#### Upper-division Courses

**Choose three upper-division courses outside of the student's major discipline from the following list (see Notes 5 and 6):**

ANTH 4010 - Global Health Studies I: The Biocultural Basis of Health. **Semester Hours: 3**

BIOL 3411 - Principles of Ecology. **Semester Hours: 3**

CHEM 4700 - Environmental Chemistry. **Semester Hours: 3**

(see note 4)

ECON 4540 - Environmental Economics. **Semester Hours: 3**

ENVS 3082 - Energy and the Environment. **Semester Hours: 3**

-OR-

PHYS 3082 - Energy and the Environment. **Semester Hours: 3**

GEOG 3232 - Weather and Climate. **Semester Hours: 3**

GEOG 3240 - Colorado Climates. **Semester Hours: 3**

GEOG 4020 - Earth Environments and Human Impacts. **Semester Hours: 3**

-OR-

ENVS 5020 - Earth Environments and Human Impacts. **Semester Hours: 3**

GEOG 4060 - Remote Sensing I: Introduction to Environmental Remote Sensing. **Semester Hours: 3**

-OR-

GEOG 5060 - Remote Sensing I: Introduction to Environmental Remote Sensing. **Semester Hours: 3**

GEOG 4080 - Introduction to GIS. **Semester Hours: 3**

-OR-

GEOG 5080 - Introduction to GIS. **Semester Hours: 3**

GEOG 4090 - Environmental Modeling with Geographic Information Systems. **Semester Hours: 3**

-OR-

GEOG 5090 - Environmental Modeling with Geographic Information Systems. **Semester Hours: 3**

GEOG 4220 - Environmental Impact Assessment. **Semester Hours: 3**

-OR-

GEOG 5220 - Environmental Impact Assessment. **Semester Hours: 3**

GEOG 4230 - Hazard Mitigation and Vulnerability Assessment. **Semester Hours: 3**

-OR-

GEOG 5230 - Hazard Mitigation and Vulnerability Assessment. **Semester Hours: 3**

GEOG 4240 - Principles of Geomorphology. **Semester Hours: 3**

GEOG 4265 - Sustainability in Resources Management. **Semester Hours: 3**

-OR-

GEOG 5265 - Sustainability in Resources Management. **Semester Hours: 3**

GEOG 4270 - Glacial Geomorphology. **Semester Hours: 3**

GEOG 4335 - Contemporary Environmental Issues. **Semester Hours: 3**

-OR-

GEOG 5335 - Contemporary Environmental Issues. **Semester Hours: 3**

GEOG 4350 - Environment and Society in the American Past. **Semester Hours: 3**

-OR-

GEOG 5350 - Environment and Society in the American Past. **Semester Hours: 3**

GEOL 4030 - Environmental Geology. **Semester Hours: 3**

HIST 4232 - Historic Preservation. **Semester Hours: 3**

HIST 4810 - Special Topics. **Semester Hours: 3**

PHIL 4510 - Philosophy of Nature. **Semester Hours: 3**

P SC 4354 - Environmental Politics. **Semester Hours: 3**

**Total: 9 Hours**

**Minor Total: 17-19 Hours**

*Notes:*

All work submitted for an environmental sciences minor must have a grade of C (2.0) or above.

The lecture/laboratory sequence can be part of the requirements for the major, but not in the student's major department (i.e., a biology major cannot use the general biology sequence, but could use the general chemistry sequence, which is also required for the biology major).

Students must take a minimum of 9 hours of the upper-division courses at the Downtown Campus.

If the student plans to go on to the MS in environmental sciences program, he/she should choose courses other than CHEM 4700. This is a core course in the MS in environmental sciences program.

Many of the upper-division courses have prerequisites; the student must check the catalog for prerequisite requirements for these courses.

The four upper-division elective courses for the environmental sciences minor cannot be from the student's major discipline, even if the particular course is not counted toward the major.

Return to Department of Geography and Environmental Sciences

## Ethics Minor

A total of 15 semester hours is required for an ethics minor, with a minimum grade of C (2.0) in each course.

### Required Courses

PHIL 1020 - Introduction to Ethics and Society: The Person and the Community: AH3.  
**Semester Hours: 3**

### **Choose four:**

- PHIL 3150 - History of Ethics. **Semester Hours: 3**
- PHIL 3200 - Social and Political Philosophy. **Semester Hours: 3**
- PHIL 3250 - Business Ethics. **Semester Hours: 3**
- PHIL 3500 - Ideology and Culture: Racism and Sexism. **Semester Hours: 3**
- PHIL 3939 - Internship/Cooperative Education. **Semester Hours: 1 to 3**
- PHIL 4150 - Twentieth Century Ethics. **Semester Hours: 3**
- PHIL 4242 - Bioethics. **Semester Hours: 3**

### **Minor Total: 15 Hours**

For those students who major in philosophy and minor in ethics, no course can satisfy the requirements for both. For example, if a student takes PHIL 4150, Twentieth Century Ethics, it cannot satisfy the requirement in the major for a course in 19th or 20th century philosophy.

[Return to Department of Philosophy](#)

## **Ethnic Studies Minor**

### **Requirements for the Minor**

The minor in ethnic studies offers students the opportunity to enhance and broaden the body of knowledge acquired in their chosen majors and to apply it in a variety of careers involving intercultural relations. Students are required to complete 18 semester hours (6 courses) in ethnic studies with a grade of C or better. These hours are to be taken with UC Denver faculty (any exception needs to be approved by the ethnic studies advisor). At least 9 of the required 18 hours must be in courses numbered 3000 or above.

The 18 hours required for the minor must be distributed as follows:

#### **Core Courses**

ETST 2000 - Introduction to Ethnic Studies: SS3. **Semester Hours: 3**

#### **Total: 3 Hours**

#### **Additional Courses**

Select four upper- or lower-division ETST courses from the following four focal U.S. racial/ethnic groups

Asian-Americans  
African-Americans  
American Indians  
Chicanos/as and Latinos/as

**Total: 12 Hours**

### **Elective**

ETST elective course of your choice.

**Total: 3 Hours**

**Total: 18 Hours**

Return to Ethnic Studies

## **Film Studies Minor**

The film studies minor offers students the opportunity to gain an informed understanding of the sophisticated medium of film, its language and history. Courses cover critical writing about cinema, creative screenwriting, the evolution of Hollywood movies, international cinema and film in its cultural context. The film studies minor makes a valuable complement to a range of undergraduate majors.

Students must complete a total of 15 hours for the film studies minor. None of the required 15 hours may be taken pass/fail. Only courses completed with a grade of C (2.0) or better may be counted toward the minor. A minimum of 9 hours must be taken with Downtown Campus faculty. Students are strongly advised to take ENGL 2250, Introduction to Film, before taking other film courses. Students are also advised to fulfill the liberal arts and sciences core curriculum writing requirements before enrolling in upper-division topics in film courses. No more than two online film studies courses can be counted toward the minor.

### **Courses**

#### **Required Courses**

ENGL 2250 - Introduction to Film. **Semester Hours: 3**

ENGL 3070 - History of Silent Film. **Semester Hours: 3**

-OR-

ENGL 3080 - History of Sound Film. **Semester Hours: 3**

**Total: 6 Hours**

## Electives

Choose three:

ENGL 2415 - Introduction to Movie Writing. **Semester Hours: 3**

ENGL 3070 - History of Silent Film. **Semester Hours: 3**

-OR-

ENGL 3080 - History of Sound Film. **Semester Hours: 3**

\* ENGL 3075 - Film Genres. **Semester Hours: 3**

\* ENGL 3085 - Film Directors. **Semester Hours: 3**

ENGL 3200 - From Literature to Film. **Semester Hours: 3**

\* ENGL 3300-3324 - Topics in Film. **Semester Hours: 3**

ENGL 4420 - Film Theory and Criticism. **Semester Hours: 3**

\* ENGL 4770 - Topics in English: Film and Literature. **Semester Hours: 3** (film topics only)

Approved film courses from another department (3 semester hours)

**Total: 9 Hours**

**Total: 15 Hours**

\* Repeatable with different topic or title.

Return to Department of English

## French Minor

Students minoring in French must complete 15 semester hours of upper-division French courses (courses numbered 3000 and above). The minor in French must include at least one language skills class, chosen from the following:

### Required Courses

Choose one:

FR 3010 - French Phonetics and Pronunciation. **Semester Hours: 3**

FR 3020 - Oral Practice. **Semester Hours: 3**

FR 3050 - Advanced Grammar and Composition. **Semester Hours: 3**

FR 3060 - Advanced French Language Skills. **Semester Hours: 3**

**Total: 3 Hours**

## Electives

In addition, students minoring in French must complete four additional upper-division French courses

**Total: 12 Hours**

## Minor Total: 15 Hours

Return to Department of Modern Languages

# General Musicianship Minor

### CAM Core Requirements

See the beginning of the Music and Entertainment Industry Studies section in this catalog for specific admission information to the UC Denver Department of Music and Entertainment Industry (MEIS). This competitive process is also for students interested in either music minor.

To declare a CAM minor, please see the College of Arts & Media's Office of Advising and Student Services in Arts Building, 177. All courses must be taken at UC Denver unless approved by an MEIS faculty member. All other courses must be taken at UC Denver. Students pursuing a BS in music may not declare a minor in music. Consult a CAM advisor for details. All minor courses must be passed with a C (2.0) or better.

Students must successfully audition before declaring a general musicianship minor.

## Program Requirements

- PMUS 1100 - Music Theory I. **Semester Hours: 3**
- PMUS 1110 - Ear Training and Sight Singing I. **Semester Hours: 1**
- PMUS 1200 - Music Theory II. **Semester Hours: 3**
- PMUS 1210 - Ear Training and Sight Singing II. **Semester Hours: 1**
- PMUS 3830 - History and Literature of Music I. **Semester Hours: 3**
- PMUS 3831 - History and Literature of Music II. **Semester Hours: 3**
- PMUS \_\_\_\_ - Applied Music (2 semester hours)
- PMUS \_\_\_\_ - Applied Music (2 semester hours)
- PMUS 1500 - General Recital. **Semester Hours: 0**
- PMUS 1500 - General Recital.
- PMUS 2000 - Music Ensembles. **Semester Hours: 1**
- PMUS 2000 - Music Ensembles.
- PMUS 1023 - Piano Class. **Semester Hours: 1**
- PMUS 1023 - Piano Class.
- P/MUS \_\_\_\_ - Music Elective (1 semester hour)

**Total: 23 Hours**

## **Geography Minor**

Students must complete 15 semester hours in geography, including at least 6 semester hours of upper-division courses. Students must achieve a grade of C (2.0) or above on required courses. At least 9 semester hours of upper-division geography courses must be completed at the Downtown Campus.

Return to Department of Geography and Environmental Sciences

## **Geology Minor**

At least two of the upper-division requirements must be completed at UC Denver. Transfer students who have earned the equivalent of all these courses elsewhere must complete a minimum of two of the required upper-division courses at UC Denver. No grade below a C (2.0) will be counted toward the minor requirements.

### **Required Courses**

GEOL 1072 - Physical Geology: Surface Processes: SC1. **Semester Hours: 4**

GEOL 1082 - Physical Geology: Internal Processes: SC1. **Semester Hours: 4**

**Choose at least two of the following courses:**

GEOL 3011 - Mineralogy. **Semester Hours: 4**

GEOL 3421 - Sedimentation and Stratigraphy. **Semester Hours: 4**

GEOL 4030 - Environmental Geology. **Semester Hours: 3**

**Minor Total: 15-16 Hours**

Return to Department of Geography and Environmental Sciences

# German Minor

The German program provides a variety of courses for students interested in German language, linguistics, literature, history, philosophy, music and art.

## Admission and Grade Requirements

To be admitted to minor status in German, students must have an overall GPA of C+ (2.3). The minimum grade acceptable in any course applied to a German minor is a C (2.0). The GPA in all courses applied to a German minor at UC Denver must be 2.5. No courses taken on a pass/fail basis may be credited toward a German minor.

## Residency Requirement

The German minor requires 15 semester hours of upper-division course work. A minimum of 6 semester hours must be taken from German faculty at the Downtown Campus. Courses taken at other institutions while a student is enrolled at UC Denver may be applied to the minor only with departmental approval before enrollment in those courses.

Students who have completed course work through an approved exchange program must also complete a residency requirement of a minimum of 6 credits of upper-division German courses. This residency requirement must include at least 3 semester hours of language skills courses at the Downtown Campus.

## Course Requirements for the Minor

Students minoring in German must complete 15 hours of upper division German courses (courses numbered 3000 and above). The minor in German must include at least one language skills course:

### Required Courses

#### Choose one:

- GER 3050 - Phonetics and Pronunciation of German. **Semester Hours: 3**
- GER 3060 - Advanced German Language Skills I. **Semester Hours: 3**
- GER 3070 - Advanced German Language Skills II. **Semester Hours: 3**
- GER 3080 - Advanced German Language Skills III. **Semester Hours: 3**
- GER 3090 - Advanced German Language Skills IV. **Semester Hours: 3**

**Total: 3 Hours**

### Electives

In addition, students minoring in German must complete four additional German courses.

**Total: 12 Hours**

## **Minor Total: 15 Hours**

Students taking a German course taught in English must complete a portion of the course work (e.g., papers and exams) in German for the course to count toward the minor.

Return to Department of Modern Languages

# **History Minor**

Students interested in a minor in history are required to complete 18 hours of course work. At least 12 semester hours must be completed at the Downtown Campus. No grade below a C (2.0) will count toward the minor.

## **Course Requirements**

### **Required Course**

HIST 3031 - Theory and Practice of History: An Introduction to the Major. **Semester Hours:**  
3

**Total: 3 Hours**

### **Distribution Requirement**

A minimum of 3 semester hours must be taken in each of the following areas: United States, Europe and World.

**Total: 9 Hours**

### **Electives**

Choose at least 6 hours of elective upper-division history credit.

**Total: 6 Hours**

**Minor Total: 18 Hours**

Return to Department of History

# Law Studies Minor

## Program Requirements

A total of 18 semester hours must be completed for the law studies minor. The five required courses (15 semester hours) must be taken in residence at UC Denver. A minimum grade of C is required in each course and students must maintain a GPA of 3.0 in courses taken toward the minor. Every course taken for the minor must be upper division, and cannot serve to fulfill requirements of the undergraduate core. Students should check with their major department to determine whether courses counted toward the law studies minor can fulfill major requirements. To apply for this minor, students must complete and submit a major/minor change declaration form to the CLAS Advising Office in North Classroom, 4002.

### Required Courses

- CMMU 4680 - Mass Communication Law and Policy. **Semester Hours: 3**  
(offered at least once a year)
- HUM 3250 - Introduction to Law Studies. **Semester Hours: 3**  
(offered every fall)
- PHIL 4260 - Philosophy of Law. **Semester Hours: 3**  
(offered every spring)

### Choose two:

- CMMU 4681 - Communication Issues in Trial Court Practices and Processes. **Semester Hours: 3**  
(offered every other year)
- CMMU 4750 - Legal Reasoning and Writing. **Semester Hours: 3**  
(offered every other year)
- P SC 3034 - Race, Gender, Law and Public Policy. **Semester Hours: 3**
- P SC 4427 - Law, Politics and Justice. **Semester Hours: 3**
- P SC 4494 - Judicial Politics. **Semester Hours: 3**

**Total: 15 Hours**

### Electives

#### Choose one:

- BLAW 3000 - Legal and Ethical Environments of Business I. **Semester Hours: 3**

CMMU 4140 - Argumentation. **Semester Hours: 3**

(taught each summer)

CMMU 4255 - Negotiations and Bargaining. **Semester Hours: 3**

MUS 3720 - Law and the Music Industry. **Semester Hours: 3**

PHIL 4812 - Special Topics in Philosophy. **Semester Hours: 3**

P SC 3214 - Federal Law and American Indians. **Semester Hours: 3**

P SC 4024 - Legislatures and Legislation. **Semester Hours: 3**

P SC 4477 - Constitutional Law I. **Semester Hours: 3**

**Total: 3 Hours**

**Minor Total: 18 Hours**

The law studies program also recommends a course in informal logic to aid in preparation for the LSAT (e.g., PHIL 2441).

Return to Law Studies

## Literature Minor

This program is designed for students who are interested in the study of English literature but who have elected to major in another area. The recommended series of courses allows students to become acquainted with some of the methods of literary study and with a number of the most important literary works.

The literature minor allows students to complement their area of major study with systematic experience in literature.

Students minoring in literature must complete a total of 15 hours (excluding ENGL 1010, 1020, 2030). None of the required 15 hours may be taken pass/fail. Only courses completed with a grade of C (2.0) or better may be counted toward the minor. A minimum of 9 upper-division hours of work in the minor must be taken with Downtown Campus English faculty.

## Courses

### Required Courses

ENGL 1400 - Introduction to Literary Studies. **Semester Hours: 3**

ENGL 3001 - Critical Writing. **Semester Hours: 3**

**Total: 6 Hours**

### **Electives; distribution requirements**

Any three 4000-level courses, at least two of which must be from those listed as distribution requirements for the major.

**Total: 9 Hours**

**Minor Total: 15 Hours**

*Restrictions:* These requirements may not be met by independent study. All upper-division courses must be taken from a member of the Downtown Campus faculty.

Return to the Department of English

## **Mathematics Minor**

### **Program Requirements**

MATH 1401 - Calculus I: MA1. **Semester Hours: 4**

MATH 2411 - Calculus II: MA1. **Semester Hours: 4**

MATH 2421 - Calculus III: MA1. **Semester Hours: 4**

Three additional upper-division math courses (3 or more semester hours each, excluding MATH 3040): **9 semester hours**

**Minor Total: 21 Hours**

Minimum of 21 semester hours with a *C* average.

*Note:* At least 6 of the upper-division semester hours must be taken at the Downtown Campus. No grade below a *C-* will be counted toward the minor requirements.

Return to Department of Mathematical and Statistical Sciences

## **Music Industry Studies Minor**

CAM Core Requirements

See the beginning of the Music and Entertainment Industry Studies section in this catalog for specific admission information to the UC Denver Department of Music and Entertainment Industry (MEIS). This competitive process is also for students interested in either music minor.

To declare a CAM minor, please see the College of Arts & Media's Office of Advising and Student Services in Arts Building, 177. All courses must be taken at UC Denver unless approved by an MEIS faculty member. All other courses must be taken at UC Denver. Students pursuing a BS in music may not declare a minor in music. Consult a CAM advisor for details. All minor courses must be passed with a C (2.0) or better.

## Program Requirements

MUS 2450 - Introduction to Performing Arts and Events Management. **Semester Hours: 3**

MUS 2470 - Music Applications on the Computer. **Semester Hours: 3**

MUS 2700 - Introduction to Music Business. **Semester Hours: 3**

MUS \_\_\_\_ - Music Business or Tech Elective (3-4\* semester hours)

PMUS 1023 - Piano Class. **Semester Hours: 1** Level I or III

PMUS 1023 - Piano Class. Level II or IV

PMUS 1100 - Music Theory I. **Semester Hours: 3**

PMUS 1110 - Ear Training and Sight Singing I. **Semester Hours: 1**

PMUS 3830 - History and Literature of Music I. **Semester Hours: 3** or

PMUS 3831 - History and Literature of Music II. **Semester Hours: 3**

**Total: 21-22 Hours**

\* Must be MUS 2560, Audio Production II (4 semester hours), if student plans to apply for the MIS/tech or recording arts emphasis as a music major.

## Philosophy Minor

A total of 15 semester hours is required for the minor in philosophy, with a minimum grade of C (2.0) in each course.

## Program Requirements

**Required Courses:**

PHIL 1012 - Introduction to Philosophy: Relationship of the Individual to the World: AH3.

**Semester Hours: 3**

PHIL 3002 - Ancient Greek Philosophy. **Semester Hours: 3**

PHIL 3022 - Modern Philosophy. **Semester Hours: 3**

(It is recommended but not required that PHIL 3002 be taken before PHIL 3022.)

**Total: 9 Hours**

### **Electives**

Choose two additional philosophy courses, one of which must be at the upper-division level.

**Total: 6 Hours**

## **Minor Total: 15 Hours**

**Religious studies courses cannot be used to fulfill the requirements for the minor.**

Return to Department of Philosophy

# **Physics Minor**

A total of 16 semester hours is required for a minor in physics. No grade below a *C* can be used to meet the requirements for the minor. At least 6 semester hours of the requirements for the minor must be completed at the Downtown Campus.

## **Program Requirements**

### **Required Physics Courses**

Either of the following two sequences:

PHYS 2010 - College Physics I. **Semester Hours: 4**

PHYS 2020 - College Physics II: SC1. **Semester Hours: 4**

PHYS 2030 - College Physics Lab I: SC1. **Semester Hours: 1**

PHYS 2040 - College Physics Lab II: SC1. **Semester Hours: 1**

**Sequence Total: 10 Hours**

-OR-

PHYS 2311 - General Physics I: Calculus-Based. **Semester Hours: 4**

PHYS 2321 - General Physics Lab I. **Semester Hours: 1**

PHYS 2331 - General Physics II: Calculus-Based. **Semester Hours: 4**

PHYS 2341 - General Physics Lab II. **Semester Hours: 1**

**Sequence Total: 10 Hours**

## **Elective Physics Courses**

At least 3 of the 6 semester hours must be at the 3000 level or above.

**Total: 6 Hours**

**Minor Total: 16 Hours**

Return to Department of Physics

# **Political Science Minor**

A student can earn an undergraduate minor in political science by completing 15 semester hours distributed as shown below. At least 9 of the 15 hours must be taken from Downtown Campus faculty.

## **Course Requirements**

### **One lower-division course**

P SC 1001 - Introduction to Political Science: The Quest for Freedom and Justice: SS1.

**Semester Hours: 3**

-OR-

P SC 1101 - American Political System: SS1. **Semester Hours: 3**

### **Four upper-division courses**

Choose four upper-division courses, including one each in political theory, American politics, comparative politics and international relations.

**Minor Total: 15 Hours**

Return to Department of Political Science

# **Psychology Minor**

## Program Requirements

A minor in psychology requires the completion of 15 semester hours with a grade of C (2.0) or better, including the following courses:

PSY 1000 - Introduction to Psychology I: SS3. **Semester Hours: 3**

PSY 1005 - Introduction to Psychology II: SS3. **Semester Hours: 3**

PSY 3205 - Human Development I: Child Psychology. **Semester Hours: 3**

-OR-

PSY 3305 - Abnormal Psychology. **Semester Hours: 3**

-OR-

PSY 4415 - Experimental Social Psychology. **Semester Hours: 3**

PSY 3222 - Principles of Learning and Behavior. **Semester Hours: 3**

-OR-

PSY 4144 - Human Cognition. **Semester Hours: 3**

PSY 4511 - History of Psychology. **Semester Hours: 3**

At least 6 upper-division semester hours must be taken from UC Denver Downtown Campus faculty. Further information about the department may be obtained from department advisors or by calling 303-556-8565.

Return to Department of Psychology

## Religious Studies Minor

Eighteen semester hours, at least 9 of which must be upper division and at least 9 semester hours taken with Downtown Campus faculty. A minimum cumulative GPA of 2.0 for all UC Denver courses taken in the minor is required, with no individual course grade lower than a C (2.0).

## Program Requirements

### Required Courses

RLST 1610 - Introduction to Religious Studies: AH3. **Semester Hours: 3**

### One course in Western religions chosen from approved list:

\* RLST 2660 - World Religions: AH3. **Semester Hours: 3**

RLST 3000 - Judaism, Christianity and Islam: Affinity and Difference. **Semester Hours: 3**

RLST 3060 - History of Early Christianity. **Semester Hours: 3**

-OR-

ETST 3224 - U.S./Middle East Culture and Religion. **Semester Hours: 3**

RLST 2700 - The Bible as Literature. **Semester Hours: 3**

-OR-

ENGL 2520 - The Bible as Literature. **Semester Hours: 3**

RLST 3740 - Biblical Traditions: Old Testament. **Semester Hours: 3**

RLST 3760 - Biblical Studies: New Testament. **Semester Hours: 3**

RLST 3770 - Archaeological Discoveries Relating to the Bible. **Semester Hours: 3**

RLST 4070 - Western Religious Thought. **Semester Hours: 3**

-OR-

PHIL 4710 - Western Religious Thought. **Semester Hours: 3**

RLST 4400 - Differing Concepts of God. **Semester Hours: 3**

-OR-

\* RLST 4440 - Concepts of the Soul. **Semester Hours: 3**

-OR-

PHIL 4470 - Concepts of the Soul. **Semester Hours: 3**

\* RLST 4460 - Death and Concepts of Afterlife. **Semester Hours: 3**

\* Fulfills requirement for either Eastern or Western Religion, but not both simultaneously

#### **One course in Eastern religions chosen from approved list:**

\* RLST 2660 - World Religions: AH3. **Semester Hours: 3**

RLST 3400 - Asian Philosophies and Religions. **Semester Hours: 3**

-OR-

PHIL 3666 - Asian Philosophies and Religions. **Semester Hours: 3**

RLST 3500 - Religions of India. **Semester Hours: 3**

RLST 3660 - Chinese Philosophy and Culture. **Semester Hours: 3**

-OR-

PHIL 3981 - Chinese Philosophy and Culture. **Semester Hours: 3**

RLST 4080 - Eastern Religious Thought. **Semester Hours: 3**

-OR-

PHIL 4720 - Eastern Religious Thought. **Semester Hours: 3**

RLST 4160 - Mysticism. **Semester Hours: 3**

\* RLST 4440 - Concepts of the Soul. **Semester Hours: 3**

\* RLST 4460 - Death and Concepts of Afterlife. **Semester Hours: 3**

\* Fulfills requirement for either Eastern or Western Religion, but not both simultaneously

#### **Elective courses (9 hours):**

The remaining 9 hours to equal the required 18 hours will count as electives, to be chosen from the approved lists (above).

Other courses, such as certain special topics, art history courses featuring religious themes and others may count toward the minor at the discretion of the course instructor and the director.

**Minor Total: 18 Hours**

[^Top](#)

[Return to Religious Studies](#)

## Sculpture Minor

CAM Core Requirements

To declare a CAM minor, please see the College of Arts & Media's Office of Advising and Student Services in Arts Building, 177.

Student may transfer up to 6 semester hours of non-UC Denver courses toward a minor. All other courses must be taken at UC Denver. Students pursuing a BA or BFA in fine arts may use up to 6 semester hours to fulfill major and minor requirements; the remaining semester hours must be taken in addition to the major requirements. Consult a CAM advisor for details.

### Program Requirements

- F A 1500 - Three-Dimensional Design. **Semester Hours: 3**
- F A 2500 - Bronze Casting and Metal Sculpture. **Semester Hours: 3**
- F A 2510 - Wood and Metal Sculpture. **Semester Hours: 3**
- Art History Elective (3 semester hours)

**Select three courses from the following list:**

- F A 3500 - Modeling and Casting the Figure. **Semester Hours: 3**
- F A 3510 - Installation Art. **Semester Hours: 3**
- F A 4500 - Kinetic Sculpture. **Semester Hours: 3**
- F A 4510 - Advanced Sculpture. **Semester Hours: 3**

**Total: 21 Hours**

# Social Justice Minor

## Requirements for the Minor

The minor consists of 18 semester hours, structured as follows:

A required introductory class (with either a social science or humanities focus); see below.

An experiential learning component of 3 semester hours.

Upper-division course work to be determined by individual students in consultation with the social justice minor director. At least two disciplines must be represented.

A 3-semester-hour capstone seminar that will provide opportunity for further reflection on the experiential learning projects and student group projects.

### Required course

#### Choose one:

SJUS 2010 - Social Justice: Theories, Narratives, and Technologies. **Semester Hours: 3**

-OR-

SJUS 2000 - Democratic Participation and Social Justice. **Semester Hours: 3**

**Total: 3 Hours**

### Internship

A 3-semester-hour internship in any discipline of the social sciences or humanities, involving community work and including a reflective component and public dissemination or report.

**Total: 3 Hours**

### Upper-Division Courses

**Choose three** (below is a sample list of upper-division courses, but other courses may be considered):

ANTH 3142 - Cultural Diversity in the Modern World. **Semester Hours: 3**

ANTH 4070 - Culture of Development and Globalization. **Semester Hours: 3**

CMMU 4022 - Critical Analysis of Communication. **Semester Hours: 3**

CMMU 4200 - Persuasion. **Semester Hours: 3**

CMMU 4260 - Communication and Conflict. **Semester Hours: 3**

ENGL 3795 - Race and Ethnicity in American Literature. **Semester Hours: 3**

ENGL 4280 - Proposal and Grant Writing. **Semester Hours: 3**

ENGL 4701 - Multimedia in the Community. **Semester Hours: 3**

ETST 3108 - Chicano/a and Latino/a History. **Semester Hours: 3**

ETST 3274 - Power, Poverty, Culture. **Semester Hours: 3**

ETST 3396 - History of the American Indian. **Semester Hours: 3**  
ETST 3704 - Culture, Racism and Alienation. **Semester Hours: 3**  
GEOG 3411 - Globalization and Regional Development. **Semester Hours: 3**  
GEOG 4335 - Contemporary Environmental Issues. **Semester Hours: 3**  
GEOG 4640 - Urban Geography: Denver and the U.S.. **Semester Hours: 3**  
HBSC 3041 - Health, Culture and Society. **Semester Hours: 3**  
HBSC 4021 - Community Health Assessment. **Semester Hours: 3**  
HIST 3345 - Immigration and Ethnicity in American History. **Semester Hours: 3**  
HIST 4217 - Consumer Culture. **Semester Hours: 3**  
HIST 4219 - Depression, Affluence and Anxiety: U.S. History, 1929 to the Present.  
**Semester Hours: 3**  
PHIL 3200 - Social and Political Philosophy. **Semester Hours: 3**  
PHIL 3280 - War and Morality. **Semester Hours: 3**  
PHIL 3500 - Ideology and Culture: Racism and Sexism. **Semester Hours: 3**  
PHIL 4920 - Philosophy of Media and Technology. **Semester Hours: 3**  
-OR-  
PHIL 5920 - Philosophy of Media and Technology. **Semester Hours: 3**  
P SC 3034 - Race, Gender, Law and Public Policy. **Semester Hours: 3**  
P SC 4025 - Local Governance and Globalization. **Semester Hours: 3**  
P SC 4207 - Theories of Social and Political Change. **Semester Hours: 3**  
RLST 4000 - Religion and Cultural Diversity. **Semester Hours: 3**  
SOC 3001 - Urban Sociology. **Semester Hours: 3**  
SOC 3030 - Social Change. **Semester Hours: 3**  
SOC 4440 - Social Stratification. **Semester Hours: 3**

**Total: 9 Hours**

### **Capstone**

SJUS 4000 - Social Justice Capstone. **Semester Hours: 3**

**Total: 3 Hours**

**Minor Total: 18 Hours**

Return to Social Justice

# **Sociology Minor**

For an undergraduate minor in sociology, a minimum of 15 semester hours in sociology must be completed with a grade of C or better. Nine of these hours must be taken from Downtown Campus faculty.

## Course Requirements

### Required Courses

SOC 1001 - Introduction to Sociology: SS3. **Semester Hours: 3**  
and  
SOC 4150 - History of Sociological Theory. **Semester Hours: 3**

**Total: 6 Hours**

### Electives

Nine hours of sociology courses, completed with a grade of C or better.

**Total: 9 Hours**

**Minor Total: 15 Hours**

[Return to Department of Sociology](#)

## Spanish Minor

Students minoring in Spanish for the BA degree must complete 15 semester hours of upper-division Spanish courses (courses numbered 3000 and higher). All course work must be taught in Spanish.

The minor in Spanish must include at least one culture and civilization class, chosen from the following:

### Required Courses

Choose one:

SPAN 3070 - Bilingual Communities: Spanish as a Language of Contact. **Semester Hours: 3**  
SPAN 3212 - Spanish American Culture and Civilization. **Semester Hours: 3**  
SPAN 3221 - Culture and Civilization of Spain I. **Semester Hours: 3**  
SPAN 3222 - Culture and Civilization of Spain II. **Semester Hours: 3**

SPAN 4230 - Modern Culture of Spain through Film and Narrative. **Semester Hours: 3**

**Total: 3 Hours**

## **Electives**

In addition, students minoring in Spanish must complete four additional upper-division Spanish courses.

**Total: 12 Hours**

**Minor Total: 15 Hours**

Return to Department of Modern Languages

## **Studio Art Minor**

CAM Core Requirements

To declare a CAM minor, please see the College of Arts & Media's Office of Advising and Student Services in Arts Building, 177.

Student may transfer up to 6 semester hours of non-UC Denver courses toward a minor. All other courses must be taken at UC Denver. Students pursuing a BA or BFA in fine arts may use up to 6 semester hours to fulfill major and minor requirements; the remaining semester hours must be taken in addition to the major requirements. Consult a CAM advisor for details.

## **Program Requirements**

Select two courses from following:

F A 1100 - Drawing I. **Semester Hours: 3**

F A 1400 - Two Dimensional Design. **Semester Hours: 3**

F A 1500 - Three-Dimensional Design. **Semester Hours: 3**

F A \_\_\_\_ - Studio Art Electives (6 semester hours)

F A \_\_\_\_ - UD Studio Art Elective (3 semester hours)

F A \_\_\_\_ - Art History Elective (3 semester hours)

**Total: 18 Hours**

# Studio Photography Minor

## CAM Core Requirements

To declare a CAM minor, please see the College of Arts & Media's Office of Advising and Student Services in Arts Building, 177.

Student may transfer up to 6 semester hours of non-UC Denver courses toward a minor. All other courses must be taken at UC Denver. Students pursuing a BA or BFA in fine arts may use up to 6 semester hours to fulfill major and minor requirements; the remaining semester hours must be taken in addition to the major requirements. Consult a CAM advisor for details.

## Program Requirements

F A 1150 - Introduction to Photography. **Semester Hours: 3**

F A 2155 - Introduction to Digital Photography. **Semester Hours: 3**

F A 3630 - History of Photography. **Semester Hours: 3**

### **F A photo electives from the following: (9 semester hours)**

F A 3155 - Digital Book Making/Narrative Strategies. **Semester Hours: 3**

F A 3170 - Photography: Constructing the Fine Print. **Semester Hours: 3**

F A 3160 - Color and Studio Lighting Dynamics. **Semester Hours: 3**

F A 3165 - Concepts and Processes in Photography. **Semester Hours: 3**

F A 3175 - Photography: Creative Commercial Applications. **Semester Hours: 3**

**Total: 18 Hours**

# Sustainability Minor

The sustainability minor is interdisciplinary, drawing on the expertise across CLAS departments: anthropology, biology, chemistry, communication, economics, environmental sciences, geography, geology, history, economics, philosophy, physics and political science. The core courses are taught by a faculty team from natural sciences and social sciences, who will present the concepts from the empirical and humanistic perspectives. The teaching team changes each term so that faculty from any given CLAS department will rotate through the core courses every 3-4 years.

The minor comprises 18 hours, distributed as follows:

two core courses that introduce students to the systems theories that document how living things affect and are affected by their environments

two electives chosen from an approved list of CLAS courses

students select either a field study, internship, service learning or related travel study course

capstone course in sustainability

## Requirements for the Minor

### Core Courses

SUST 3010 - The Non-Sustainable Past. **Semester Hours: 3**

SUST 3011 - The Sustainable Present. **Semester Hours: 3**

**Total: 6 Hours**

### Electives

Choose two from the following list of approved electives:

#### Anthropology

ANTH 1302 - Introduction to Archaeology: SS3. **Semester Hours: 4**

ANTH 1303 - Introduction to Biological Anthropology: SC1. **Semester Hours: 4**

ANTH 2102 - Culture and the Human Experience: SS3. **Semester Hours: 3**

ANTH 3006 - Development, Environment and Culture. **Semester Hours: 3**

ANTH 3301 - World Prehistory. **Semester Hours: 3**

ANTH 3512 - Human Evolution. **Semester Hours: 3**

ANTH 4030 - Ethnobiology. **Semester Hours: 3**

ANTH 4060 - Evolutionary Medicine. **Semester Hours: 3**

ANTH 4070 - Culture of Development and Globalization. **Semester Hours: 3**

ANTH 4170 - Culture and the Environment. **Semester Hours: 3**

ANTH 4220 - Community in Global Context. **Semester Hours: 3**

ANTH 4250 - Culture Change in the Modern World. **Semester Hours: 3**

ANTH 4450 - Development and Conservation: Contemporary Issues. **Semester Hours: 3**

ANTH 4460 - Development and Conservation: Theory and Practice. **Semester Hours: 3**

ANTH 4560 - Human Ecology. **Semester Hours: 3**

#### Biology

BIOL 1550 - Basic Biology: Ecology and the Diversity of Life: SC1. **Semester Hours: 4**

BIOL 3122 - Natural History of Colorado. **Semester Hours: 3**

BIOL 3330 - Plant Diversity. **Semester Hours: 3**

BIOL 3411 - Principles of Ecology. **Semester Hours: 3**

BIOL 3412 - Fundamentals of Applied Ecology. **Semester Hours: 3**

BIOL 3521 - Vertebrate Biology. **Semester Hours: 3**

BIOL 4154 - Conservation Biology. **Semester Hours: 3**

## **Business**

MGMT 4950 - Special Topics in Management. **Semester Hours: 3**  
when offered as Business and Sustainability

MKTG 4950 - Special Topics. **Semester Hours: 3**  
when offered as Nonprofit and Social Marketing

## **Chemistry**

CHEM 1474 - Core Chemistry: Chemistry For the Consumer: SC1. **Semester Hours: 4**

CHEM 4700 - Environmental Chemistry. **Semester Hours: 3**

CHEM 5700 - Environmental Chemistry. **Semester Hours: 3**

## **Communication**

CMMU 4282 - Environmental Communication. **Semester Hours: 3**

CMMU 5282 - Environmental Communication. **Semester Hours: 3**

## **Economics**

ECON 4530 - Economics of Natural Resources. **Semester Hours: 3**

ECON 4540 - Environmental Economics. **Semester Hours: 3**

ECON 4770 - Economic Development--Theory and Problems. **Semester Hours: 3**

ECON 5530 - Economics of Natural Resources. **Semester Hours: 3**

ECON 5540 - Environmental Economics. **Semester Hours: 3**

## **Geography / Geology / Environmental Science**

ENVS 1042 - Introduction to Environmental Sciences: SC1. **Semester Hours: 4**

ENVS 1342 - Introduction to Environment and Society: SS2. **Semester Hours: 3**

ENVS 3082 - Energy and the Environment. **Semester Hours: 3**

GEOG 1202 - Introduction to Physical Geography: SC2. **Semester Hours: 3**

GEOG 3302 - Water Resources. **Semester Hours: 3**

GEOG 3411 - Globalization and Regional Development. **Semester Hours: 3**

GEOG 4010 - Biogeochemical Cycles. **Semester Hours: 3**

GEOG 4020 - Earth Environments and Human Impacts. **Semester Hours: 3**

GEOL 4030 - Environmental Geology. **Semester Hours: 3**

GEOG 4090 - Environmental Modeling with Geographic Information Systems. **Semester Hours: 3**

GEOG 4230 - Hazard Mitigation and Vulnerability Assessment. **Semester Hours: 3**

GEOG 4265 - Sustainability in Resources Management. **Semester Hours: 3**

GEOG 4335 - Contemporary Environmental Issues. **Semester Hours: 3**  
GEOG 4350 - Environment and Society in the American Past. **Semester Hours: 3**  
GEOG 4640 - Urban Geography: Denver and the U.S.. **Semester Hours: 3**  
GEOG 5090 - Environmental Modeling with Geographic Information Systems. **Semester Hours: 3**  
GEOG 5230 - Hazard Mitigation and Vulnerability Assessment. **Semester Hours: 3**  
GEOG 5265 - Sustainability in Resources Management. **Semester Hours: 3**  
GEOG 5335 - Contemporary Environmental Issues. **Semester Hours: 3**  
GEOG 5350 - Environment and Society in the American Past. **Semester Hours: 3**  
GEOG 5640 - Urban Geography: Denver and the U.S.. **Semester Hours: 3**

## History

HIST 3350 - Colonial Latin America. **Semester Hours: 3**  
HIST 3360 - Denver History. **Semester Hours: 3**  
HIST 3366 - Environmental History of North America. **Semester Hours: 3**  
HIST 3451 - Introduction to African History. **Semester Hours: 3**  
HIST 3460 - Introduction to Latin American History. **Semester Hours: 3**  
HIST 3470 - Introduction to Asian History. **Semester Hours: 3**  
HIST 3606 - Science, Technology, and Society in the Modern World. **Semester Hours: 3**  
HIST 4217 - Consumer Culture. **Semester Hours: 3**  
HIST 4226 - U.S. Business History. **Semester Hours: 3**  
HIST 4227 - American West. **Semester Hours: 3**  
HIST 4236 - Colorado Mining and Railroads. **Semester Hours: 3**  
HIST 4411 - Modern Mexico. **Semester Hours: 3**  
HIST 4417 - Commodities and Globalization: Dessert in World History. **Semester Hours: 3**  
HIST 4421 - Modern China. **Semester Hours: 3**  
HIST 4431 - Modern Japan. **Semester Hours: 3**  
HIST 4451 - Southern Africa. **Semester Hours: 3**  
HIST 4461 - The Modern Middle East. **Semester Hours: 3**  
HIST 4501 - World History for Educators. **Semester Hours: 3**  
HIST 4503 - Topics in History of Science. **Semester Hours: 3**  
HIST 4504 - Animals in U.S. History. **Semester Hours: 3**

## Physics

PHYS 3082 - Energy and the Environment. **Semester Hours: 3**  
PHYS 4400-4499 - Topics in Scientific Instrumentation and Laboratory Methods. **Semester Hours: 1**  
PHYS 4850 - Physics for Design and Innovation I. **Semester Hours: 3**  
PHYS 4852 - Physics for Design and Innovation II. **Semester Hours: 3**  
Note: PHYS 4850 is prerequisite for PHYS 4852

PHYS 5400-5499 - Topics in Scientific Instrumentation and Laboratory Methods. **Semester Hours: 1**

PHYS 5850 - Physics for Design and Innovation I. **Semester Hours: 3**

PHYS 5852 - Physics for Design and Innovation II. **Semester Hours: 3**

Note: PHYS 5850 is prerequisite for PHYS 5852

## **Philosophy**

PHIL 4250 - Environmental Ethics. **Semester Hours: 3**

PHIL 4510 - Philosophy of Nature. **Semester Hours: 3**

PHIL 5250 - Environmental Ethics. **Semester Hours: 3**

## **Political Science**

P SC 3034 - Race, Gender, Law and Public Policy. **Semester Hours: 3**

P SC 3035 - Political Movements: Race and Gender. **Semester Hours: 3**

P SC 3042 - Introduction to International Relations. **Semester Hours: 3**

P SC 3914 - The Urban Citizen. **Semester Hours: 3**

P SC 4009 - Politics of the Budgetary Process. **Semester Hours: 3**

P SC 4014 - Media and Politics. **Semester Hours: 3**

P SC 4025 - Local Governance and Globalization. **Semester Hours: 3**

P SC 4085 - Comparative Public Policy. **Semester Hours: 3**

P SC 4144 - Indigenous Political Systems. **Semester Hours: 3**

P SC 4206 - Social Movements, NGOs and Global Politics. **Semester Hours: 3**

P SC 4207 - Theories of Social and Political Change. **Semester Hours: 3**

P SC 4215 - Women's Rights, Human Rights: Global Perspectives. **Semester Hours: 3**

P SC 4217 - Human Rights in Theory and Practice. **Semester Hours: 3**

P SC 4226 - The United Nations in World Affairs. **Semester Hours: 3**

P SC 4248 - Gender, Globalization and Development. **Semester Hours: 3**

P SC 4324 - Politics, Public Policy and Leadership. **Semester Hours: 3**

P SC 4326 - Advanced International Political Economy: Globalization. **Semester Hours: 3**

P SC 4354 - Environmental Politics. **Semester Hours: 3**

P SC 4365 - Global Ecological Crises. **Semester Hours: 3**

P SC 4374 - Public Priorities for the 21st Century. **Semester Hours: 3**

P SC 4545 - Immigration Politics. **Semester Hours: 3**

P SC 4555 - International Women's Resistance. **Semester Hours: 3**

P SC 4645 - Comparative Political Leadership. **Semester Hours: 3**

**Total: 6 Hours**

## **Experiential learning course**

Students choose a field study, internship, service learning or related travel study course.

**Total: 3 Hours**

## Capstone

SUST 4960 - Capstone in Sustainability. **Semester Hours: 3**

**Total: 3 Hours**

**Total: 18 Hours**

Return to Sustainability

# Theatre, Film and Television Minor

## CAM Core Requirements

To declare a CAM minor, see the College of Arts & Media's Office of Advising and Student Services in Arts Building, 177. Students may transfer up to 6 semester hours of non-UC Denver courses toward a minor. All other courses must be taken at UC Denver. Students pursuing a BA or BFA in the Department of Theatre, Film and Video Production may not declare a minor in theatre, film and television. Consult a CAM advisor for details. All minor courses must be completed with a C (2.0) or better.

## Program Requirements

FILM 1050 - Video Production/Post-Production I. **Semester Hours: 4**

### One of the following (in consultation with advisor)

FILM 2090 - Production Management Techniques. **Semester Hours: 3**

THTR 1611 - Acting Lab I. **Semester Hours: 3**

FILM 1611 - Acting Lab I. **Semester Hours: 3**

THTR 1110 - Production Design: Theatre, Film and Video. **Semester Hours: 3**

### Two of the following (in consultation with advisor)

ENGL 3070 - History of Silent Film. **Semester Hours: 3**

ENGL 3080 - History of Sound Film. **Semester Hours: 3**

THTR 3610 - Performance: Theory/History/Criticism I. **Semester Hours: 3**

THTR 4610 - Performance: Theory/History/Criticism II. **Semester Hours: 3**

**Total: 24 Hours**

# Urban and Regional Planning Minor

The undergraduate planning minor in the Department of Geography and Environmental Sciences provides nongeography undergraduate students the opportunity to pursue studies in the professional field of planning. Geography majors can pursue the urban studies option, so this minor would not be available to these majors.

Geography and urban and regional planning share a common concern for the spatial configuration of the places that we inhabit and enjoy. In recognition of this close association, there is currently an articulation agreement between the Department of Geography and Environmental Sciences and the College of Architecture and Planning that provides students with a mechanism for acceleration through the master of urban and regional planning (MURP) degree program, if accepted into that graduate program. Those students completing the requirements for an undergraduate planning minor may also be eligible to pursue an accelerated MURP degree.

To meet the requirements for this minor, students must complete three core requirements and two electives, totaling 15 semester hours. Although the three core courses may be taken in any order, it is advisable to begin with GEOG 1602, since this course familiarize students with many key concepts used in other classes. All core courses are offered on a yearly basis.

## Program Requirements

### Required Core

GEOG 1602 - Introduction to Urban Studies: SS2. **Semester Hours: 3**

GEOG 4640 - Urban Geography: Denver and the U.S.. **Semester Hours: 3**

URP 5501 - Planning Issues and Processes. **Semester Hours: 3**

**Total: 9 Hours**

### Electives

Choose two:

GEOG 4060 - Remote Sensing I: Introduction to Environmental Remote Sensing. **Semester Hours: 3**

-OR-

GEOG 5060 - Remote Sensing I: Introduction to Environmental Remote Sensing. **Semester Hours: 3**

GEOG 4080 - Introduction to GIS. **Semester Hours: 3**

-OR-

GEOG 5080 - Introduction to GIS. **Semester Hours: 3**

GEOG 4085 - GIS Applications for the Urban Environment. **Semester Hours: 3**

-OR-

GEOG 5085 - GIS Applications for the Urban Environment. **Semester Hours: 3**  
GEOG 4090 - Environmental Modeling with Geographic Information Systems. **Semester Hours: 3**  
-OR-  
GEOG 5090 - Environmental Modeling with Geographic Information Systems. **Semester Hours: 3**  
-OR-  
GEOG 4095 - Deploying GIS Functionality on the Web. **Semester Hours: 3**  
-OR-  
GEOG 5095 - Deploying GIS Functionality on the Web. **Semester Hours: 3**  
GEOG 4230 - Hazard Mitigation and Vulnerability Assessment. **Semester Hours: 3**  
-OR-  
GEOG 5230 - Hazard Mitigation and Vulnerability Assessment. **Semester Hours: 3**  
GEOG 4235 - GIS Applications in the Health Sciences. **Semester Hours: 3**  
-OR-  
GEOG 5235 - GIS Applications in the Health Sciences. **Semester Hours: 3**  
GEOG 4400 - Regional Economic Development. **Semester Hours: 3**  
GEOG 4630 - Transportation Planning I: Transport Network Analysis. **Semester Hours: 3**  
GEOG 4990 - Special Topics. **Semester Hours: 3**

**Total: 6 Hours**

**Minor Total: 15 Hours**

### **Entrance Requirements**

All undergraduate students, except geography majors, are eligible for this minor.

### **Performance Requirements**

Students must complete 15 semester hours in geography and/or planning. Because of the professional nature of this minor and the potential for fast-tracking in the MURP program, 12 semester hours of upper-division courses are required. Students must achieve a grade of C (2.0) or higher in required courses. All upper-division courses must be completed at the Downtown Campus and a minimum of 9 semester hours must be completed in CLAS (geography) to satisfy residency requirements.

Return to Department of Geography and Environmental Sciences

## **Women's and Gender Studies Minor**

The women's and gender studies minor gives students the opportunity to explore gender issues in the humanities and social sciences. To minor in WGST, a student must complete 18 semester hours in WGST courses with a grade of C or better. At least 12 semester hours for the WGST minor must be taken with UC Denver faculty, and all courses for the minor must be approved by a WGST advisor.

## Requirements for the Minor

### 1. Required Course: WGST 1050 (3 semester hours)

This course provides an introduction to key concepts, themes and approaches to the interdisciplinary field of women's and gender studies. It helps students develop an overall framework for WGST in which to place their electives and internship.

WGST 1050 - Introduction to Women's and Gender Studies. **Semester Hours: 3**

### 2. WGST-related courses at the 3000 level or above (12 semester hours)

These courses combine humanities and social science fields. Advisor approval is required for course selection. Students are strongly urged to take at least one course that focuses on women's and gender issues in international perspective. Courses which are eligible for WGST credit include (but are not limited to):

#### Humanities

ENGL 3450 - Twentieth Century Women Writers. **Semester Hours: 3**

ENGL 4510 - Whores and Saints: Medieval Women. **Semester Hours: 3**

FR 4510 - French Women Writers. **Semester Hours: 3**

HIST 3343 - Women in U.S. History. **Semester Hours: 3**

HIST 4230 - Women in the West. **Semester Hours: 3**

HIST 4303 - Sex and Gender in Modern Britain. **Semester Hours: 3**

HIST 4307 - History of Sexuality. **Semester Hours: 3**

HIST 4345 - Gender, Science, and Medicine: 1600 to the Present. **Semester Hours: 3**

PHIL 3500 - Ideology and Culture: Racism and Sexism. **Semester Hours: 3**

PHIL 4933 - Philosophy of Eros. **Semester Hours: 3**

RLST 4420 - Goddess Traditions. **Semester Hours: 3**

SPAN 4540 - Race, Class, and Gender in Spanish Golden Age Literature. **Semester Hours: 3**

WGST 4306 - Survey of Feminist Thought. **Semester Hours: 3**

-OR-

ENGL 4306 - Survey of Feminist Thought. **Semester Hours: 3**

-OR-

HIST 4306 - Survey of Feminist Thought. **Semester Hours: 3**

#### Social Sciences

ANTH 4200 - Gender in Cross-Cultural Perspective. **Semester Hours: 3**  
ANTH 4260 - Human Reproductive Ecology. **Semester Hours: 3**  
CMMU 4020 - Feminist Perspectives on Communication. **Semester Hours: 3**  
CMMU 4045 - Female-Male Friendships. **Semester Hours: 3**  
CMMU 4265 - Gender and Communication. **Semester Hours: 3**  
CMMU 4268 - Communication and Diversity in U.S. History. **Semester Hours: 3**  
CMMU 4275 - Family Communication. **Semester Hours: 3**  
ECON 3100 - Economics of Race and Gender. **Semester Hours: 3**  
ECON 3400 - Economics of Sex and Drugs. **Semester Hours: 3**  
HBSC 3010 - Evolution of Human Sexuality. **Semester Hours: 3**  
P SC 3034 - Race, Gender, Law and Public Policy. **Semester Hours: 3**  
P SC 3035 - Political Movements: Race and Gender. **Semester Hours: 3**  
P SC 4215 - Women's Rights, Human Rights: Global Perspectives. **Semester Hours: 3**  
P SC 4248 - Gender, Globalization and Development. **Semester Hours: 3**  
P SC 4555 - International Women's Resistance. **Semester Hours: 3**  
P SC 4564 - Gender and Politics. **Semester Hours: 3**  
P SC 4827 - Women and the Law. **Semester Hours: 3**  
PSY 3235 - Human Sexuality. **Semester Hours: 3**  
PSY 3405 - Family Psychology. **Semester Hours: 3**  
PSY 3611 - Psychology of Women. **Semester Hours: 3**  
PSY 3612 - Domestic Abuse. **Semester Hours: 3**  
SOC 3010 - Sociology of Human Sexuality. **Semester Hours: 3**  
SOC 3080 - Sex and Gender. **Semester Hours: 3**  
SOC 3700 - Sociology of the Family. **Semester Hours: 3**  
SOC 4120 - Popular Culture and the American Family. **Semester Hours: 3**

See the WGST Web site for this semester's course offerings.

### **3. WGST Community Internship (3 semester hours)**

An internship working in the community around issues related to women and gender. Working with a WGST advisor and the UC Denver Experiential Learning Center (ELC), students will choose an internship related to their interests in WGST. Through the ELC, students sign up for their internship under WGST 3939. Students will be required to complete a critical writing component made up of an ongoing log about the internship experience and an 8-10 page final paper discussing the interrelationships between the practical internship experience and the theoretical/scholarly insights of women's and gender studies. Students may also choose to use WGST 2900, Smart Girl Leadership Training, in lieu of their internship and must follow the requirements of that course and practicum. Students must have taken WGST 1050 before enrolling for their internship.

WGST 3939 - Cooperative Education. **Semester Hours: 1 to 3**

-OR-

WGST 2900 - Smart Girl Leadership Training and Practicum. **Semester Hours: 3**

## **Total: 18 Hours**

Return to Women's and Gender Studies

# **Writing Minor**

The writing minor allows students to complement their area of major study with systematic experience in writing.

Students minoring in writing must complete a total of 15 hours (excluding ENGL 1010, 1020, 2030). None of the required 15 hours may be taken pass/fail. Only courses completed with a grade of C (2.0) or better may be counted toward the minor. A minimum of 9 upper-division hours of work in the minor must be taken with Downtown Campus English faculty.

Students are encouraged to take ENGL 1020 and ENGL 2030 before beginning the minor. (ENGL 2154 and ENGL 2030 can be taken concurrently.)

## **Courses**

### **Required Courses**

ENGL 2070 - Grammar, Rhetoric and Style. **Semester Hours: 3**

ENGL 4180 - Argumentation and Logic. **Semester Hours: 3**

ENGL 4190 - Special Topics in Rhetoric and Writing. **Semester Hours: 3**

### **Total: 9 Hours**

### **Distributed Course**

Choose one course from the following:

ENGL 2154 - Introduction to Creative Writing. **Semester Hours: 3**

-OR-

ENGL 3154 - Technical Writing. **Semester Hours: 3**

-OR-

ENGL 3170 - Business Writing. **Semester Hours: 3**

### **Elective**

One 3000-/4000-level writing course.

**Minor Total: 15 Hours**

Return to the Department of English

## **Undergraduate Experiences**

# **First-Year Seminars**

The Office of Undergraduate Experiences at UC Denver offers an optional program of first-year seminars (FYS) designed to assist students to successfully make the transition from high school to college, improve student retention and boost new student confidence. The FYS courses integrate rigorous academic content with academic skills such as library usage, campus resources, information literacy, time management, communication skills and career counseling.

Class size is capped at 24 students to facilitate interaction between student and instructor and to allow the instructor to serve as a mentor in the student's first semester of college. FYS classes engage students in active learning beyond the traditional classroom, laboratory or studio classes. In the FYS courses, students learn about themselves and their abilities. The experiences obtained from the FYS program aim to promote academic exploration and interdisciplinary learning, civic engagement, cultural awareness, leadership, problem solving and other professional skills.

### **WHY PARTICIPATE?**

- higher first semester grades
- higher student satisfaction facilitated by small class size and a faculty mentor
- better utilization of campus resources paid for through student fees
- early exploration of career paths and a suitable major
- more likely to stay in college

Students are encouraged to use the FYS course to explore areas either within or outside their major. Students should work with their academic advisor during orientation to select an appropriate FYS course. All of the courses are 3 semester hours and count in the required core curriculum. Requirements vary slightly, but students should expect weekly writing and readings, participation in events outside the classroom including one service-learning activity, and a final project.

## **Fall 2009 First Year Seminar Course Descriptions:**

**ARTS 1111-001**

**FYS: Sources of Creativity**

(Core: Arts)  
Carol Bloom

This course will explore the nature of creative inspiration, its potential and implementation. Through individual and collaborative projects, students will investigate the interdisciplinary composition and development of the literary, visual and performing arts and their aesthetic, social and political impact.

**BIOL 1111-001**

**FYS: Global Health Crisis**

(Core: Biological and Phys Science)

Kim Regier

Come explore the interaction of our environment and our health. Topics include: water and air pollution, toxins, pests and pesticides, food quality and radiation. We will discuss current events such as the obesity epidemic, recent outbreaks of infectious disease, methamphetamine labs and global warming.

**CHEM 1111-001**

**FYS: Environmental Science: Is There Science Behind the Headlines?**

(Core: Biological and Phys Science)

John Lanning

This is an introductory seminar into the multidisciplinary area of environmental science. Basic principles of chemistry and ecology will be used to examine air pollution, water pollution and hazardous waste issues that impact the environment on a local or global scale. Prior knowledge of chemistry is not required.

**C J 1111-001**

**FYS: Law & Order: Anatomy of the Criminal Justice System**

(Core: Social Science)

Mary Dodge

This course explores contemporary issues and controversies in cases within the criminal and juvenile justice systems. Topical issues cover various forms of crime—for example, environmental hazards, murder and sexual assault. The materials examine the relationships among crime statistics, theory, law and sensationalism in the media.

**CMMU 1111-001**

**FYS: Communication and Adaptation**

(Core: Behavioral Science)

Ian Dawe

This course will examine the role of communication during seasons of adaptation to new environments. Specifically, the course will address challenges faced by students as they transition from high school to higher education contexts and offer communication strategies that can be implemented during this process. Additionally, the course will address cycles of change in early adulthood, both in personal and professional contexts.

**ENGL 1111-001**

**FYS: Rereading America**

(Core: Humanities)

Paul DeMarte

The first-year seminar thrives on the interaction of students with each other and the instructor;

therefore, your contributions to the class are vitally important. I have selected evaluable, current and sometimes controversial materials for discussion, but I appreciate class suggestions about what to read, write and do in the college community. We'll have weekly reading and writing experiences, all of which will be evaluated. Guest lectures and visits, in and out-of-class activities and videos are also part of this course.

### **ETST 1111-001**

#### **FYS: Racial Minorities in the US**

(Core: Social Science)

Khushnur Dadabhoy

A survey of the historical and the contemporary experiences of American Indians, Asians, African-Americans and Hispanics in the United States from 1958 to the present. This course will examine the origins and development of racial and ethnic identities in the Americas with specific attention to Colorado history.

### **F A 1111-001**

#### **FYS: Appreciating Art: It's Form and Content**

(Core: Arts)

Vivian George

This course will take students through an understanding of art with an introduction to art's basic elements; learning the vocabulary to look at, appreciate and better understand the visual arts. What is visual perception? Students will learn to be informed critics of contemporary and historical examples of art. What is art? We will look at all visual media including, painting, sculpture, photography, film, architecture and design.

### **GEOG 1111-001**

#### **FYS: Climate Change**

(Core: Biological and Physical Science)

Fred Chambers

This introductory seminar will give you a broad overview of the current state of our changing climate. Topics will include climate changes through geologic time, the mechanism of climate change, scales of climate change (e.g. global, regional and local levels), global warming and past and future ice ages. No prior knowledge of geology, weather and/or climate needed.

### **MGMT 1111-001**

#### **FYS: Current Topics In Business**

(Core: Behavioral Science)

MaryLee Stansifer

This course examines a variety of issues relevant to business in Denver and the world. Discussion will focus on topics such as Denver companies, ethical issues in business, business career exploration, marketing everywhere, globalization and other current topics.

### **MGMT 1111-002**

#### **FYS: Introduction to Business**

(Core: Behavioral Science)

Barry McConnell

This course examines the issues confronting business from a management, marketing, finance and global economic perspective. Entrepreneurship and other career opportunities in business

are covered. The course is designed especially for nonbusiness majors and students just wanting to sort out the possibilities that a career in business might offer.

### **MGMT 1111-003**

#### **FYS: Leadership, Business and You**

(Core: Behavioral Science)

Ken Bettenhausen

This course examines the role of leadership in business and society. Through individual and group activities, guest speakers and field trips, students will better understand the need for and the limits of leadership and gain a better appreciation for their own leadership strengths and potential.

### **PHYS 1111-001**

#### **FYS: How Things Work**

(Core: Biological and Physical Science)

Randy Tagg

Everyday objects, including technical gadgets used in home, office, entertainment, factory, etc., are full of examples of the application of physics, but haven't you always wanted to know how they work? This course will show how physics concepts like mechanics, thermodynamics, electromagnetism and optics play a vital role in how the objects that we use everyday work. You'll also have the opportunity to take things apart and design new products using the concepts of physics.

### **T ED 1111-001**

#### **FYS: TEACH—Imagine the Possibilities!**

(Core: Humanities)

Deidre Magee

What is possible with a career in teaching? Education offers so many possibilities for future teachers and concerned citizens. In this seminar you will explore the world of education through interactive, field-based experiences in collaboration with your peers, teacher education faculty and leaders in today's urban schools. You will also have an opportunity to visit UC Denver's award-winning K-12 partner schools and network with current teacher candidates in the program.

### **T ED 1111-002**

#### **FYS: Learning for the 21st Century**

(Core: Humanities)

Carole Basile

This first-year seminar will focus on learning for the 21st century. We'll examine the types of learning people need to be successful today's world as well as how and where they acquire these skills. We'll visit formal and informal educational settings to see how students learn in those settings and we'll meet with people from different sectors (i.e. government, industry, education, nonprofits) to hear their perspectives on what they believe are important learning goals for all students.

# **University Honors and Leaders**

**Director:** Steven G. Medema  
**Office:** 1047 Ninth Street Park  
**Telephone:** 303-556-5297  
**Fax:** 303-556-6744  
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**Web site:** www.cudenver.edu/uhl

University Honors and Leadership (UHL) is a program of excellence designed for outstanding students who have demonstrated superior achievement in academic performance and/or outstanding leadership qualities. The program is founded on the premise that the integration of rigorous programs of academic excellence and leadership education provides the ideal environment in which to develop the gifts of the next generation of leaders in academia, business, policymaking and service to communities local, national and global.

The UHL program is unique in integrating academic honors and leadership education within a highly selective learning community of outstanding students and faculty. The UHL program allows students to complement their major field of study with a traditional honors experience in the academic honors track or program of leadership education in the leadership studies track. Students move through the UHL program in cohorts that simultaneously promote community, teamwork and individual initiative. All of the UHL courses are multidisciplinary, reflecting our view that the ability to effectively analyze the challenges faced in all sectors of society can be enhanced by the integration of appropriate pieces drawn from a broad base of perspectives and problem-solving skills. The UHL program complements this with an emphasis on the development of exceptional oral and written communication skills, projects that steep the students in sophisticated research methods and the opportunity to work in teams to solve practical problems in the community.

## **The Academic Program**

UHL is a multidisciplinary cohort program consisting of 27 semester hours of course work to be completed over four years. The UHL courses will substitute for most of the UC Denver general core curriculum requirements.

UHL students are given the opportunity to pursue a traditional honors experience through the academic honors track of the UHL program or to focus on leadership education through the UHL leadership studies track. UHL students have a common first-year experience, taking a core of course work common to both tracks. The second and third years of the UHL program offer programs designed specifically for the academic honors and leadership studies tracks. The UHL students come together for a two-semester capstone research seminar in the fourth year.

## **UHL Core**

The UHL Core is a body of courses the completion of which is required of all UHL students. The UHL core includes:

UHL 1100: Introduction to UHL (3 semester hours)

UHL 2755: UHL Seminar (two semesters at 1 semester hour each)  
English 2030-UHL: Core Composition II (3 semester hours)  
UHL 4991: UHL Senior Research Seminar I (2 semester hours)  
UHL 4992: UHL Senior Research Seminar II (2 semester hours)

## **Waiver of English 2030 requirement for UHL Students**

All UHL students who have not previously received credit for English 2030 or its equivalent are required to complete a UHL section of English 2030. UHL students who have previously received credit for English 2030 or the equivalent will not receive additional UC Denver credit for English 2030 and so are not required to take the UHL section of this course. Students who believe that they are exempt from the English 2030 requirement should meet with the UHL Advisor to confirm this.

## **Credit Hour and Distribution Requirements for UHL Certification**

UHL students are required to complete 27 student semester hours of UHL courses, including two (2) one-semester-hour UHL seminars, in order to graduate with UHL certification. Students who have previously received credit for English 2030 or the equivalent must complete 24 hours of UHL courses. In addition, students are required to structure their UHL curricula so that they satisfy the UC Denver core curriculum requirements within their UHL programs of study. Students should meet regularly with the UHL advisor in order to ensure that their UHL course work satisfies the necessary requirements for UHL certification and UC Denver graduation.

## **Academic Honors Track Requirements**

The academic honors track offers a unique program for outstanding students entering UC Denver. The academic honors track provides a rigorous academic experience to complement the student's major, provides an environment for lifelong learning and promotes self-discovery. Students will be exposed to complicated problems, competing perspectives and differing approaches to important topics. Undergraduate research will be emphasized in the academic honors track to prepare students for graduate school or any postbaccalaureate professional program.

The second and third year of the academic honors program will develop students' core knowledge areas through the integration of humanities, arts, science, behavioral and social science, international perspectives and cultural diversity by way of multidisciplinary courses where students are exposed to complex multidimensional issues. Students continue to build and broaden their communication, analytical and critical thinking skills. Students will learn to apply knowledge to new areas, expand their view of the world and develop sensitivity and appreciation of the arts, diversity and global society.

## **A typical course of study for an Academic Honors track student is:**

### **Year 1:**

UHL 1100: Introduction to UHL (3 semester hours)

UHL 2755: UHL Seminar (two semesters at 1 semester hour each)

English 2030-UHL: Core Composition II (3 semester hours)

### **Years 2 and 3:**

Five UHL Academic Honors track electives (15 semester hours)

### **Year 4:**

UHL 4991: UHL Senior Research Seminar I (2 semester hours)

UHL 4992: UHL Senior Research Seminar II (2 semester hours)

NOTE: Academic Honors track students may count one leadership studies track course toward their academic honors graduation requirements. Students who successfully complete the academic honors track will receive a university honors designation on their diploma and on their university transcript. The academic honors track complements, but does not replace, honors programs available in the student's major. Students should consult advisors in their major as well as the UHL advisor for advice on honors sections. Meeting with advisors is encouraged during the first semester at UC Denver.

## **Leadership Studies Track Requirements**

The leadership studies track is designed to develop skills and experiences that will prepare students for the new systems and challenges of leadership in corporate, institutional and public life. Leadership studies tracks work together to enhance their leadership abilities to meet the challenges of a world characterized by the increasing globalization of leadership responsibilities and the rapid change in what leaders need to learn and know. They confront complex issues, individually and in leadership teams, while taking responsibility for becoming lifelong learners.

Students develop their leadership potential through self-guided learning strategies, practical team projects, theory-based seminars, contact with outstanding leaders and individualized mentoring. The leadership studies track is designed to create a collaborative learning environment where students work in action-oriented teams on innovative solutions to practical issues.

## **A typical course of study for a leadership studies track student is:**

**Year 1:**

UHL 1100: Introduction to UHL (3 semester hours)

UHL 2755: UHL Seminar (two semesters at 1 semester hour each)

English 2030-UHL: Core Composition II (3 semester hours)

**Years 2 and 3:**

Five UHL Leadership Studies track electives (15 semester hours)

**Year 4:**

UHL 4991: UHL Senior Research Seminar I (2 semester hours)

UHL 4992: UHL Senior Research Seminar II (2 semester hours)

NOTE: Leadership track students may count one academic honors track course toward their leadership studies graduation requirements. Students who successfully complete the leadership studies track will graduate with a minor in leadership studies.

## **UHL Graduation Requirements**

To graduate with the appropriate UHL designation (university honors or a minor in leadership studies), students are required to satisfy the course and semester hour requirements specified above and must have a GPA of 3.50 or higher in their UHL courses. No grade below B- (2.70) in a UHL course will count toward the UHL graduation requirements.

## **Admission**

Admission to the UHL program is competitive. In addition to meeting published requirements for admission to UC Denver, students must have a high school GPA, class ranking and SAT/ACT scores commensurate with an honors educational experience. For example, we would expect that applicants would rank in the top 10 percent of their high school class and/or have scored in the 90th percentile or above on the SAT/ACT.

Students who wish to be considered for admission to the UHL program must submit the following application materials:

- A completed UHL application form

- A written essay

- 3 letters of recommendation

- High school transcripts and transcripts for all college-level work completed to date

- SAT and/or ACT scores

We require a personal interview with all students who are selected as finalists for admission.

Applicants for admission to the UHL program should show evidence of ability and desire to:

Take responsibility for their own learning, for self-discovery and for personal and intellectual growth.

Learn about and understand diverse, competing perspectives, viewpoints and values

Profit from varied modes of learning

Become responsible and contributing members of the UHL program, of the university and of society

Application information can be found on the UHL Web site at: [www.cudenver.edu/UHL](http://www.cudenver.edu/UHL).

## **Transfer Student Admissions**

The UHL program may admit a limited number of transfer students into the UHL program, contingent on the availability of slots in the UHL cohorts. Students may transfer into the UHL program for the second semester of their freshmen year or the first semester of their sophomore year.

Students wishing to apply for admission to the UHL program after the first semester of the freshman year must follow the standard UHL application procedures. In addition, prospective transfer students should include with their application materials copies of transcripts for all college-level work completed to date.

Applicants for transfer admission into the UHL program will be evaluated by the UHL admissions committee on the same basis as traditional UHL admissions candidates, and transfer admissions are subject to the availability of slots in the UHL cohort.

Transfer students are required to complete 27 semester hours of UHL courses, including the UHL core, in order to graduate with UHL certification. The requirement is 24 semester hours for students who have already received credit for English 2030 or its equivalent.

## **Graduate Degree Programs**

# **Accounting MS**

**Program Director:** Michael Roberts

**Telephone:** 303-556-6518

**E-mail:** [Michael.Roberts@ucdenver.edu](mailto:Michael.Roberts@ucdenver.edu)

## **Faculty**

**Professors:**

Bruce Neumann, PhD, University of Illinois

**Associate Professors:**

Gary Colbert, PhD, University of Oregon

Carol Dee, PhD, Louisiana State University

L. Ann Martin, PhD, University of Minnesota

Michael Roberts, PhD, Georgia State University

**Assistant Professors:**

George F. Klersey, PhD, University of Southern California

Mary Malina, PhD, University of Colorado Boulder

Robert Nieschwietz, PhD, Arizona State University

**Senior Instructors:**

Elizabeth Connor, MS, Colorado State University

Robert Hockenbury, MS, University of Houston

**Instructors:**

Cindy Fischer, MA, University of Colorado Boulder

Emily Vera, MS, University of Colorado Denver

The master of science in accounting offers three specializations plus a flexible program which allows students to design individualized courses of study. The program provides students the opportunity to acquire a thorough understanding of financial and managerial accounting, auditing and taxation in preparation for successful careers in public or private accounting, as well as government or nonprofit accounting.

Students completing the MS in accounting will complete:

- 6 semester hours of required accounting course work
- 12 semester hours of elective accounting course work\*
- 9 semester hours of a secondary business area
- 3 semester hours of a free accounting elective.

\*The elective course work can be selected from graduate accounting courses or by selecting one of the three specializations offered within the program. Students who select the accounting

and information systems audit and control (AISAAC) specialization have completely different requirements which are listed under that specialization.

## **A. Background Accounting Courses\***

The MS in accounting also requires completion of the following undergraduate accounting prerequisites.

Must be completed with a grade of B- or higher plus a cumulative GPA of 3.0. Students with grades below a B may be subject to probation.

Required Courses:

ACCT 2200 - Financial Accounting and Financial Statement Analysis. **Semester Hours: 3**

ACCT 2220 - Managerial Accounting and Professional Issues. **Semester Hours: 3**

ACCT 3054 - Accounting Systems and Data Processing. **Semester Hours: 3**

ACCT 3220 - Intermediate Financial Accounting I. **Semester Hours: 3**

ACCT 3230 - Intermediate Financial Accounting II. **Semester Hours: 3**

ACCT 3320 - Intermediate Cost Accounting. **Semester Hours: 3**

ACCT 4620 - Auditing. **Semester Hours: 3**

**Total: 15-21 Hours**

\*Waived for students with appropriate background. BUSN 6550, Analyzing and Interpreting Accounting Information, may be substituted for ACCT 2200 and ACCT 2220. International course work waivers are by petition only.

Accounting courses may be taken by nondegree or non-matriculated students.

## **B. Common Body of Knowledge (CBK)**

Based on prior course work, students may be required to take up to three background courses. The following are suggested:

BUSN 6540 - Legal and Ethical Environment of Business. **Semester Hours: 3**

BUSN 6620 - Applied Economics for Managers. **Semester Hours: 3**

BUSN 6640 - Financial Management. **Semester Hours: 3**

## **C. MS Accounting Core**

**Required Courses (all students)**

*(6 semester hours)*

ACCT 6250 - Seminar: Financial Accounting. **Semester Hours: 3**

ACCT 6260 - Seminar: Managerial Accounting. **Semester Hours: 3**

### **Accounting Electives**

*(12 semester hours)*

To design an individualized course of study, choose four accounting courses with three of those accounting courses numbered 6260 or higher.

**Or, you may select one of the three following specializations to meet this elective requirement.**

## **D. Accounting Specializations**

If you select one of the three following specializations, you will complete the required courses, complete four of the choices within your selection of specialization, complete the secondary area and complete a free elective.

### **Auditing and Forensic Accounting Specialization**

**Complete the required courses and choose four of the following courses:**

ACCT 6280 - Professional Judgment and Decision Making in Accounting. **Semester Hours: 3**

ACCT 6340 - Financial Statement Analysis. **Semester Hours: 3**

ACCT 6350 - Current Issues in Professional Accounting. **Semester Hours: 3**

ACCT 6380 - Forensic Accounting. **Semester Hours: 3**

ACCT 6470 - Internal Auditing. **Semester Hours: 3**

ACCT 6510 - Accounting IS Processes and Control. **Semester Hours: 3**

ACCT 6620 - Advanced Auditing. **Semester Hours: 3**

### **Financial Accounting Specialization**

**Complete the required courses and choose four of the following courses:**

ACCT 6024 - Advanced Financial Accounting. **Semester Hours: 3**

ACCT 6080 - Accounting for Government and Nonprofit Organizations. **Semester Hours: 3**

ACCT 6280 - Professional Judgment and Decision Making in Accounting. **Semester Hours: 3**

ACCT 6340 - Financial Statement Analysis. **Semester Hours: 3**

ACCT 6350 - Current Issues in Professional Accounting. **Semester Hours: 3**

ACCT 6370 - International Accounting. **Semester Hours: 3**

**Three of the courses must be selected with course numbers above ACCT 6260.**

### **Taxation Specialization**

**Complete the required courses and choose four of the following courses:**

ACCT 6140 - Tax Planning for Managers. **Semester Hours: 3**

ACCT 6410 - Advanced Tax For Individuals. **Semester Hours: 3**

ACCT 6420 - Advanced Tax for Businesses. **Semester Hours: 3**

ACCT 6430 - International Taxation. **Semester Hours: 3**

ACCT 6450 - Research Problems in Income Tax Accounting. **Semester Hours: 3**

ACCT 6460 - Advance Topics in Taxation. **Semester Hours: 3**

**Three of the courses must be selected with course numbers above ACCT 6260.**

## **E. Secondary Area**

*(9 semester hours)*

Accounting is increasingly diverse and linked to many business decisions. Accountants may eventually work as systems designers, chief financial officers, cost analysts, budget officers or chief executive officers. Students will be better prepared for their careers if they develop competencies in a related field, which may be chosen from a single discipline such as finance, information systems, entrepreneurship, health administration, marketing or management. *The accounting faculty strongly encourage students to gain additional expertise in finance and/or information systems.*

Alternatively, a self-designed secondary area might best achieve a student's individual objectives (must be approved by the program director). A self-designed secondary field must have a common theme or objective if it crosses several disciplines. For example, a secondary area in information systems might include an accounting technology course, a data base management course and a finance technology course. On the other hand, a finance secondary area might include two finance courses and a cost management (accounting) course or a strategic management course. When a BUSN course is a prerequisite for a secondary area, it can be included in the secondary area by petition only. Consult a schedule planner for information about current course offerings and a current catalog for course descriptions.

## **F. Free Accounting Elective**

*(3 semester hours)*

Select one graduate accounting course numbered above ACCT 6000.

## **G. Total: 30 Hours**

### **Accounting and Information Systems Audit and Control (AISAAC) Specialization**

Recently, new regulatory environments have required companies to provide better documentation of their accounting and IT systems to improve the management and disclosure of their business processes for better financial and regulatory controls. Accounting and IT professionals have significant roles in audit and control activities, since they control the systems

that monitor and report on finance, planning and operations. The courses within this specialization cover business-process management and financial controls; the emerging trends and practices in privacy and security; the strategies for integrating governance and compliance; and the IT organization's financial and business intelligence services. These courses will focus on how to leverage the existing IT infrastructure to establish quality in financial and internal audit processes and address the regulatory issues associated with reporting, consolidation and document/content management more effectively and completely.

As you will notice the complete 30 semester hour requirements for this specialization are listed below.

### **Accounting Core**

*(9 semester hours)*

ACCT 6250 - Seminar: Financial Accounting. **Semester Hours: 3**

ACCT 6260 - Seminar: Managerial Accounting. **Semester Hours: 3**

ACCT 6620 - Advanced Auditing. **Semester Hours: 3**

### **AISAAC Common Courses**

*(12 semester hours)*

#### **Choose four of the following courses:**

ACCT 6020 - Auditing. **Semester Hours: 3**

ACCT 6510 - Accounting IS Processes and Control. **Semester Hours: 3** or

ISMG 6510 - Accounting and Information Systems Processes and Controls. **Semester Hours: 3**

ISMG 6040 - Business Process Management. **Semester Hours: 3**

ISMG 6420 - Global Enterprise Systems. **Semester Hours: 3**

#### **Choose three of the following courses:**

*(9 semester hours)*

ACCT 6340 - Financial Statement Analysis. **Semester Hours: 3**

ACCT 6800 - Special Topics. **Semester Hours: 3**

ISMG 6080 - Database Management Systems. **Semester Hours: 3**

ISMG 6180 - Information Systems Management and Strategy. **Semester Hours: 3**

ISMG 6430 - Information Systems Security and Privacy. **Semester Hours: 3**

**Total 30 hours**

# **Administrative Leadership and Policy Studies EdS**

## **Administrative Leadership and Policy Studies**

### **Requirements for Principal Licensure, the MA and EdS degrees, and Executive Leadership Administrator Licensure Program**

**Office:** Lawrence Street Center, 701

**Telephone:** 303-315-6300

**Fax:** 303-315-6311

**E-mail:** [education@ucdenver.edu](mailto:education@ucdenver.edu)

**Web site:** [www.ucdenver.edu/education/alps](http://www.ucdenver.edu/education/alps)

**Principal Licensure**

**Master of Arts Degree**

**Education Specialist Degree**

**Executive Leadership Administrator Licensure Program**

## **Faculty**

For information about faculty in this area, visit [www.ucdenver.edu/education/alps](http://www.ucdenver.edu/education/alps).

The primary responsibility of the administrative leadership and policy studies (ALPS) faculty is to prepare leaders for public education in Colorado and the nation. Currently, the principal license is required for people seeking building-level administrative positions in Colorado.

## **Principal Licensure Program**

ALPS offers course work that leads to the initial license for principal. Having earned an initial license, those who have obtained a master's degree and who go on to complete a district sponsored induction program may then be awarded a professional license by the Colorado Department of Education.

ALPS's 32 semester-hour principal licensure program is project-based, requiring students to present evidence of meeting both state and national standards through performance based

assessments. A 400-hour clinical-practice experience is integrated throughout the four-semester program.

Students develop a portfolio during the principal licensure program. Portfolios not finalized by the end of the fourth semester must be completed within the two subsequent semesters (not including summer).

**Note:** Those already holding a principal license and master's degree should see the Executive Leadership Program (below) for pursuing administrator licensure.

## Denver Metro-Area Cohorts

Denver metro-area cohorts are delivered in **four 8-semester-hour courses** over four consecutive semesters. Cohorts start at one or more locations each semester and involve a combination of regular in-person meetings (up to 15 times per semester) and online work.

EDUC 5751 - Principal/Administrator Licensing I. Semester Hours: 5 to 9

EDUC 5752 - Principal Administrator Licensing II. Semester Hours: 5 to 9

EDUC 5753 - Principal/Administrator Licensing III. Semester Hours: 5 to 9

EDUC 5754 - Principal or Administrator Licensing IV. Semester Hours: 5 to 9

**Total: 32 Hours**

## Distance-Learning Cohorts

Distance-learning cohorts start each summer in June with a weeklong boot camp in Denver, meet over several intensive weekends during the subsequent fall and spring semesters and end with a weekend the following summer. Online work is completed in between the in-person sessions. Distance-learning cohorts are delivered in **three 9-semester-hour courses and one 5-semester-hour course:**

EDUC 5751 - Principal/Administrator Licensing I. Semester Hours: 5 to 9

EDUC 5752 - Principal Administrator Licensing II. Semester Hours: 5 to 9

EDUC 5753 - Principal/Administrator Licensing III. Semester Hours: 5 to 9

EDUC 5754 - Principal or Administrator Licensing IV. Semester Hours: 5 to 9

**Total: 32 Hours**

## MA Program

The MA is designed for those who do not already hold a graduate degree. Usually master's students will complete 9 semester hours beyond the 32 required in the licensure program, for a total of 41 semester hours of course work after the bachelor's degree.

For the MA degree, students must select at least one course in each of the following three areas:

### Section A: Educational Research

REM 5100 - Basic Statistics. Semester Hours: 3  
REM 5200 - Introduction to Research Methods. Semester Hours: 3  
REM 5300 - Introduction to Measurement. Semester Hours: 3

## **Section B: Educational Foundations/Multicultural Education**

FNDS 5050 - Critical Issues in American Education. Semester Hours: 3  
FNDS 5500 - Contemporary Philosophies of Education. Semester Hours: 3  
FNDS 5410 - History and Philosophy of Modern Education. Semester Hours: 3  
LLC 5140 - Multicultural Education. Semester Hours: 3  
LLC 5150 - Culture of the Classroom. Semester Hours: 3  
LLC 5160 - Foundations of Bilingual Education. Semester Hours: 3

## **Section C: Educational Psychology/Special Education**

EDUC 5400 - Special Education Seminar for Principals. Semester Hours: 3  
EPSY 5100 - Advanced Child Growth and Development. Semester Hours: 3  
EPSY 5110 - Human Learning. Semester Hours: 3  
EPSY 5140 - Advanced Adolescent Growth and Development. Semester Hours: 3  
EPSY 5160 - Behavior Disorders in Exceptional Children. Semester Hours: 3  
EPSY 5200 - Social Psychology of Learning. Semester Hours: 3  
SPED 5140 - Advanced Assessment in Special Education. Semester Hours: 3  
SPED 5180 - Curriculum Planning for Students with Special Needs. Semester Hours: 3  
SPED 5400 - Advanced Seminar in Special Education. Semester Hours: 3  
SPED 5600 - Special Education for School Professionals. Semester Hours: 3

Candidates must also successfully complete a comprehensive exam paper, reflecting on how the three MA classes will help them in the role of principal or administrator.

## **EdS Program**

The EdS degree program affords the opportunity for advanced graduate study and is available to those who already hold a master's degree. Generally for the specialist degree students will complete 9 semester hours that constitute an area of focus, in addition to the 32 required in the licensure program. Candidates must also successfully complete a comprehensive exam paper, reflecting on how the three EdS classes will help them in the role of principal or administrator.

## **Administrator Licensure - Executive Leadership Program**

Designed for the professional educator who, already holding a principal license and master's degree, wishes to obtain an initial administrator license in Colorado and prepare for a career as a superintendent or other district leader. This one-year, 12-semester-hour certificate program combines weekend meetings with online work and hands-on clinical practice—usually completed in participants' home districts. Learn more at [www.ucdenver.edu/education/elp](http://www.ucdenver.edu/education/elp).

## **Additional Program Information**

Individuals interested in any of these programs are encouraged to contact ALPS faculty. Conferences prior to application are encouraged and welcomed. Following admission, students are expected to maintain frequent contact with assigned advisors to plan, develop and complete their programs of study.

# **Administrative Leadership and Policy Studies MA**

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**5-semester-hour course:**

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## Additional Program Information

Individuals interested in any of these programs are encouraged to contact ALPS faculty. Conferences prior to application are encouraged and welcomed. Following admission, students are expected to maintain frequent contact with assigned advisors to plan, develop and complete their programs of study.

# Anthropology, MA

► Graduate School Rules apply to this program.

## Plans of Study

MA students may pursue Plan I (thesis option) or Plan II (nonthesis option).

**Plan I:** 33 semester hours of course work, of which 4-6 will be allocated to thesis hours.

The thesis may consist of a report of original research, a comprehensive evaluation of existing research or a report on an internship experience in which disciplinary theory is applied to a practical question or series of practical questions. Students electing this option must prepare a thesis prospectus (research plan). The prospectus must be submitted to and approved by the student's primary advisor one semester prior to beginning thesis work. The entire thesis committee must approve a draft of the thesis at least six weeks prior to any proposed defense date.

**Plan II:** 39 hours of course work.

Your plan of study, including a statement of proposed course work and thesis subject if applicable, must be submitted to and approved by your advisor by the third semester in residence.

The balance of courses (9-21 semester hours, depending on whether you pursue Plan I or II) should be used to develop the research or area concentration chosen from those available in the department. Up to 9 hours of course credit (at the 4000 level or above) may be in disciplines outside of but related to anthropology with the approval of your graduate advisor.

The Department of Anthropology offers an accelerated BA/MA degree option (Plan III) for accomplished undergraduate students. This option permits students to apply some courses taken at the undergraduate level toward meeting knowledge area requirements (research concentrations) for the MA degree. It also permits students to begin taking graduate courses (at the 5000 level or above), up to a maximum of 9 hours, while still considered by the university to be an undergraduate student. The accelerated degree option is designed to permit the full-time

student to complete a full BA and MA program in anthropology in 10 semesters (assuming matriculation as a freshman and full-time residence). *The accelerated degree option is only available to students who complete, or intend to complete, at least 30 semester hours from UC Denver anthropology faculty.* Courses taken at any other institution, including common pool courses taught by MSCD faculty, cannot be applied toward completion of accelerated degree requirements. Transfer students may be required to take additional anthropology course work to qualify for the Plan III option.

Plan III students must complete the same core requirements as Plan I and Plan II students. To graduate in one year post-baccalaureate, admitted Plan III students should plan on completing at least two of the required core seminar courses during their senior undergraduate year. Students who are accepted to Plan III, but who do not eventually meet residency or minimum GPA requirements, will be transferred to Plan I or II options.

**Plan III:** 30 semester hours of course work taken at the graduate (5000 or above) level, inclusive of thesis hours. The student is *encouraged* (though not required) to take at least 9 graduate-level hours while still considered an undergraduate. During the final semester of residence as a graduate student, the student must take and pass the department's comprehensive examination (described below). If a student wishes to complete a thesis, 4-6 hours of the 30 required course hours will be devoted to thesis work. Up to 3 thesis hours may be taken before the student meets requirements for the BA degree. See the Department of Anthropology Web site for a discussion of the relative advantages and disadvantages of pursuing the thesis option.

All graduate courses taken by students in the accelerated degree option must be completed with a grade of *B-* or better.

There are special admission and application requirements for the accelerated degree option (Plan III). Please see the Application Process section for information.

Students must maintain an overall GPA of 3.0 to remain in good standing and receive a grade of *B-* or better in a course to have it count toward graduation. The Graduate School on the Downtown Campus requires a minimum of two full years devoted to advanced study, but students are strongly discouraged from spending more than four years. Generally, three years of full-time participation are required to complete the MA degree. Most of our students attend part time and thus take slightly longer to complete their degree program. All students are required to pass a six-hour written comprehensive examination, usually taken after core course work has been completed.

Your graduate anthropology education begins by taking ANTH 5810, Integrating Anthropology, plus two core courses that together encompass contemporary theory in anthropology. These are followed by three courses in research methods and techniques, including statistics. You are required to take the core series in two of the three subdisciplines. After completing this core, you will select from among the specialized elective courses in the research concentrations described in more detail below. You will work closely with an advisor in selecting the range of courses appropriate both to a problem orientation and to your career objectives.

## **Tier One: A Survey of Theoretical Perspectives in Contemporary Anthropology**

*Required in fall of first year*

ANTH 5810 - Integrating Anthropology. **Semester Hours: 3**

**Choose two:**

ANTH 6103 - Current Theory in Ethnography. **Semester Hours: 3**

\* ANTH 6307 - Contemporary Perspectives in Archaeology. **Semester Hours: 3**

† ANTH 6503 - Biological Anthropology Core: The Fossil Record. **Semester Hours: 3**

**Total: 9 Hours**

**Tier Two: Methods of the Discipline**

*All students must complete or demonstrate competence in subjects covered by the following:*

ANTH 5053 - Quantitative Methods in Anthropology. **Semester Hours: 3**

**Choose two:**

ANTH 6063 - Qualitative Research Design and Methods. **Semester Hours: 3**  
(same as HBSC 7051-3)

\* ANTH 6317 - Archaeological Research Design and Analysis. **Semester Hours: 3**

† ANTH 6513 - Biological Anthropology Core: Modern Human Variation. **Semester Hours: 3**

**Total: 9 Hours**

*\* Students who wish to apply for a teaching assistantship in archaeology must have completed this course.*

*† Students who wish to apply for a teaching assistantship in biological anthropology must have completed this course.*

**Tier Three: Research Concentrations (9-21 semester hours)**

You will round out your program by selecting from the diverse range of courses offered in the department according to your particular interests in anthropology, your career goals and your plans for future graduate study. You may take courses in one or more concentrations. The courses listed are suggestions only; you must work closely with your advisor in constructing your particular program of study.

## MEDICAL ANTHROPOLOGY

Medical anthropology is a subdiscipline of anthropology that includes the study of all aspects of health, illness and disease in human communities and populations. It draws on all of the perspectives that distinguish anthropology as a unique discipline: the analysis of human evolution and adaptation; cultural development, expressions and variability; and historical change and continuity. Medical anthropology takes as its subject a broad range of specific topics, including the study of health care systems, factors that affect the distribution and determinants of disease in populations, maternal and child health, nutrition and food habits, human development, political ecology, health policy and language and communication in health care contexts. Faculty in the department emphasize the applied dimensions of medical anthropology, preparing students for careers in public health, health care and health sciences research. Courses in the department are complemented by electives in other departments (sociology, biology, psychology, history, geography), programs on the Downtown Campus (health administration, public affairs, education) and programs at the Anschutz Medical Campus (schools of medicine, dental medicine, pharmacy and nursing).

## Courses

ANTH 5014 - Global Health Studies I: The Biocultural Basis of Health. **Semester Hours: 3**

ANTH 5024 - Global Health Studies II: Comparative Health Systems. **Semester Hours: 3**

ANTH 5030 - Ethnobiology. **Semester Hours: 3**

ANTH 5040 - Anthropology of Food and Nutrition. **Semester Hours: 3**

ANTH 5060 - Evolutionary Medicine. **Semester Hours: 3**

ANTH 5090 - Political Economy of Drug Culture. **Semester Hours: 3**

ANTH 5150 - Human Biocultural Adaptability. **Semester Hours: 3**

ANTH 5260 - Human Reproductive Ecology. **Semester Hours: 3**

ANTH 5560 - Human Ecology. **Semester Hours: 3**

HBSC 7310 - Environmental Epidemiology. **Semester Hours: 3**

*Note:* Students are also strongly encouraged to take elective courses in public health, epidemiology and biostatistics, which are available in the Department of Biometrics and Preventive Medicine on the Anschutz Medical Campus. See the Health Professions chapter of this catalog for further information.

## ARCHAEOLOGICAL STUDIES

The archaeological studies program concentrates on the study of past human societies using archaeological data collected in field and museum settings. While a quantitative and scientific approach is emphasized, the theoretical perspectives employed also draw heavily from political economy and cultural ecology. The department offers a variety of theoretical, methodological and area courses, which may be supplemented by others in the geography and environmental sciences and history departments. Internships are available in local museums and historic preservation offices in the Denver metropolitan area.

ANTH 5210 - Archaeology of the American Southwest. **Semester Hours: 3**

ANTH 5320 - Archaeology of Mexico and Central America. **Semester Hours: 3**  
ANTH 5330 - Lithic Analysis. **Semester Hours: 3**  
ANTH 5570 - Landscape Archaeology. **Semester Hours: 3**  
ANTH 5910 - Field Experience in Archaeology. **Semester Hours: 3 to 6**  
GEOG 5060 - Remote Sensing I: Introduction to Environmental Remote Sensing. **Semester Hours: 3**  
GEOG 5080 - Introduction to GIS. **Semester Hours: 3**  
GEOG 5220 - Environmental Impact Assessment. **Semester Hours: 3**  
HIST 5231 - History in Museums. **Semester Hours: 3**  
HIST 5232 - Historic Preservation. **Semester Hours: 3**  
HIST 5234 - Introduction to Public History. **Semester Hours: 3**

## **BIOLOGICAL ANTHROPOLOGY**

The biological anthropology concentration is concerned with modern human biological diversity and the past evolutionary history that has led to such diversity. Students in this concentration develop a firm understanding of the evolutionary processes that lead to physical and behavioral variation in humans and nonhuman primates. The concentration also emphasizes the theoretical and quantitative methods used to explore and explain this variation. Students may take courses in diverse areas including evolutionary biology, genetics, ecology, ethnobiology, epidemiology, nutrition, medical anthropology, paleoanthropology, paleontology and primatology. Because biological anthropology is multidisciplinary in nature, students are encouraged to consider courses offered outside the department.

ANTH 5014 - Global Health Studies I: The Biocultural Basis of Health. **Semester Hours: 3**  
ANTH 5030 - Ethnobiology. **Semester Hours: 3**  
ANTH 5040 - Anthropology of Food and Nutrition. **Semester Hours: 3**  
ANTH 5060 - Evolutionary Medicine. **Semester Hours: 3**  
ANTH 5150 - Human Biocultural Adaptability. **Semester Hours: 3**  
ANTH 5500 - Advanced Issues in Human Evolution. **Semester Hours: 3**  
ANTH 5520 - Human Biological Variation. **Semester Hours: 3**  
ANTH 5530 - Anthropological Genetics. **Semester Hours: 3**  
ANTH 5550 - Primate Comparative Anatomy. **Semester Hours: 3**  
ANTH 5560 - Human Ecology. **Semester Hours: 3**  
ANTH 5580 - Neanderthals and the Origin of Modern Humans. **Semester Hours: 3**  
ANTH 5640 - Darwinian Approach to Human Behavior. **Semester Hours: 3**  
BIOL 5074 - Human Reproductive Biology. **Semester Hours: 3**  
BIOL 5134 - Human Genetics. **Semester Hours: 3**  
BIOL 5494 - Population and Evolutionary Genetics. **Semester Hours: 3**  
HBSC 7031 - Human Ecology and Environmental Adaptation. **Semester Hours: 3**  
HBSC 7310 - Environmental Epidemiology. **Semester Hours: 3**

## **SUSTAINABLE DEVELOPMENT AND POLITICAL ECOLOGY**

This concentration provides a critical, multicultural and multidisciplinary perspective on issues of development and resource conservation, with a strong emphasis on the integration of theoretical knowledge with field-based training opportunities. Three major themes are addressed within this concentration:

- the types of resource management systems present in the world and their relationship to particular ecosystems

- the types of knowledge systems and ideas associated with this diverse array of resource management systems, environmental knowledge and theoretical perspectives included

- the culture of institutions—ranging from small-scale NGOs to the World Bank—that design and implement conservation and development

A central goal of this emphasis is to provide students with the information, opportunities and resources required for pursuing a wide variety of career options in conservation and/or development. In addition to offering the following courses, the department encourages students to develop a specialized skill in conjunction with other departments and schools including areas such as GIS mapping (geography), ecology (biology/anthropology), legal and policy issues (political science, School of Public Affairs), land use (geography, School of Public Affairs) and research/evaluation methodologies (anthropology).

- ANTH 5030 - Ethnobiology. **Semester Hours: 3**

- ANTH 5070 - Culture of Development and Globalization. **Semester Hours: 3**

- ANTH 5170 - Culture and the Environment. **Semester Hours: 3**

- ANTH 5220 - Community in Global Context. **Semester Hours: 3**

- ANTH 5450 - Development and Conservation: Contemporary Issues. **Semester Hours: 3**

- ANTH 5460 - Development and Conservation: Theory and Practice. **Semester Hours: 3**

- Other courses in consultation with faculty advisor.

**Total: 9-21 Hours**

**Degree Total Hours**

**PLAN I: 33 Hours (including 4-6 hours of thesis)**

**PLAN II: 39 Hours**

Return to Department of Anthropology

## **Applied Mathematics, MS**

► Graduate School Rules apply to this program.

## Program Requirements

Students must present 30 hours of course work and maintain a 3.0 GPA for the MS degree. At least 24 of these hours must consist of graduate-level (numbered 5000 or higher) mathematics courses. The remaining 6 hours must be either mathematics courses numbered 5000 or above or approved courses outside the department numbered 4000 or above. Up to 12 semester hours may be transferred from other institutions.

A student may devote from 4 to 6 hours (of the 30 required hours) to the writing of a thesis. Following completion of course work, all candidates must make a one-hour oral presentation before a committee consisting of three graduate faculty members.

The MS degree is designed to prepare a candidate for a position as an applied mathematician, or a teacher, or to continue studies at the PhD level. It provides training in applied mathematics in the fields of:

- discrete mathematics
- operations research
- applied statistics
- applied probability
- numerical analysis
- mathematics of science and engineering
- mathematical foundations of computer science
- computational biology

Students must take either applied analysis or real analysis and applied linear algebra. Additionally, students must fulfill course work requirements for an area of specialization.

All master's degree students are encouraged to participate in the math clinic, a unique program in which students have an opportunity to work on real-world problems supplied by local businesses, research firms and government agencies.

For more detailed information about the applied mathematics PhD, go to Requirements for the MS Degree on the Math Graduate Handbook Web page.

Return to Department of Mathematical and Statistical Sciences

## Architecture MArch

The MArch is a three-and one-half-year plan of study on the Downtown Campus that has been fully accredited by the NAAB.

### Prerequisites

Students must complete the prerequisites of college-level trigonometry and physics before enrolling in ARCH 5310, Introduction to Building Technology. Since this class should be taken in the first semester in order to stay on track for graduation, students are strongly encouraged to complete the trigonometry and physics requirements before beginning the MArch program.

ARCH 5000, Math and Physics for Architects, is offered in the summer on a pass/fail basis. This class meets the prerequisite requirements. This class does not count toward the number of credits required for the MArch degree.

A graphics workshop is recommended for students who do not have a background in architectural drawing and model building. This class is offered each year before the beginning of the fall semester.

Students are also expected to have achieved a basic level of computer literacy and should be familiar with PC or Apple operating systems.

## Program Requirements

Students with a bachelor's or master's degree unrelated to architecture must complete a seven- or eight-semester sequence of course work and accumulate a minimum of 114 semester hours of credit. Students who have completed the college's BEnvd or any other preprofessional architecture degree from any NAAB-accredited institution and students who have completed a non-NAAB-accredited professional architecture degree in another country, and who wish to obtain the NAAB-accredited degree from this college, will be evaluated for advanced standing. These students will work with the associate chair of the department to develop an individualized plan of study commensurate with their previous degrees and experience, and will have to complete at least 60 semester hours of credit in residence within the College of Architecture and Planning.

## Course Sequence

The MArch program is divided into five major components: design studies, 45 semester hours; cultural studies, 12 semester hours; technology studies, 18 semester hours; professional studies, 6 semester hours; and electives, 33 semester hours. A wide array of electives in these areas allows students to tailor their graduate studies to their own interests.

## First Year

### Fall

ARCH 5110 - Design Studio I. **Semester Hours: 6**

ARCH 5111 - Introduction to Drawing. **Semester Hours: 3**

ARCH 5210 - Introduction to Architecture. **Semester Hours: 3**

ARCH 5310 - Introduction to Building Technology. **Semester Hours: 3**

**Total: 15 Hours**

## Spring

- ARCH 5120 - Design Studio II. **Semester Hours: 4**
- ARCH 5121 - Design Seminar II. **Semester Hours: 2**
- ARCH 5220 - History of Architecture I. **Semester Hours: 3**
- ARCH 5320 - Building Construction and Methods. **Semester Hours: 3**
- L A 6632 - Site Planning. **Semester Hours: 3**
- Elective\* (3 semester hours)

**Total: 18 Hours**

## Second Year

### Fall

- ARCH 5130 - Design Studio III. **Semester Hours: 4**
- ARCH 5131 - Design Seminar III. **Semester Hours: 2**
- ARCH 5230 - History of Architecture II. **Semester Hours: 3**
- ARCH 5240 - Human Factors in Design. **Semester Hours: 3**
- ARCH 5330 - Environmental Control Systems I. **Semester Hours: 3**
- Elective\* (3 semester hours)

**Total: 18 Hours**

### Spring

- ARCH 5140 - Design Studio IV. **Semester Hours: 4**
- ARCH 5141 - Design Seminar IV. **Semester Hours: 2**
- ARCH 5340 - Environmental Control Systems II. **Semester Hours: 3**
- ARCH 5350 - Structures I. **Semester Hours: 3**
- ARCH 5410 - Professional Practice. **Semester Hours: 3**
- Elective\* (3 semester hours)

**Total: 18 Hours**

### Summer

- ARCH 6150 - Comprehensive Design Studio. **Semester Hours: 4**
- ARCH 6151 - Comprehensive Design Seminar. **Semester Hours: 2**
- Electives\* (6 semester hours)

**Total: 12 Hours**

## **Third Year**

### **Fall**

ARCH 5360 - Structures II. **Semester Hours: 3**  
ARCH 6170 - Advanced Design Studio. **Semester Hours: 4**  
ARCH 6171 - Advanced Design Seminar. **Semester Hours: 2**  
Electives\* (9 semester hours) or  
ARCH 6950 - Thesis Preparation. **Semester Hours: 6** and  
Electives (3 semester hours)

**Total: 18 Hours**

### **Spring**

ARCH 6170 - Advanced Design Studio. **Semester Hours: 4**  
ARCH 6171 - Advanced Design Seminar. **Semester Hours: 2**  
Electives\* (9 semester hours) or  
ARCH 6951 - Architecture Thesis. **Semester Hours: 6**  
Electives\* (9 semester hours)

**Total: 15 Hours**

\* Students must take 9 elective semester hours in cultural studies, 9 elective semester hours in professional studies (3 semester hours of which must emphasize the computer), 6 elective semester hours in technology studies and 9 elective semester hours in any architecturally related electives on campus.

# **Architecture II Post-Professional (MArch)**

## **The Post-Professional Program**

The post-professional degree program is a mid-career, post-professional intensive course for those individuals in the design fields who seek to expand their knowledge and to advance their professional careers. In this program, students have the opportunity to study recent developments in their design fields resulting from advances in information technology, new theories and methods and emergent discoveries and associations. The program currently offers

the master of architecture II degree program. The program has a research orientation and agenda, and its general intent is to create an educational context within which the fundamental practices of architecture and urbanism can be examined, advanced and extended. The program has been designed to be both flexible and interdisciplinary so as to provide students with a broad range of options that can accommodate and respond to each student's own interests and study agenda through course work, independent study or optional training.

## Post-Professional Program: The Master of Architecture II

The master of architecture II is an advanced degree program that provides its students with a range of opportunities for exploring and extending their knowledge of the practice of architecture. **Students applying for admission to the program must have been awarded a five-year or six-year first-professional degree in architecture.** They may enter the master of architecture II program in any semester of the academic year.

**NOTE:** The master of architecture II program does not offer an NAAB first-professional degree; it is an advanced studies program for those who already hold this first-professional degree.

Students in the program must complete 30 semester hours of credit in required, recommended and elective course work to qualify for the master of architecture II degree. To be eligible for graduation from the program, students must complete 12 semester hours of advanced design studio (ARCH 6170/6171 or UD 6600/6601) in the degree project sequence and 12 semester hours in required and/or focus-area course work particular to their area of study. The remaining 6 semester hours are elective course work. A typical sequence of course work within a focus area leading to the award of the master of architecture II degree is as follows:

<b>Semester One</b>	<b>Semester Hours</b>
Advanced Design Studio	6
Focus-area required/recommended course work	6
Elective course work	3
<b>Total</b>	<b>15</b>

### **Semester Two**

Advanced Design Studio	6
Focus-area required/recommended course work	6
Elective course work	3

## Dual Degree Options

Students may enroll in a dual degree program with landscape architecture (MArch and MLA), with MURP (MArch and MURP), with MUD (MArch and MUD) or with the Business School (MArch and MBA).

# Biology MS

- ▶ Graduate School Rules apply to this program.

## Requirements for Admission

Applicants must hold a baccalaureate degree from an accredited college or university, awarded within the preceding nine years. Students whose biology degree was awarded 10 or more years prior to entrance to the UC Denver program will be expected to retake or show competence in the biology core courses. Successful applicants generally have earned an overall GPA of 3.0 or better. Most applicants have an undergraduate major in biology or a related field. Students entering the master's program in biology must have completed the equivalent of a minor in biology (see above). Although a deficit of one course is allowed, this must be completed within the first semester of entering the master's program and will not apply toward the degree. Both the general GRE and biology subject GRE are required of all applicants, with scores above the 50th percentile required on all parts. The graduate application form is submitted online to UC Denver graduate admissions. The biology supplemental application form is also required and is submitted directly to the biology program. Application information can be found at: <http://thunder1.cudenver.edu/clas/biology/gradAdmission.html>

## Degree Requirements

All course work taken within the Department of Integrative Biology and applied toward the degree must be 5000 level or above. There is no core of required courses. A course plan is developed by the student and major advisor and is approved by the student's graduate committee. With the advisor's and/or graduate committee's approval, a maximum of 6 semester hours of course work at the 4000 level taken outside the department may be applied toward the degree. At least 18 semester hours must be taken from faculty in the Department of Integrative Biology at UC Denver. Upon approval from the Department of Integrative Biology, no more than 12 semester hours may be transferred into the program. Two types of degree plans are offered:

### **Plan I (with thesis)**

Requires 30 semester hours including required thesis hours and two semesters of:

BIOL 6655 - Seminar. **Semester Hours: 1**

### **Plan II (without thesis)**

Requires 32 semester hours including two semesters of:

BIOL 6655 - Seminar. **Semester Hours: 1**

### **Additional Information**

The student is referred to the MS in Biology Web site for more detailed information. Specific questions relating to the student's background and specific program needs should be directed to the biology graduate coordinator.

Return to the Department of Integrative Biology

# **Business Administration MBA**

**Program Director:** Elizabeth Cooperman

**Telephone:** 303-556-5948

**E-mail:** Elizabeth.Cooperman@ucdenver.edu

## **Faculty**

### **Professors:**

Marcelle Arak, PhD, Massachusetts Institute of Technology  
Heidi Boerstler, PhD/JD, Yale University/University of Denver  
Jean-Claude Bosch, PhD, University of Washington  
Peter Bryant, PhD, Stanford University  
Wayne Cascio, PhD, University of Rochester  
Lawrence Cunningham, DBA, University of Tennessee  
E. Woodrow Eckard, PhD, University of California-Los Angeles  
Richard Foster, PhD, University of Chicago  
James Gerlach, PhD, Purdue University  
Jahangir Karimi, PhD, University of Arizona  
Susan Keaveney, PhD, University of Colorado  
Gary Kochenberger, PhD, University of Colorado  
C. Marlena Fiol, PhD, University of Illinois-Urbana-Champaign

James Morris, PhD, University of California-Berkeley  
Dennis Murray, PhD, University of Massachusetts-Amherst  
Bruce Neumann, PhD, University of Illinois  
Edward O'Connor, PhD, University of Akron  
John Ruhnka, JD/LLM, Yale School of Law/Cambridge University  
Dean Taylor, PhD, University of Chicago  
Clifford Young, PhD, University of Utah

## **Associate Professors:**

Ajeyo Banerjee, PhD, University of Massachusetts-Amherst  
Kenneth Bettenhausen, PhD, University of Illinois-Urbana-Champaign  
Kang Rae Cho, PhD, University of Washington  
Gary Colbert, PhD, University of Oregon  
Elizabeth Cooperman, PhD, University of Georgia  
Murray Cote, PhD, Texas A & M University  
Carol Dee, PhD, Louisiana State University  
David Forlani, PhD, University of Minnesota  
Blair Gifford, PhD, University of Chicago  
Dawn Gregg, PhD, Arizona State University  
Deborah Kellogg, PhD, University of Southern California  
Sarah Koovor-Misra, PhD, University of Southern California  
Vick Lane, PhD, University of Washington  
Michael Mannino, PhD, University of Arizona  
L. Ann Martin, PhD, University of Minnesota  
Madhavan Parthasarathy, PhD, University of Nebraska  
Michael Roberts, PhD, Georgia State University  
Judy Scott, PhD, University of California-Irvine  
Manuel Serapio, PhD, University of Illinois  
Marlene Smith, PhD, University of Florida  
Steven Walczak, PhD, University of Florida

## **Assistant Professors:**

Vinit Desai, PhD, University of California at Berkeley  
Stephanie Johnson, PhD, Rice University  
George Kiersey, PhD, University of Southern California  
Mary Malina, PhD, University of Colorado  
Robert Nieschwietz, PhD, Arizona State University  
Ronald Ramirez, PhD, University of California-Irvine  
Zhiping Walter, PhD, University of Rochester

## **Senior Instructors:**

John Byrd, PhD, University of Oregon  
Elizabeth Connor, MS, Colorado State University  
Chen Ji, MS, University of Colorado  
Michael Harper, PhD, Rensselaer Polytechnic Institute  
Robert Hockenbury, MS, University of Houston  
Barbara Pelter, PhD, University of California-Davis  
Mary Lee Stansifer, PhD, Northwestern University  
Eric Thompson, MS, University of Colorado  
John Turner, PhD, St. Louis University

## **Instructors:**

Errol Biggs, PhD, Pennsylvania State University  
John Daley, PhD, University of Washington  
Cindy Fischer, MA, University of Colorado  
Linda Fried, JD/LLM, University of Miami  
Wendy Guild, PhD, Massachusetts Institute of Technology  
Fredrick Hampel, MS, Kansas State University  
Barry McConnell, MBA, University of Colorado  
Peter Miller, MA, Farleigh Dickenson University  
Jeffrey Nystrom, MS, University of Colorado  
Ira Selkowitz, JD, University of Denver  
Lori Seward, PhD, Virginia Tech  
Mary Lee Stansifer, PhD, University of Florida  
Cindy Sutfin, MS, University of Colorado  
Emily Vera, MS, University of Colorado  
Nicole Vowles, PhD, Victoria University of Wellington, New Zealand

The master of business administration (MBA) program provides a general background in management and administration. This background enables the student to have the breadth of exposure and depth of knowledge required for an advanced-level management career. The program is devoted to developing the concepts, analytical tools and communication skills required for competent and responsible administration of an enterprise viewed in its entirety, within its social, political and economic environment.

The professional MBA program allows the scheduling of classes with maximum flexibility so students can progress through the program at their own pace, by taking as little as one class per semester or as many as five classes per semester, at times that are convenient to their work schedule. The program can be completed in as little as 16 months or as long as five years plus one semester.

Online courses add additional flexibility. Students may complete all degree requirements online, or combine online and campus courses to broaden your choice of electives or to fit a business travel schedule or personal learning style. Choice of online electives is limited.

The MBA program is also available in different configurations: 11-month (full time, see relevant section), health administration and the executive MBA (see relevant section). All MBAs have the

same curriculum requirements; they differ only in their focus, the flexibility of course scheduling and the time required to complete the program. The 11-month and executive MBAs are lockstep programs (no open electives, no specialized tracks), where all the students complete all program requirements together. No course transfers, waivers or substitutions are permitted.

## Program Requirements

### Core Requirements

- BUSN 6520 - Managing Individuals and Teams. **Semester Hours: 3**
- BUSN 6530 - Data Analysis for Managers. **Semester Hours: 3**
- BUSN 6540 - Legal and Ethical Environment of Business. **Semester Hours: 3**
- BUSN 6550 - Analyzing and Interpreting Accounting Information. **Semester Hours: 3**
- BUSN 6560 - Marketing Management. **Semester Hours: 3**
- BUSN 6610 - Information Systems Management and Strategy. **Semester Hours: 3**
- BUSN 6620 - Applied Economics for Managers. **Semester Hours: 3**
- BUSN 6630 - Management of Operations. **Semester Hours: 3**
- BUSN 6640 - Financial Management. **Semester Hours: 3**
- BUSN 6710 - Strategic Management. **Semester Hours: 3**

### Electives

- International business elective (1) (3 semester hours)
- Free electives (5) (15 semester hours)

**Total: 48 Hours**

### Notes and Restrictions:

*Core Substitution.* Students with extensive and comparable course work in a particular core subject area may petition to substitute a higher-level graduate core course on the basis of prior undergraduate or graduate course work taken at a regionally accredited college or university for the corresponding core class. This does not waive the 48-hour requirement. If a core course is substituted, another graduate level course in the same functional area must be used as a substitute so that the student completes a total of 48 semester hours.

*International Elective.* One 3-hour course with an international focus must be completed. Contact a graduate advisor or refer to a current MBA degree plan for a complete list of options.

*Electives.* The professional MBA curriculum allows for 15 semester hours of elective credit, which can be chosen from graduate-level courses offered by the Business School, except BUSN courses numbered below 6800. Additional graduate-level course work completed at the Downtown Campus outside the Business School may be applied to the MBA degree, but only with prior written approval of the MBA program director.

*Note:* Electives for the 11-month and executive MBA programs are preselected for all students.

## MBA Specializations

Graduate students will have an opportunity to take specialized tracks within the professional MBA program by completing a prespecified program of elective courses. The following 15 tracks are available:

- Business-to-Business Marketing
- Business Intelligence
- Business-to-Consumer Marketing
- Business Strategy
- Change Management
- Corporate Financial Management
- Decision Sciences
- Enterprise Technology Management
- Entrepreneurship
- Finance
- Financial Analysis
- Human Resources Management
- Information Systems
- International Business
- Investment Management
- Managing for Sustainability
- Marketing
- Services Management
- Sports and Entertainment Management

For additional information about the professional MBA program, contact a graduate advisor at 303-556-5900.

## Business Administration—11–Month MBA

**Program Director:** Gary Colbert

**Administrative Director:** Debbie Follenweider

**E-mail:** 11-monthMBA@ucdenver.edu

**Telephone:** 303-556-5911

**Web site:** [www.busniess.cudenver.edu/11month](http://www.busniess.cudenver.edu/11month)

The 11-month MBA is an accelerated full-time program that brings academically superior students together with select research and teaching faculty. The program enables students to focus their energies in a concentrated, total-immersion program of study earning a nationally accredited, 48-semester-hour MBA degree in just under a year.

The 11-month MBA consists of five eight-week terms, three courses per term, plus a two-week international business course abroad. In addition to a minimum of 18 hours of class time each

week, the 11-month MBA students spend an average of 30 hours a week on homework. Students should expect a minimum time commitment of 48 hours per week to successfully complete this program.

## **Admission and Application Process**

The admissions committee considers each candidate's entire record of achievement demonstrated through academic transcripts, GMAT scores, essays, letters of recommendation, personal interviews (optional at the candidate's discretion), work experience and extracurricular and community activities.

## **Previous Education**

Applicants' complete academic records, including GPAs and previous course work are considered. Undergraduate degrees do not have to be in business, but they must be from regionally accredited colleges or universities.

## **Testing**

The GMAT is a requirement for application to the 11-month MBA program and cannot be substituted with other standardized examinations. If you take the GMAT more than once, we will evaluate your application using the highest GMAT score. The GMAT score for students admitted into the 11-month MBA program has averaged around 600. Students must score a minimum 500 to be considered for admission to the 11-month MBA program. The GMAT Web site is [www.mba.com](http://www.mba.com).

The 11-month MBA also requires a highly developed proficiency in written and oral English. International applicants whose first language is not English must take the TOEFL or IELTS exam and earn a minimum score of 575/232 TOEFL or 7 IELTS to be considered for admission to the 11-month MBA program. Information on taking the TOEFL or IELTS can be obtained by visiting [www.ets.org](http://www.ets.org) and [www.ielts.org](http://www.ielts.org).

## **Work Experience**

Students in the 11-month MBA program have an average of six years of work experience. However, experience ranges from the recently graduated to more than 30 years in business. Professional experience strengthens the application, since it adds relevance and depth to the learning process and enables candidates to contribute to and benefit from the knowledge of fellow classmates in the accelerated time frame of the program.

## **Applications**

The following are required for consideration of admission to the program.

completed application for graduate admission, parts I and II, submitted by published deadlines and fee (domestic or international as appropriate)  
two (2) letters of recommendation from professional or academic acquaintances who are familiar with the applicant's academic/professional competence  
GMAT scores taken in the last five years sent directly to the graduate admissions office from the Educational Testing Service. When registering for the GMAT, use code MPB-OG-65  
two (2) official transcripts from each school, college or university previously attended past high school, sent directly to the graduate admissions office. A minimum baccalaureate degree is required  
include answers to the four essay questions demonstrating commitment to an accelerated MBA program  
a resumé outlining work experience  
for international students, a minimum official score of 575/232 TOEFL or 7 IELTS is required to apply

The priority date for domestic applications is June 15 (May 1 for international students). Applications (for domestic students) and current fee information are available at [www.cudenver.edu/business/11month](http://www.cudenver.edu/business/11month).

All of the required admission materials should be sent to:

University of Colorado Denver  
The Business School  
Graduate Admissions  
Campus Box 165, P.O. Box 173364  
Denver, CO 80127-3364

For further information, brochures and application materials, contact the 11-month MBA program at 303-556-5911 or [11-monthMBA@ucdenver.edu](mailto:11-monthMBA@ucdenver.edu).

The 11-month MBA uses a rolling admission system. The committee reviews applications when they are complete in all respects, including transcripts, GMAT scores and letters of recommendation. Candidates are encouraged to submit their application as early in the process as possible. Completed applications are reviewed until early August; applications received after June 15 will be reviewed on a space-available basis. International applicants should have their completed applications in by May 1, to leave them sufficient time for visa and travel arrangements if they are admitted.

A personal interview may also be required for admission to the 11-month MBA.

## **11-Month MBA Scholarships/Loans**

General financial assistance is available for qualified students. Students should apply directly to the Downtown Campus Office of Financial Aid. Call 303-556-2886 for information and forms. In addition, 11-month MBA merit-based scholarships are available only to students in the 11-month MBA. Other Business School scholarships are also available to all MBA students.

## **Degree Requirements**

Students in the 11-month MBA complete 10 MBA core courses, one international business course (conducted abroad) and five special topics courses. All courses require that students work in teams. Due to the program's cohort structure, individual elective options are not available to 11-month MBA students. **No courses may be waived, substituted or transferred into the program.** If a student finds it necessary to leave the accelerated program, credits already earned may be transferred to the professional MBA program on campus.

#### *MBA Core Courses*

- BUSN 6520 - Managing Individuals and Teams. **Semester Hours: 3**
- BUSN 6530 - Data Analysis for Managers. **Semester Hours: 3**
- BUSN 6540 - Legal and Ethical Environment of Business. **Semester Hours: 3**
- BUSN 6550 - Analyzing and Interpreting Accounting Information. **Semester Hours: 3**
- BUSN 6560 - Marketing Management. **Semester Hours: 3**
- BUSN 6610 - Information Systems Management and Strategy. **Semester Hours: 3**
- BUSN 6620 - Applied Economics for Managers. **Semester Hours: 3**
- BUSN 6630 - Management of Operations. **Semester Hours: 3**
- BUSN 6640 - Financial Management. **Semester Hours: 3**
- BUSN 6710 - Strategic Management. **Semester Hours: 3**

**Total: 30 Hours**

### **International Course Abroad**

The international course, which involves travel abroad, is completed as an all-day, two-week intensive course.

### **Special Topics Courses**

The special topics courses, revised each year, are selected to create a broad understanding of the most current business issues. These requirements are subject to change.

# **Business Administration—Health Administration MBA**

**Program Director:** Errol L. Biggs  
**Telephone:** 303-556-5845  
**E-mail:** [errol.biggs@ucdenver.edu](mailto:errol.biggs@ucdenver.edu)

## **Faculty**

**Professors:**

Heidi Boerstler, PhD/JD, Yale University/University of Denver

Peter Bryant, PhD, Stanford University

C. Marlena Fiol, PhD, University of Illinois-Urbana-Champaign

Richard Foster, PhD, University of Chicago

Bruce Neumann, PhD, University of Illinois

Edward O'Connor, PhD, University of Akron

**Associate Professors:**

Deborah Kellogg, PhD, University of Southern California

Stephen Ross, MD, University of North Carolina

**Instructors:**

Errol Biggs, PhD, Pennsylvania State University

## Admission Process

**Requirements for Admission**

Selection of students is a multistep process. When making application to the program for the MBA-HA, candidates should send their applications to:

Graduate Admissions  
Graduate School of Business Administration  
University of Colorado Denver  
Campus Box 165, P.O. Box 173364  
Denver, CO 80217-3364

## Application Requirements

complete the application for graduate admission, parts I and II, and submit by published deadlines

send two (2) letters of recommendation from professional or academic acquaintances who are familiar with the applicant's academic/professional competence  
send required GMAT scores directly to the graduate office from the Educational Testing Service. When registering for the GMAT, use code MPB-OG-78. GRE scores will also be considered.

pay the appropriate application fee

send two (2) official transcripts directly from each school, college or university previously attended past high school. A minimum baccalaureate degree is required.

include answers to the four essay questions

document any experience in the field of health services administration (preferred but not required)

complete a personal interview with the health administration committee

Admission to the MBA-HA degree program is on a competitive basis. Therefore, these admission criteria represent minimum entrance qualifications expected of all students.

For further information, brochures and application materials, contact the Business School's Graduate Program in Health Administration, University of Colorado Denver, 303-556-5900.

## **Health Administration Scholarships/Loans**

Financial assistance is available for qualified students. Students should apply directly to the Downtown Campus Office of Financial Aid. Call 303-556-2886 for information and forms.

In addition, some funds are available only to students in the graduate program in health administration:

Foster G. McGaw Scholarship

UC Denver MS and MBA Health Administration Scholarship

Colorado Health Administration Alumni Association Scholarship

Enrollment in the program also makes students eligible to apply for some nationally competitive scholarships from professional organizations.

Call 303-556-5900 for applications or visit [www.business.ucdenver.edu](http://www.business.ucdenver.edu).

## **Graduate Program in Health Administration**

The graduate program in health administration is consistently ranked as a top program in the United States and attracts students with a variety of backgrounds and experience levels, which further enriches the classroom experience. The HA program is accredited by the Commission on Accreditation of Healthcare Management Education. The program is the only such program in the Rocky Mountain region and was started in 1968. Full-time faculty with distinguished research records and a select group of practicing managers provide students with the latest thinking on the most important health issues.

## **Degree Requirements**

The curriculum of the MBA with an emphasis in health administration is a synthesis of management concepts and techniques that are applicable to any economic organization, and tools that can be specifically applied to health services systems. The program emphasizes skills that strengthen basic analytic and decision-making processes used by top level managers in selecting broad strategies and by junior managers in administering subunits in health care organizations.

Students enrolled in the master of business administration with an emphasis in health administration must complete a minimum of 48 semester hours of graduate-level course work to receive their degree. The curriculum is based on a series of structured learning sequences. Most of the courses are available in the evening to enable working students to pursue the degree on a part-time basis. The specific course requirements are as follows (recommended sequence):

## Year One

BUSN 6521 - Managing Individuals and Teams (Health Section). **Semester Hours: 3**  
BUSN 6530 - Data Analysis for Managers. **Semester Hours: 3**  
BUSN 6550 - Analyzing and Interpreting Accounting Information. **Semester Hours: 3**  
HLTH 6010 - Health Care Systems. **Semester Hours: 3**  
BUSN 6541 - Legal and Ethical Environment of Business (Health Section). **Semester Hours: 3**  
HLTH 6071 - Introduction To Health Information Technology. **Semester Hours: 3**  
BUSN 6621 - Applied Economics for Managers (health section). **Semester Hours: 3**  
HLTH\_\_\_\_ - Health Elective (3 semester hours)  
**Total: 24 Hours**

## Year Two

HLTH 6040 - Health Care Financial Management. **Semester Hours: 3**  
BUSN 6640 - Financial Management. **Semester Hours: 3**  
BUSN 6560 - Marketing Management. **Semester Hours: 3**  
HLTH\_\_\_\_ - International Elective (Health) (3 semester hours)  
BUSN 6631 - Management of Operations (Health Section). **Semester Hours: 3**  
BUSN 6711 - Strategic Management (health section). **Semester Hours: 3**  
HLTH 6911 - Health Field Studies. **Semester Hours: 3**  
HLTH\_\_\_\_ - Health Elective (3 semester hours)  
**Total: 24 Hours**

## Notes and Restrictions

Students admitted into the MBA with an emphasis in health administration must meet with a graduate advisor before they register for their first semester. Call 303-556-5900 to schedule an appointment.

*Administrative Residency.* An administrative residency is optional but recommended for students with limited health care experience. The program faculty provide assistance to students in securing the residency, as well as regular consultation during the residency period. The program has been very successful in placing graduates in administrative residencies.

*Length of program.* A maximum of five years and one semester is allowed to complete the health administration program.

## **Specialized Tracks in the MBA with an Emphasis in Health Administration**

Each track carries its own specific course requirements. To provide a variety of perspectives and experiences within a specific area of health administration, each track includes courses that span various departments within the Business School, other schools at the Downtown Campus and other University of Colorado campuses.

International Health Management and Policy Track  
Financial Management Track  
Health Information Technology Management Track

## **Chemistry MS**

► Graduate School Rules apply to this program

### **Requirements for Admission**

Students must meet the Downtown Campus Graduate School admission requirements with specific chemistry requirements as follows:

Undergraduate GPA of at least 3.0.

Undergraduate major in chemistry essentially equivalent to the one offered at UC Denver (see the undergraduate requirements), including two semesters of organic, analytical and physical chemistry with laboratories and one semester of inorganic chemistry. No student will be admitted to the graduate program who is not within two classes of meeting the undergraduate requirements.

GRE examination is recommended, as is the advanced chemistry GRE examination.

International students have additional admission requirements concerning immigration status, proof of financial responsibility and acceptable TOEFL scores.

Failure to meet the full admission standards may lead to provisional admission.

Prospective students are encouraged to contact the graduate program director or visit the chemistry department Web site for additional details concerning the chemistry program, admission procedures, financial assistance and faculty research interests.

## General Program Requirements

At the heart of the graduate program is a set of four core graduate courses in the fields of analytical, inorganic, organic and physical chemistry. A student must qualify in order to register for any core graduate class, either by passing a qualifying examination in that field or by passing the equivalent undergraduate class in that area at UC Denver with a grade of *B* (3.0) or better. All entering students are required to qualify in all four core fields. The qualifying requirements must be completed during the first year in the graduate program. Individual core classes may have additional prerequisites.

Depending on the program option that she/he selects, a student will be required to pass either three (Plan I) or all four (Plan II) of the graduate core courses with no grade in a core course below *B-* (2.7).

The remaining course work for the degree will consist of regular graduate offerings in chemistry, a limited number of which may be substituted by approved classes in related fields. In particular, students interested in interdisciplinary areas, such as biochemistry or environmental chemistry, are encouraged to take cognate courses outside the chemistry department. The chemistry graduate program director must approve in advance any graduate class taken outside the department that is to count toward the degree. All students are required to annually submit an updated program plan for approval and to have their progress evaluated by the graduate program director.

## Specific Degree Requirements

There are two options for obtaining a master's degree from the Downtown Campus Department of Chemistry: Plan I, the thesis option, and Plan II, the course work emphasis option. All students must complete at least 3 semester hours of master's report (CHEM 6960). A student is allowed to participate in the thesis option only after the successful completion of the master's report with the proposed advisor, and upon the mutual agreement of both the student and advisor that the student is prepared to work on a master's thesis. Students who select the course work emphasis option may petition to have up to 3 additional semester hours of master's report research substitute for an equivalent number of course work hours.

### Plan I. Thesis Option

Plan I is a research-oriented program involving a minimum of 30 semester hours with the following requirements:

21-23 semester hours of formal course work, including three of the four graduate core courses

4-6 semester hours of CHEM 6950, Master's Thesis research; successful completion of the thesis research includes the presentation of the results at a departmental seminar

3 semester hours of CHEM 6960, Master's Report research

a grade of *B-* (2.7) or better in all courses completed; *B-* (2.7) or better in all core courses

a cumulative GPA of 3.0 or better in all courses taken as a graduate student

an acceptable formal thesis consistent with the guidelines of the Graduate School

successful oral defense of the master's thesis before a committee of at least three graduate faculty members, two of whom must be tenure track faculty members in the chemistry department

compliance with all Graduate School Rules, available from the Graduate School or CLAS Graduate Advising Web site

all work must be completed within five years of completion of the first graduate class in the department

Plan I thesis research must be conducted under the direct supervision of a tenure-track faculty member of the Downtown Campus Department of Chemistry. Plan I students must take a minimum of 15 semester hours of formal course work in chemistry at the 5000 level or above. Students may petition the graduate program director in advance for permission to take one or two courses at the graduate level outside of chemistry that would count toward the requirements for an MS in chemistry.

## **Plan II. Course Work Emphasis Option**

Plan II is a course work-oriented program involving a minimum of 33 semester hours with the following requirements:

27-30 semester hours of formal course work, including all four graduate core courses  
at least 3 (but not more than 6) semester hours of CHEM 6960, Master's Report, research  
a grade of *B-* (2.7) or better in all courses completed; *B-* (2.7) or better in all core courses  
a cumulative GPA of 3.0 or better in all courses taken as a graduate student

a final research report

presentation of the research project in a final seminar

successful defense of the project before a committee of at least three graduate faculty members, one of whom must be a tenure-track faculty member in the chemistry department

compliance with all Graduate School Rules, available from the Graduate School or CLAS Graduate Advising Web site

all work must be completed within five years of completion of the first graduate class in the department

A Plan II student may petition the graduate program director to substitute up to 3 semester hours of master's report (CHEM 6960) research, beyond the required minimum, for an equivalent number of semester hours of formal course work. Approval will be perfunctory for research performed with the support and under the direct supervision of a faculty member in the Department of Chemistry on the Downtown Campus. Plan II students must take a minimum of 24 semester hours of formal course work in chemistry at the 5000 level or above. Students may

petition the graduate program director in advance for permission to take up to two courses at the graduate level outside of chemistry that would count toward the requirements for an MS in chemistry.

Return to the Department of Chemistry

## Civil Engineering MS and MEng

- ▶ Graduate School Rules apply to these programs

### Graduate

#### Degree Programs

UC Denver offers the master of science degree in civil engineering (MS) with emphases in the following areas: environmental engineering, geotechnical/geo-environmental engineering, structural engineering, transportation engineering, hydrology and water resources, geographical information systems (GIS), and transportation engineering. The Department of Civil Engineering also offers the master of engineering (MEng) degree with an emphasis in either geographical information systems (GIS) or transportation. For the convenience of working students, all graduate-level courses are scheduled in the evenings or on Saturdays.

### Degree Requirements

Two MS degree programs are available. Plan I includes a master's thesis, while Plan II includes a master's report. Both plans require a minimum of 30 semester hours.

Plan I requires 24 or more semester hours of graduate-level courses plus at least 6 semester credits for a thesis. Plan II requires 27 or more semester hours of graduate-level courses plus at least 3 semester hours for a report.

The MEng degree requires 27 or more semester hours of graduate-level courses plus at least 3 semester hours for a master's report. The MEng degree requires at least 15 semester hours of civil engineering courses, which can include the master's report and up to 15 semester hours of graduate-level courses in other disciplines.

Both the MS and MEng degrees require satisfactory completion of a written comprehensive exam and an oral defense of the master's thesis or master's report to a committee of at least three graduate faculty. Every graduate student must also satisfy the degree requirements of the Graduate School on the Downtown Campus, specified in the Information for Graduate Students chapter of this catalog. Both the MS and the MEng degree programs must be completed within seven years of the date the student begins the degree program.

Courses for both the MS and MEng degree programs are selected by mutual agreement of the student and his/her graduate advisor after admission to the degree program. The advisor may

also specify undergraduate courses that must be completed before starting graduate course work but will not count toward the semester hour requirements for the degree. The student's thesis or report topic must also be approved by the graduate advisor.

# Communication MA

► Graduate School rules apply to this program

The master of arts in communication is a generalist degree designed to enhance students' intellectual and professional growth through the understanding and practice of effective communication.

## Degree Requirements

Students have two options for completing the MA degree in communication: the professional track and the academic track.

### Professional Track

The professional track requires the completion of 36 hours of graduate course work (5000 level or above). As explained below, students have the option of taking 6 hours of 4000-level courses. In this situation, a student will take 30 hours of graduate credit and 6 hours of 4000-level (undergraduate) course work. The requirements for course work are as follows:

### Required Course

CMMU 6013 - Introduction to Graduate Work in Communication. **Semester Hours: 3**  
(recommended to be taken the first semester of graduate course work; offered only in the fall semester)

### Methods Courses

Most methods courses are offered every other year. The second methods course may be taken outside of the communication department with the approval of the student's advisor.

### Choose two:

CMMU 5011 - Research Methods: Quantitative. **Semester Hours: 3**  
CMMU 5022 - Critical Analysis of Communication. **Semester Hours: 3**  
CMMU 5221 - Research Methods: Qualitative. **Semester Hours: 3**  
CMMU 6205 - Empirical Research Methods for Communication and Technical Communication. **Semester Hours: 3**

**Total: 9 Hours**

### **Graduate Seminars**

In addition to the above core requirements, students must take four graduate seminars from the Department of Communication. Graduate seminars are 5000- or 6000-level courses.

**Total: 12 Hours**

### **Electives**

Students must complete five electives. A minimum of three of these electives must be at the 5000 or 6000 level; the remaining two may be at the 4000 level. At least three of the five electives must be communication courses; the remaining two electives may be taken from outside of the Department of Communication.

[Students whose bachelor's degrees are not in communication are required to take one additional course (CMMU 4031). This course does not count toward the semester hours required for the degree; it is taken in addition to those 36 hours.]

CMMU 4031 - Perspectives on Communication. **Semester Hours: 3**

**Total: 15 Hours**

Students must receive a grade of *B* or higher in all courses that are applied to the MA degree.

**Track Total: 36 Hours**

### **Academic Track**

The academic track is distinguished from the professional track in that it requires the completion of a substantial academic writing project or projects. The academic track requires the completion of 36-37 hours of graduate course work. At least 30 of these hours must be at the 5000 or 6000 level; 6 hours (two courses) may be at the 4000 level. The requirements for course work are as follows:

CMMU 6013 - Introduction to Graduate Work in Communication. **Semester Hours: 3**  
(recommended to be taken the first semester of graduate course work; offered only in the fall semester)

### **Methods Courses**

Most methods courses are offered every other year.

**Choose two:**

CMMU 5011 - Research Methods: Quantitative. **Semester Hours: 3**

CMMU 5022 - Critical Analysis of Communication. **Semester Hours: 3**

CMMU 5221 - Research Methods: Qualitative. **Semester Hours: 3**

CMMU 6205 - Empirical Research Methods for Communication and Technical Communication. **Semester Hours: 3**

**Total: 9 Hours**

**Graduate Seminars**

In addition to the above core requirements, students must take four graduate seminars from the communication department. Graduate seminars are 5000- or 6000-level courses. The four courses must be approved by the student's advisor.

**Total: 12 Hours**

**Electives**

Students must complete five electives. A minimum of two of these electives must be at the 5000 or 6000 level; the remaining two may be at the 4000 level. At least two of the electives must be communication courses; the remaining two may be taken from outside of the communication department. If a thesis is presented, the thesis credits will substitute for one elective course requirement.

[Students whose bachelor's degrees are not in communication are required to take one additional course (CMMU 4031). This course does not count toward the semester hours required for the degree; it is taken in addition to those 36-37 hours.]

CMMU 4031 - Perspectives on Communication. **Semester Hours: 3**

**Total: 12-15 Hours**

(12 hours for thesis students; 15 for non-thesis)

**Thesis**

Students either must present a major paper for publication (no additional course credit) or complete a thesis for 4 semester hours. Credit for a thesis may substitute for one elective course requirement.

**Total: 4 Hours**

Students must receive a grade of *B* or higher in all courses that are applied to the MA degree.

**Track Total: 36-37 Hours**

## **Options for Specialization**

The communication department has developed three options for students who wish to create an area of focus or specialization within the MA degree—communication management, technical communication and doctoral preparation. Students may choose to develop one of these options as they select their electives, or they may earn a general degree by selecting electives across the three areas of specialization. Any of the options may be pursued by students in the professional track; the doctoral preparation specialization is recommended for students in the academic track.

### **Communication Management**

Communication management is an area of knowledge and skills concerned with the processes involved in managing communication— creating, accessing and delivering communication services within organizational contexts. The area of communication management provides opportunities for the development of communication skills and knowledge by professionals in public, corporate and not-for-profit organizations. Anyone who must manage communication resources for an organization—including account executives, multimedia professionals, human resource specialists and trainers—can advance their career through a specialty in communication management.

### **Technical Communication**

Technical communication is the field concerned with creating documents (electronic as well as paper) that integrate words and images in ways that help individuals achieve their specific goals for using documents at work, school and home. Technical communication is the act of bringing together prose, graphics (including illustration, photography, video and quantitative displays), typography and page design for purposes of instruction, explanation, persuasion and decision making. A specialty in technical communication is available for students who want to develop their skills in technical communication but who also want the breadth available from course work in many areas of communication.

Students who develop a specialty in technical communication also may choose to receive a graduate certificate in technical and professional communication (9 hours).

### **Doctoral Preparation**

The specialty in doctoral preparation is for students who plan to pursue a PhD after completion of their MA degree. Individuals who earn a PhD typically engage in teaching and research as

university professors, but the degree also may be pursued to increase marketability in the corporate world in areas such as consulting and training.

Return to Department of Communication

# Computer Science MS

► Graduate School Rules apply to this program

## General MS Degree Requirements

In addition to the basic requirements of the university, the Department of Computer Science and Engineering requires master's degree candidates to complete an approved program of study consisting of at least 30 semester hours of graduate-level computer science courses while maintaining a GPA of at least 3.0. With prior approval by the graduate committee, a student may substitute up to 9 semester hours of graduate-level mathematics or other engineering courses. All courses must be taught by University of Colorado graduate faculty.

A student must submit an approved plan of study to the department during the first semester of his/her admission. An academic advisor will consult with each student to develop a plan of study.

## Adequate Progress Toward MS in Computer Science Degree

Students are expected to finish the MS degree program within five years. Candidates for the MS degree may not get credit for a course taken longer than five years before the date on which the degree is to be granted.

Students who do not enroll for any course work relevant to computer science in a given semester (summer semesters excluded) must supply the Department of Computer Science and Engineering with a written statement describing the reason for the inactivity. Students who are inactive for three consecutive semesters (summer semesters excluded) can be removed from the program.

Students may choose either Plan I (thesis) or Plan II (MS project).

## Plan I—Thesis

Students choosing Plan I take 24 semester hours of graduate course work plus 6 semester hours of thesis work. Three courses must be chosen from among five core courses and three additional courses chosen from among more than a dozen "breadth" courses. All must be passed with a grade of B or better. Plan I students must also write a thesis and defend it before a thesis committee. The students in Plan I may take two independent study courses for a maximum of 6 hours.

## Plan II—MS Project

Students choosing Plan II take 27 semester hours of graduate course work. Three courses must be chosen from among five core courses and three additional courses chosen from among more than a dozen “breadth” courses. All must be passed with a grade of B or better. The students in Plan II may take only one independent study course for a maximum of 3 semester hours.

*Note:* Students can take only graduate engineering (21 semester hours must be CS courses) and graduate mathematics courses. No more than 6 semester hours can be taken in the form of online courses.

# Counseling Psychology and Counselor Education MA

Degree

Admission Requirements

Matriculation Requirements

**Program Leader:** Diane Estrada

**Office:** Lawrence Street Center, 701

**Telephone:** 303-315-6300

**Fax:** 303-315-6311

**E-mail:** [education@ucdenver.edu](mailto:education@ucdenver.edu)

**Web site:** [www.ucdenver.edu/education/cpce](http://www.ucdenver.edu/education/cpce)

## Faculty

Information about faculty in the Counseling Psychology and Counselor Education program is available online at [www.ucdenver.edu/education](http://www.ucdenver.edu/education).

## Degree

The master of arts degree in counseling psychology and counselor education prepares professionals for community/mental health agencies, private practice and public schools. Students should obtain faculty advising regarding requirements.

Programs consist of 63 semester hours (66 for the multicultural/diversity strand). Core requirements that are common to all areas of study are followed by courses specific to each program. All programs require a practicum (150 clock hours) and an internship (600 clock hours). For most students, the master’s degree is a three-year program with course work for two years followed by a year of practicum and internship. All beginning students enroll in CPCE 5010 - Counseling Theories. The clinical mental health counseling, school counseling and couple and family therapy programs are nationally accredited by CACREP, the Council for the Accreditation of Counseling and Related Educational Programs.

All students are expected to have online computer capability for communication and instructional purposes. For students in off-campus programs, some courses may be offered via computer technology.

## **Admission Requirements**

Successful applicants to the counseling psychology and counselor education (CPCE) program will have obtained a minimum 2.75 undergraduate GPA and will score at least 900 on the verbal and quantitative sections of the GRE or at least 396 on the Miller Analogy Test. Also, applicants will submit a current resume, a statement of goals and four letters of recommendation (academic letters strongly advised). Applicants meeting these minimum standards will be invited to a half-day group interview that involves program orientation, small group interviews, a writing assignment and a group exercise.

Application materials are available by calling the Student Services Center at 303-315-6300 or coming to Lawrence Street Center, Suite 701. All materials must be submitted to the Student Services Center in one complete packet by the appropriate deadline: September 15 for spring semester, January 15 for summer and fall semesters. Application materials include the following:

- part I of the application for admission
- tuition classification form
- \$50 application fee (make checks payable to the University of Colorado Denver)
- written statement
- four letters of recommendation - academic letters strongly advised (in sealed and signed envelopes)
- two official transcripts from each higher education institution attended (in original sealed envelope)
- official GRE or MAT scores sent directly to the University of Colorado Denver (if you do not already hold a graduate degree; see CPCE application checklist)
- oath and consent
- fingerprint card
- online written response

## **Matriculation Requirements**

CPCE students must earn at least a B in skills-oriented courses (CPCE 5100, 5160, 6140, 7100, 5910, 5930) or must repeat these courses until they do so. In addition, all students must make a formal case presentation in CPCE 5930 (internship) to demonstrate their clinical knowledge. Students must also take a national comprehensive examination (after 30 semester hours). Students may opt to write a research-based thesis instead of taking the national written examination.

## **Program Areas**

Students accepted into the CPCE program follow one of three programs offering counseling psychology and counselor education. The couple and family therapy program follows licensure requirements designated by the state of Colorado for licensure as a marriage and family therapist. The clinical mental health counseling program follows state licensure requirements for

licensed professional counselor, and the school counseling program follows state department of education licensure requirements.

## **Program Areas**

### **Counseling Psychology and Counselor Education Core**

*(required in all program areas)*

- CPCE 5010 - Counseling Theories. **Semester Hours: 3**
- CPCE 5100 - Techniques of Counseling. **Semester Hours: 3**
- CPCE 5110 - Group Counseling. **Semester Hours: 3**
- CPCE 5150 - Family Therapy Theory. **Semester Hours: 3**
- CPCE 5330 - Counseling Issues and Ethics. **Semester Hours: 3**
- CPCE 5400 - Career Development. **Semester Hours: 3**
- CPCE 5810 - Multicultural Counseling Issues for Individuals and Families. **Semester Hours: 3**
- CPCE 5910 - Practicum in CPCE. **Semester Hours: 6**
- CPCE 5930 - Internship in Counseling Psychology and Counselor Education. **Semester Hours: 1 to 6**
- EPSY 6200 - Human Development Over the Life Span. **Semester Hours: 3**
- REM 5200 - Introduction to Research Methods. **Semester Hours: 3**
- REM 5300 - Introduction to Measurement. **Semester Hours: 3**

**Total: 42 Hours**

### **Additional Requirements for Program Area One: Clinical Mental Health Counseling (MA)**

- CPCE 5160 - Techniques in Family Therapy. **Semester Hours: 3**
- CPCE 5280 - Addictions Counseling. **Semester Hours: 3**
- CPCE 5820 - Strategies of Agency Counseling. **Semester Hours: 3-6**
- CPCE 6250 - Mental Health Diagnosis. **Semester Hours: 3**
- CPCE 7100 - Advanced Theories and Techniques in Psychotherapy. **Semester Hours: 3**
- Two Electives (6 semester hours)

**Total: 21 Hours**

### **Additional Requirements for Multicultural/Diversity Strand in Clinical Mental Health Counseling**

- CPCE 5160 - Techniques in Family Therapy. **Semester Hours: 3**
- CPCE 5280 - Addictions Counseling. **Semester Hours: 3**
- CPCE 5820 - Strategies of Agency Counseling. **Semester Hours: 3-6**
- CPCE 6250 - Mental Health Diagnosis. **Semester Hours: 3**

CPCE 7100 - Advanced Theories and Techniques in Psychotherapy. **Semester Hours: 3**  
CPCE 5830 - ST: Gender and Sexual Orientation **Semester Hours: 3**  
CPCE 6100 - Spiritual Dimensions of Counseling. **Semester Hours: 3**  
CPCE 6810 - Advanced Multicultural Counseling. **Semester Hours: 3**

**Total: 24 Hours**

**Additional Requirements for Program Area Two: Public School Counseling Certificate (MA)\***

CPCE 5280 - Addictions Counseling. **Semester Hours: 3**  
CPCE 5420 - Organizational Development. **Semester Hours: 3**  
CPCE 5815 - Intro to School Counseling. **Semester Hours: 3**  
CPCE 5915 - Fieldwork in School Counseling. **Semester Hours: 3**  
CPCE 6140 - Counseling Children, Adolescents and Their Parents. **Semester Hours: 3**  
CPCE 6220 - Youth Challenges and Resiliency. **Semester Hours: 3**  
CPCE 6250 - Mental Health Diagnosis. **Semester Hours: 3**

**Total: 21 Hours**

\* Students without teaching experience must accumulate 10 hours of observation time in a school setting. Three hundred of the 600 hours of internship must be in a concentrated environment. Full time experience consisting of at least a four-hour block of time each day is required. Students may not do their concentrated experience in their teaching building. Three hundred (300) hours of concentrated experience are needed at both the middle and secondary level for a K–12 program. CPCE 5150, 6140 and 7100 are necessary for students to work with school-related family issues, individual counseling and children’s counseling in practicum and internship. CPCE 5160 is necessary prior to couple and family therapy. Ten hours of laboratory experiences working with youth are required as part of this course.

**Additional Requirements for Program Area Three: Couple and Family Therapy (MA)**

CPCE 5160 - Techniques in Family Therapy. **Semester Hours: 3**  
CPCE 5170 - Issues In Family Studies. **Semester Hours: 3**  
CPCE 5180 - Counseling Couples. **Semester Hours: 3**  
CPCE 6000 - Introduction to Sex Therapy. **Semester Hours: 3**  
CPCE 6140 - Counseling Children, Adolescents and Their Parents. **Semester Hours: 3**  
CPCE 6160 - Advanced Assessment: Theory and Treatment in Family Systems. **Semester Hours: 3**  
CPCE 6250 - Mental Health Diagnosis. **Semester Hours: 3**

**Total: 21 Hours**

## **Criminal Justice MCJ**

- ▶ Graduate School Rules apply to this program

**Program Director:** Mary Dodge, PhD

## **Faculty**

### **Professors:**

Mark Pogrebin, PhD, University of Iowa

Eric Poole, PhD, Washington State University

### **Associate Professors:**

Mary Dodge, PhD, University of California, Irvine

Angela Gover, PhD, University of Maryland

Paul Stretesky, PhD Florida State University

### **Assistant Professor:**

Deanna Perez, PhD, University of Maryland

### **Associate Research Professor:**

Jerry Williams, DPA, University of Colorado Denver

The master of criminal justice (MCJ) program is designed for students interested in comprehensive professional graduate education in the field of criminal justice. It is intended to develop in the student an in-depth understanding of the fields within criminal justice and of background material from supporting disciplines, which enables the student to adapt to many operational specializations.

As an academic and professional field of study, this program is dedicated to preparing men and women not only to administer the system as it presently exists—but also to evaluate, to analyze and to change—to become pioneers in accelerating the shaping of a rational and responsive criminal justice system.

To deal with this system effectively, research design capability must be developed along with the skills required for the ordering and analysis of empirical data. This course of study prepares the student to be an innovator in crime control and prevention through course work dealing with strategies and skills for promoting individual, organizational and social change.

## **MPA AND MCJ—General Information**

### **Admission Requirements**

A baccalaureate degree from a college or university of accredited standing, with a minimum GPA of 3.0. Two sets of official transcripts are required from all higher education institutions attended.

Three recommendations from qualified references. Recommendations may be from professors, employers and/or others acquainted with the prospective student's professional and/or academic work.

Applicants are required to take the GRE, the GMAT or the LSAT unless they meet the requirements for waiver. Standard graduate admission test scores are normally waived when the candidate already has a graduate degree in another field from an accredited institution. Other applicants may have test scores waived if they have an undergraduate GPA of 3.0 or better *and* they have *significant* professional employment in management or policymaking positions for a minimum of 10 years or the equivalent.

A current resume highlighting professional accomplishments and community involvement.

International students whose first language is not English are required to take the TOEFL or IELTS. A score of 550 or higher on the paper-based exam or 213 or higher on the computer-based exam is required for the MPA or 525/197 for the MCJ.

All application material and test scores should be sent to SPA, University of Colorado Denver, Campus Box 142, P.O. Box 173364, Denver, CO 80217-3364.

SPA will process applications as they come in. Master-level applicants generally receive notification of their admission status three weeks after all materials have been received in the office. The preferred deadlines listed below allow students to receive best consideration for scholarships, financial aid and course selection. *Students who do not meet the preferred deadline may still submit application materials until approximately one month before the start of classes and will be considered on a space-available basis.*

<i>Semester</i>	<i>Preferred Application Deadline</i>	<i>Final Deadline*</i>
Fall	March 15	August 1
Spring	October 15	December 1
Summer	March 15	May 1

\*Final deadline does not apply to international students who should contact the Office of International Admissions for deadline information.

## **Provisional Admission**

Under special circumstances, a student may be admitted on provisional status for one semester. Students admitted on a provisional basis take two courses in their first semester. MPA students may select two of the following: P AD 5001, 5003 or 5004. They may take no other courses during that semester. Based on their performance in these courses, a decision will be made concerning their admission into the program.

## Nondegree Admissions

Students may register as nondegree students while developing their application packet. However, students are discouraged from taking many courses as a nondegree student if they hope to pursue a degree. **Nine semester hours taken in the program as a nondegree student may be applied to the master's degree programs with approval of an advisor.** Nondegree student application forms are available in the Office of Admissions or online.

## Transfer of Credit to SPA

Up to 9 semester hours of appropriate graduate work from an accredited college or university may transfer, if such credit was not applied to a completed degree.

## Limitation of Course Load

The normal course load for a full-time student is 9 semester hours. A student who is employed full time may not carry more than 9 hours unless an excess load has been approved in advance by the faculty advisor.

## Financial Assistance

Students in the master's degree programs are eligible for several types of financial assistance. Educational loans require application to the Office of Financial Aid on the Downtown Campus and completion of the FAFSA. A number of students secure internships or other part-time positions with local, state and federal agencies in the Denver metropolitan area. Scholarship assistance is available on a limited basis.

The school receives announcements for fellowships from various government organizations and actively seeks additional funding for student support in the form of internship positions and research assistantships.

Persons interested in applying for financial assistance should inquire in the SPA office. The deadline for current students is March 15 for the fall term. Prospective students seeking scholarship funds should have complete scholarship applications on file at the SPA office by the preferred application deadline for the semester they are requesting funds.

## The Internship Program

An internship for the MPA and MCJ programs is required for students who have not had significant public, nonprofit or private-sector experience. The purpose of the internship is to continue the linkage between theory and practice that is the philosophical basis of SPA. The internships generally involve part-time work. A maximum of three semester hours will be awarded for internship service. Great care is taken by the SPA to ensure that the internship experience meets the intellectual needs of the student. Placements have included the Governor's Office, Colorado General Assembly, Denver Mayor's Office, City of Denver, Denver

Police Department, Boulder Crime Lab, Western Governor's Association, the National Conference of State Legislatures, the Colorado Department of Public Health and Environment and the Denver Center for the Performing Arts.

## **Time Limit for Master's Degree**

Master's degree students must complete all course work and degree requirements within six years of registration in their first course.

## **Degree Requirements**

### **1. Graduate Study**

The program leading to the MCJ degree requires a minimum of 36 semester hours of appropriate graduate study with an average of B or better. No grade below C will be accepted for graduate credit. No more than 6 semester hours of independent study can be applied toward the degree.

### **2. Core Courses**

The completion of the following core courses is required with a grade of B- or better:

C J 5000 - Law and Social Control. **Semester Hours: 3**

C J 5100 - Administration of Criminal Justice. **Semester Hours: 3**

C J 5120 - Nature and Causes of Crime. **Semester Hours: 3**

C J 5321 - Research Methods in Criminal Justice. **Semester Hours: 3**

**Total: 12 Hours**

### **3. Course Work**

Students must complete a minimum of 27 semester hours of course work in criminal justice.

### **4. Criminal Justice Experience**

Students who have not had criminal justice experience are required to complete CJ 6910 (field study). A minimum of 240 hours of supervised work is required to earn 3 hours of credit. All required core courses must be completed before taking CJ 6910.

### **5. Advanced Seminar**

All MCJ students, except those pursuing the thesis option, must complete the Advanced Seminar during the last semester of their degree program. All core classes must be completed before taking the advanced seminar. Students admitted before Spring 2009 may opt to take a written comprehensive exam in lieu of CJ 5561.

C J 5561 - Advanced Seminar in Criminal Justice. **Semester Hours: 3**

Students must receive the approval of both a faculty advisor and the director of the criminal justice program to complete a thesis for 3–6 semester hours in lieu of the advanced seminar.

## **Elective Courses**

The courses listed below may be taken as electives for the MCJ degree:

- C J 5200 - Wrongful Convictions. **Semester Hours: 3**
- C J 5210 - Prisoner Reentry. **Semester Hours: 3**
- C J 5220 - The American Jury System. **Semester Hours: 3**
- C J 5240 - Gang Patterns and Policies. **Semester Hours: 3**
- C J 5250 - Criminal Offenders. **Semester Hours: 3**
- C J 5260 - Crime and Literature. **Semester Hours: 3**
- C J 5325 - Qualitative Methods for Criminal Justice. **Semester Hours: 3 or**
- C J 7325 - Qualitative Methods for Criminal Justice. **Semester Hours: 3**
- C J 5410 - Victimology. **Semester Hours: 3**
- C J 5430 - Drugs, Alcohol and Crime. **Semester Hours: 3**
- C J 5510 - Seminar: Contemporary Issues in Law Enforcement. **Semester Hours: 3 or**
- C J 7510 - Seminar: Contemporary Issues in Law Enforcement. **Semester Hours: 3**
- C J 5520 - Seminar: Corrections. **Semester Hours: 3 or**
- C J 7520 - Seminar: Corrections. **Semester Hours: 3**
- C J 5530 - Seminar: Community Corrections. **Semester Hours: 3 or**
- C J 7530 - Seminar: Community Corrections. **Semester Hours: 3**
- C J 5540 - Seminar: Juvenile Justice Administration. **Semester Hours: 3 or**
- C J 7540 - Seminar: Juvenile Justice Administration. **Semester Hours: 3**
- C J 5552 - Seminar: Criminal Justice Ethics. **Semester Hours: 3 or**
- C J 7552 - Seminar: Criminal Justice Ethics. **Semester Hours: 3**
- C J 5553 - Seminar: Women and Criminal Justice. **Semester Hours: 3 or**
- C J 7553 - Seminar: Women and Criminal Justice. **Semester Hours: 3**
- C J 5554 - Seminar: Criminal Justice Reform. **Semester Hours: 3 or**
- C J 7554 - Seminar: Criminal Justice Reform. **Semester Hours: 3**
- C J 5571 - Advanced Seminar: The Social Organization of Crime. **Semester Hours: 3 or**
- C J 7571 - Advanced Seminar: The Social Organization of Crime. **Semester Hours: 3**
- C J 5572 - Advanced Seminar: Race, Crime and Justice. **Semester Hours: 3 or**
- C J 7572 - Advanced Seminar: Race, Crime and Justice. **Semester Hours: 3**
- C J 5573 - Advanced Seminar: Organized Crime. **Semester Hours: 3 or**
- C J 7573 - Advanced Seminar: Organized Crime. **Semester Hours: 3**
- C J 5574 - Advanced Seminar: White Collar Crime. **Semester Hours: 3 or**
- C J 7574 - Advanced Seminar: White Collar Crime. **Semester Hours: 3**
- C J 5575 - Advanced Seminar: The Mentally Disordered Offender. **Semester Hours: 3 or**
- C J 7575 - Advanced Seminar: The Mentally Disordered Offender. **Semester Hours: 3**

## MCJ Options

### Concentration in Domestic Violence

A student may choose to complete a concentration in domestic violence as part of the MCJ degree. The concentration provides an interdisciplinary perspective on crime, the formulation of laws and codes, the criminal legal system and its intersection with women and violence. Students seeking a domestic violence concentration must complete 15 semester hours related to domestic violence, which are completed via intensive workshops that meet periodically throughout a two-year period.

P AD 5910 - Women and Violence: A Sociological Perspective. **Semester Hours: 3**

P AD 5920 - Psychology of Violence Against Women. **Semester Hours: 3**

P AD 5930 - Battered Women and the Legal System. **Semester Hours: 3**

P AD 5940 - Domestic Violence Social Change and Advocacy. **Semester Hours: 3**

Elective (1) (3 semester hours)

**Total: 15 Hours**

## Curriculum and Pedagogy MA

**Office:** Lawrence Street Center, 701

**Telephone:** 303-315-6300

**Fax:** 303-315-6311

**E-mail:** [education@ucdenver.edu](mailto:education@ucdenver.edu)

**Web site:** [www.cudenver.edu/education](http://www.cudenver.edu/education)

### Faculty

Information about faculty in the Division of Teacher Education and Professional Learning is available online at [www.ucdenver.edu/education/c&p](http://www.ucdenver.edu/education/c&p).

### Areas of Study

**Curriculum and Pedagogy**

**Master of Arts for Practicing Teachers**

**Science-Math-Social Studies**

The curriculum and pedagogy (C&P) studies lead to an advanced master's degree in curriculum and instruction. All programs require 36 semester hours, including the C&P core or its equivalent. The core courses provide a sound basis in curriculum theory, teacher inquiry,

appreciation of diversity and philosophical foundations. The various specializations allow teachers to focus in an area of interest.

Elementary teachers take the math and science concentration. Secondary teachers may choose mathematics, science or social studies.

Each of these programs is designed to prepare teachers to qualify for master certification from the National Board of Professional Teaching Standards, as well as prepare for licensure renewal with the Colorado Department of Education.

**Core (Required in Elementary Math and Science, Secondary Science, Secondary Math and Secondary Social Studies)**

ELED 6110 - Curriculum Development and School Improvement. **Semester Hours: 3** Or

SECE 6110 - Curriculum Development and School Improvement. **Semester Hours: 3**

FNDS 5050 - Critical Issues in American Education. **Semester Hours: 3**

REM 5XXX - One 5000-level course in research and evaluation methodology. **Semester Hours: 3**

**Total: 9 Hours**

**Elementary Math and Science**

27 semester hours of electives, chosen with advisor's approval (27 semester hours)

**Total: 36 Hours**

**Science (Secondary)**

SECE 5340 - Multicultural Science Education. **Semester Hours: 3**

SECE 5350 - Issues and Problems in Science Education. **Semester Hours: 3**

SECE 5500 - The Nature of Science. **Semester Hours: 3**

SECE 5650 - Environmental Education. **Semester Hours: 3**

15 hours of electives in science or education chosen with advisor's approval

**Total: 36 Hours**

**Mathematics (Secondary)**

SECE 5400 - Curriculum in Secondary Mathematics. **Semester Hours: 3** or

SECE 5410 - Advanced Methods and Strategies in Secondary Mathematics. **Semester Hours: 3**

SECE 5401 - Assessment in Mathematics Education. **Semester Hours: 3**

**Choose three:**

- ELED 5416 - Math-Science Connections: Outdoor. **Semester Hours: 3**
  - SECE 5417 - Structure of Rational Numbers. **Semester Hours: 3**
  - SECE 5418 - Mathematical Modeling. **Semester Hours: 3**
  - SECE 5419 - Exploring the Structure of Geometry Using Technology. **Semester Hours: 3**
  - SECE 5420 - Teaching Mathematics to Low Achievers. **Semester Hours: 3**
  - SECE 5440 - Topics in Mathematics Education. **Semester Hours: 3**
- 12 hours of electives from the School of Education & Human Development or the mathematics department, chosen with an advisor's approval

**Total: 36 Hours**

**Social Studies (Secondary)**

Below is a sample plan, please refer to the School of Education & Human Development Web site for the advising plan at [www.ucdenver.edu/education/c&p](http://www.ucdenver.edu/education/c&p).

- HIST 5464 - Problems and Methods in Teaching History and Social Studies I. **Semester Hours: 3**
  - HIST 5465 - Problems and Methods in Teaching History and Social Studies II. **Semester Hours: 3**
  - HIST 5466 - Teaching About Ethnicity, Race, and Prejudice. **Semester Hours: 3**
  - HIST 6951 - Masters Project: Advanced History Curriculum Development. **Semester Hours: 1 to 6**
  - EPSY 5XXX - Educational Psychology Elective. **Semester Hours: 3**
  - IT 5XXX - Instructional Technology elective. **Semester Hours: 3**
- 9 semester hours of electives, chosen with advisor's approval: history, sociology, economics, education courses strongly recommended.

**Total: 36 Hours**

**Comprehensive Exam**

C&P programs requires a master's comprehensive exam that consists of a project or a comprehensive portfolio for the program completion requirement. Details may be obtained from your faculty advisor and from the "C&P Handbook" available at [www.ucdenver.edu/education/c&p](http://www.ucdenver.edu/education/c&p).

## **Decision Sciences MS**

**Program Director:** Marlene A. Smith  
**Telephone:** 303-556-5813  
**E-mail:** Marlene.Smith@ucdenver.edu

The MS in decision sciences focuses on modeling and applications which prepares you for a career as a decision science specialist in industry or government. Today, companies in every conceivable industry are reaping the benefits of using formal mathematical models to assist them in addressing complex business problems. Decision science graduates hold positions that bridge the gap between operations research/statistics specialists and management.

Learn to apply quantitative methods to real-world problems using modern methodologies adopted from statistics, operations research, and management science. Although the MS in decision sciences is founded in operations research methods, it focuses on applications of these methods in the workplace rather than the development of new operations research techniques. The managerial emphasis of our degree is accomplished through a comprehensive set of elective and required course work such as data analysis, operations management, forecasting, project management, simulation and supply chain management. A required practicum course provides students with the opportunity (under the direction of faculty) to solve a real, complex workplace problem for a local Denver organization.

Requirements for the MS degree in decision sciences are met by the following courses and options:

## **Prerequisite course work:**

Accounting: completion of BUSN 6550 or two undergraduate accounting courses with a grade of B- or better along with useable knowledge of spreadsheets.

## **Required Courses**

BUSN 6530 - Data Analysis for Managers. **Semester Hours:** 3  
BUSN 6630 - Management of Operations. **Semester Hours:** 3  
DSCI 6820 - Project Management. **Semester Hours:** 3  
DSCI 6230 - Business Forecasting. **Semester Hours:** 3  
DSCI 6460 - Decision Analysis. **Semester Hours:** 3  
DSCI 6910 - Decision Sciences Practicum. **Semester Hours:** 3  
DSCI Electives (12 semester hours)

**Total: 30 Hours**

## **Notes and Restrictions**

Decision sciences electives must include at least two DSCI courses numbered 6000 or higher. Remaining decision sciences electives may be any of the following courses: DSCI 6000 or higher; MKTG 6050, Marketing Research; or FNCE 6480, Financial Modeling.

Students are not required to take a comprehensive examination or complete a thesis in the major field.

# Early Childhood Education MA

## Early Childhood Education

**Office:** Lawrence Street Center, 701

**Telephone:** 303-315-6300

**Fax:** 303-315-6311

**E-mail:** [education@ucdenver.edu](mailto:education@ucdenver.edu)

**Web site:** [www.ucdenver.edu/education](http://www.ucdenver.edu/education)

## Faculty

More information about faculty in this division is available online at [www.ucdenver.edu/education](http://www.ucdenver.edu/education).

## Early Childhood Education Program

The early childhood education (ECE) program leads to a master's degree in early childhood education (early childhood accomplished teacher focus) and/or licensure in early childhood special education (early childhood special education specialist). The program prepares leaders who will enrich the life experience of young children (birth to 8) and their families through a variety of professional roles.

ECE Program students may select from three program options:

- MA in early childhood education

- ECSE specialist license (initial or added endorsement)

- MA plus ECSE specialist license (initial or added endorsement)

The ECE program is interdisciplinary in focus, drawing on university resources and the clinical expertise of various community professionals. There is a strong emphasis on fieldwork and practicum experiences in both regular and special education concentrations. Field experiences are a part of each course and provide an opportunity for each student to gain knowledge, abilities and dispositions while interacting with children, families, program staff and community agencies. Practicum experiences are designed to allow students to apply knowledge and practice skills in a closely supervised environment.

The early childhood accomplished teacher focus and the early childhood special education focus share course content in:

literacy development and disorders  
child growth and development, differences and disorders  
learning approaches with young children  
measurement and evaluation  
basic statistics/research methods  
multicultural education  
research and current issues  
early childhood curriculum and program development for inclusive classrooms  
working collaboratively with parents and families  
program administration/leadership

The early childhood special education program provides specialized preparation in:

screening and assessment of young children  
intervention strategies with infants and preschoolers  
behavior management  
working as a member of the transdisciplinary team  
cognitive and socio-emotional development and disorders  
treatment of children who have neurological impairment and chronic illness  
challenging behaviors and autism

## **Program Requirements**

### Semester Hour Requirements

Master's degree in ECE: 40 semester hours

ECSE specialist license: 40 semester hours

Master's degree plus ECSE specialist license: 49 semester hours

Master's degree plus ECSE specialist added endorsement: 40 semester hours

ECSE specialist added endorsement: 25 semester hours

## **Fieldwork and Practicum Requirements**

The master's degree in early childhood education includes a total of 425 hours of required fieldwork/practica. Approximately 200 hours of fieldwork are associated with course assignments; 225 hours of intense, culminating practica occur toward the end of the second year of study. Students completing the MA program take a written comprehensive exam (take home) during the final semester of their program (concurrently with courses at the end of the program sequence).

For the master's degree in early childhood education plus the ECSE specialist initial license, a total of 800 hours of fieldwork/practica is required. Approximately 290 hours of fieldwork are associated with course assignments; 510 hours of intense, culminating practica occur toward the end of the second year of study. Students seeking an added endorsement in ECSE specialist also complete 510 hours of practicum experiences.



ECE 5020 - Approaches to Young Children's Learning.	Required	Required	Required		Required **	Required *	Required **
ECE 5070 - Cognitive, Social, Emotional Development and Disorders in Young Children. <b>or</b> ECE 5202 - Stress, Violence, and Behavior Challenges in Young Children's Lives.		Required	Required	Required	Required	Required *	Required *
ECE 5080 - Language and Literacy in Young Children.	Required	Required	Required	Required	Required	Required *	Required*
ECE 5010 - Curriculum and Program Development in Early Childhood Education.	Required	Required	Required	Required *	Required *	Required	Required
ECE 5060 - Working with Parents and Families.	Required	Required	Required		Required **		Required **
ECE 5040 - Administrative Seminar.	Required	Required	Required		Required **		Required **

ECE 5202 - Stress, Violence, and Behavior Challenges in Young Children's Lives.	Required					Required **	Required **
ECE 6690 - Seminar: Research and Current Issues in Early Childhood Education.	Required		Required			Required	Required
ECE 5140 - Measurement and Evaluation in Early Childhood Education.	Required		Required			Required	Required
ECE 6010 - Literacy and Mathematics K-2.	Required	Required	Required	Required*	Required*		
ECE 5200 - Screening and Assessment of Young Children.		Required	Required	Required	Required	Required	Required
ECE 6200 - Early Intervention Strategies.		Required	Required	Required	Required	Required	Required
ECE 6911 - Practicum in Early Childhood Education.	Required						

ECE 6910 - Practicum in Infancy.		Required	Required	Required	Required	Required	Required
ECE 6912 - Practicum: Early Childhood Special Education. Preschool Practicum		Required	Required	Required	Required	Required	Required
ECE 6914 - Primary Practicum in Early Childhood Special Education.		Required	Required	Required	Required	Required	Required
<b>Total Semester Hours</b>	<b>40</b>	<b>40</b>	<b>49</b>	<b>25</b>	<b>40</b>	<b>25</b>	<b>40</b>
<b>Comprehensive Exam</b>	Required		Required		Required		Required
<b>PLACE Exam #27</b>		Required	Required	Required	Required	Required	Required
				* choose one	* choose one	* choose two	* choose two
					** choose two		** choose two

## Economics MA

► Graduate School Rules apply to this program

### Requirements for Admission

general requirements of the Graduate School (including a 3.0 undergraduate cumulative GPA)  
three letters of recommendation  
15 semester hours of undergraduate economics (including theory and quantitative methods); variations to be discussed with graduate advisor  
acceptable GRE scores  
two official transcripts from all colleges attended  
international students must submit TOEFL scores

## **Degree Requirements**

The MA degree requires the completion of 30 semester hours of course work, of which 21 hours are core requirements. Each student's plan will be worked out in conjunction with the graduate advisor.

### **Core Courses**

All courses must be completed with a grade of B- or better.

ECON 5073 - Microeconomic Theory. **Semester Hours: 3**  
ECON 5083 - Macroeconomic Theory. **Semester Hours: 3**  
ECON 5803 - Mathematical Economics. **Semester Hours: 3**  
ECON 5813 - Econometrics I. **Semester Hours: 3**  
ECON 5823 - Econometrics II. **Semester Hours: 3**  
ECON 6053 - Seminar In Applied Economics. **Semester Hours: 1.5**  
ECON 6073 - Research Seminar. **Semester Hours: 3**

**Total: 21 Hours**

### **Electives**

Three elective courses

**Total: 9 Hours**

**Degree Total: 30 Hours**

Return to Department of Economics

# **Educational Psychology MA**

**Office:** Lawrence Street Center, 701  
**Telephone:** 303-315-6300  
**Fax:** 303-315-6311  
**E-mail:** [education@ucdenver.edu](mailto:education@ucdenver.edu)  
**Web site:** [www.ucdenver.edu/education](http://www.ucdenver.edu/education)

## Faculty

Information about educational psychology faculty is available online at [www.ucdenver.edu/education](http://www.ucdenver.edu/education).

## Master's Degree

The MA program in educational psychology prepares students to facilitate the teaching/learning process. Thus, many students pursue the degree to enhance their skills as professional classroom teachers. The degree also provides skills necessary for a variety of roles where knowledge of learning, development, motivation, and research is essential; examples would include teaching at the community college level, teaching adults and conducting program evaluation. Other students seek the MA as preparation for advanced study in educational psychology.

Note, too, that many students in the school's initial professional teacher education program—as well as interns in the alternative teacher licensure programs conducted by the Stanley British Primary School, the Boulder Journey School and Friends' School—also seek the MA degree in the Division of Educational Psychology.

## Areas of Study

Four major areas of concentration are available—human learning, child growth and development, research and evaluation and individualized programs (such as adult learning). Regardless of the concentration area selected, all students must:

- take 9 semester hours of core courses required by the School of Education & Human Development

- demonstrate competence in educational psychology by successfully completing a minimum of 36 semester hours of relevant course work (9 of which are the core)

- complete either a master's thesis (4 semester hours, MA Plan I) or an independent study project (3 to 4 semester hours, MA Plan II), the latter involving the collection of data bearing on a given problem and its analysis and interpretation in writing

- perform satisfactorily on a written comprehensive examination (typically during the last term enrolled in regular courses)

- complete the degree on a timely basis, usually within three years

To stay current with the needs of a changing industry, faculty in the educational psychology program may choose to change curriculum requirements at semester for incoming

students to the program. For the 2009-2010 term, please refer to the most current version of the handbook for academic requirements for this program.

EPSY Student Handbook

## Research and Evaluation Methodology

**Office:** Lawrence Street Center, 701

**Telephone:** 303-315-6300

**Fax:** 303-315-6311

**E-mail:** [education@ucdenver.edu](mailto:education@ucdenver.edu)

**Web site:** [www.ucdenver.edu/education](http://www.ucdenver.edu/education)

## Faculty

To find information about faculty in this program visit [www.ucdenver.edu/education](http://www.ucdenver.edu/education).

## Emphasis Track

There is a REM emphasis track within the educational psychology master's degree program; students can select either an evaluation/data analysis focus or an assessment focus. This area also provides classes to all education graduate programs, offering courses in research methods, evaluation, statistics, analysis, assessment and measurement.

To stay current with the needs of a changing industry, faculty in the educational psychology program may choose to change curriculum requirements at semester for incoming students to the program. For the 2009-2010 term, please refer to the most current version of the handbook for academic requirements for this program.

EPSY Student Handbook

## Electrical Engineering MEng

► Graduate School Rules apply to this program

The master of engineering (MEng) degree program is broad based and is designed especially for that person who wants to further his/her education in more than just electrical engineering. A minimum of 30 semester hours of academic work is required for the MEng degree. At least 15 of these hours must be in electrical engineering courses at the 5000-level or above. At least 15 semester hours must be taken in the Department of Electrical Engineering at UC Denver. As many as 15 semester hours may be taken outside of engineering. The student who wishes to enter the master of engineering program should apply to the electrical engineering department in the same manner as a master of science applicant.

# Electrical Engineering MS

- ▶ Graduate School Rules apply to this program

The master of science (MS) program offers two plans, thesis (Plan I) and master's project (Plan II). In each, the student must complete 30 graduate semester hours. To satisfy the breadth requirement, two courses outside the area of specialization are required and two mathematics courses are recommended. Plan I requires a minimum of 24 semester hours of graduate course work and 6 semester hours of MS thesis work. Plan II requires a minimum of 27 semester hours of graduate course work and 3 semester hours of MS project. A minimum of 21 graduate semester hours must be earned through the electrical engineering department at UC Denver. Candidates with a BS degree from UC Denver can count 6 electrical engineering UC Denver graduate credits toward both undergraduate and graduate degrees if their undergraduate GPA is at least 3.0. Double counting applies only to credits earned with a B or better grade.

## English MA

- ▶ Graduate School Rules apply to this program

The department offers three programs in the English MA degree: 1) the literature program increases students' knowledge of English and American literature and also their familiarity with a variety of critical methodologies; 2) the teaching of writing program introduces students to the theory, research and pedagogy underlying contemporary instruction in secondary and college composition; 3) the applied linguistics program introduces students to the principles, practices and concerns of teaching English to adults whose first language is not English.

Students concurrently pursuing a master's in education can count up to 6 hours of education courses toward their MA in English with their English advisor's permission.

Contact the graduate director for more information on these programs.

## Requirements for Admission

Applicants for any of the programs described above must submit all application materials by either the spring, summer or fall deadline. The deadline for fall enrollment is April 1; the deadline for spring and summer enrollment is October 1. Complete applications for all three programs must include the following:

- a completed University of Colorado graduate application
- two copies of all graduate and undergraduate transcripts, and for any nondegree courses previously taken
- three letters of recommendation in which the recommender specifically addresses the candidate's ability to pursue successfully the program chosen

recent scores on the GRE, including the analytical, verbal and quantitative portions. GRE score average should be 600 or higher. Analytical writing score should be 4 or higher.

evidence of a 3.0 GPA in previous courses

a letter of application, in which the applicant carefully describes reasons and motivation for pursuing the program chosen, and career aspirations upon completing the degree

10-page critical writing sample

In addition to these requirements, applicants for the MA in literature must have successfully completed 24 semester hours in English courses (graduate or undergraduate), excluding courses in composition, creative writing or speech. At least 15 of these semester hours must be at the upper-division level.

## **Transfer of Credits from Other CU Campuses**

Students admitted to graduate study in English may complete all of their course requirements for the MA degree at UC Denver. Up to 12 semester hours (total) may be transferred from the University of Colorado-Boulder, University of Colorado-Colorado Springs or other graduate program; however, such transfer requires the written approval of the specific program coordinator. Only 12 semester hours of courses at UC Denver can be counted toward the degree before acceptance into the program. Further, work already applied toward a graduate degree received at the University of Colorado or at another institution cannot be transferred toward another graduate degree of the same level at UC Denver. (For other rules concerning transfer of graduate credits, see the Graduate School Rules available from the Graduate School Web site.) For more information, contact the director of graduate studies at 303-556-4648.

## **Degree Requirements**

Two of the three programs above require a total of 30 semester hours. The literature program requires 33 semester hours. Each program also has a different capstone requirement, e.g., a thesis, a comprehensive examination or a project. Students must receive a *B-* or above in all courses counted toward the MA degree.

**For complete information about the graduate programs in English, go to the master of arts in English Web site: <http://thunder1.cudenver.edu/clas/english/MA.html>.**

## **Environmental Sciences MS**

- ▶ Graduate School Rules apply to this program

**Program Director:** John Wyckoff

**Associate Program Director:** Jon Barbour

**Office:** North Classroom, 3622  
**Telephone:** 303-556-4520  
**Fax:** 303-556-6197  
**E-mail:** Jon.Barbour@ucdenver.edu  
**Web site:** [www.cudenver.edu/ges/mses.html](http://www.cudenver.edu/ges/mses.html)

## **Faculty (Concurrently Appointed)**

### **Professors:**

Larry Anderson, chemistry  
Lloyd Burton, School of Public Affairs  
Lynn Johnson, civil engineering  
John Lanning, chemistry  
Martin Lockley, geography and environmental science  
Diana Tomback, biology

### **Associate Professors:**

Leo Bruederle, biology  
Frederick Chambers, geography and environmental science  
Greg Cronin, biology  
Brian Page, geography and environmental science  
Anu Ramaswami, civil engineering  
Timberly Roane, biology  
Deborah Thomas, geography and environmental science  
John Wyckoff, geography and environmental science

### **Assistant Professors:**

Michael Green, biology  
Rafael Moreno, geography and environmental science  
Brian Muller, planning and design  
Bryan S. Wee, geography and environmental science

Environmental sciences is a multidisciplinary study of the environment, housed in the Department of Geography and Environmental Sciences. The academic fields involved in environmental sciences include chemistry, biology and ecology, physics, geology, geography, anthropology, engineering, political science, law, economics and the health sciences. Students planning to pursue the MS in environmental sciences must either have earned a bachelor's degree or have taken significant course work in the natural/physical sciences or engineering and completed several other prerequisites (see the following graduate information). Graduate-level certificates in environmental sciences are also offered. The certificates may be earned stand-alone or as options in the MS in environmental sciences.

Environmental careers encompass a broad range of professions, from those with a strong foundation in the natural/physical sciences or engineering to those based in the social sciences and/or humanities. Students interested in environmental issues and careers should investigate the whole field before deciding which course to follow. At the Downtown Campus, the MS in

environmental sciences emphasizes the natural/physical sciences and engineering with the addition of the social sciences and humanities.

The MS in environmental sciences degree is designed to provide training in engineering, natural/physical sciences and socioeconomic analysis. The goals of the program are to (1) enhance the interdisciplinary communication and analytical skills of the student, and (2) provide a multidisciplinary approach for more intensive study of a particular environmental issue. Students will receive instruction in the physical and biological dynamics of various ecosystems, environmental engineering and socioeconomic issues associated with environmental analysis.

Graduates of the environmental sciences program are involved in many different areas, such as reviewing environmental impact statements, monitoring groundwater quality and communicating with the public. Many students have found employment in various agencies (U.S. Environmental Protection Agency, U.S. Geological Survey, Colorado State Department of Public Health and Environment) and private-sector environmental and engineering firms.

## Requirements for Admission

The program is for students who either have baccalaureate degrees or significant background in one of the natural/physical sciences or engineering. In addition, minimum undergraduate science and math requirements are:

one semester of calculus and one semester of upper-division statistics (*if applicant is missing the statistics course, he/she can be admitted but must take ENVS 5600, Applied Statistics, or an approved statistics course as an elective before receiving the MS in environmental sciences degree*)

two semesters general chemistry with lab

one semester physics

two semesters general biology with lab

If only two semesters of the six prerequisite courses are lacking, students may be admitted, but must take them in the first year in the program. Applicants who have fulfilled all prerequisites have a better chance of acceptance. Applicants may be required to take additional prerequisite courses (necessary for completing particular core or elective courses). The prerequisite courses will not count toward the MS environmental sciences degree. As part of the admission review process, applicants are required to submit a graduate application, a minimum of three letters of recommendation, transcripts from all institutions previously attended, and general GRE scores. UC Denver has a minimum requirement of a 3.0 undergraduate GPA for applicants to the Graduate School. The program admits new students for the fall semester and the number of students admitted to the program depends, in part, on space availability. **Applicants must submit all materials by the April 1 deadline.**

## Financial Aid

There are three kinds of financial aid available: tuition assistance; research assistantship positions funded by grants to specific program faculty; and the regular package of financial aid

(primarily loans) available through the financial aid office on the Downtown Campus. Incoming students will be automatically considered for program-distributed tuition assistance at the time of admission to the program. Continuing students will be regularly apprised of available aid and positions. Students interested in research assistantships should consult individual faculty with whom they wish to work regarding potential assistantship positions. All other aid should be requested through the UC Denver Financial Aid Office, North Classroom, 1030, Campus Box 125, P.O. Box 173364, Denver, CO 80217-3364. Telephone: 303-556-2886.

## **Internships**

Students in the MS in environmental sciences program are strongly encouraged to contact the Experiential Learning Center for internships and paid positions related to environmental sciences. The Experiential Learning Center is located in the Tivoli Student Union, Suite 260. Telephone: 303-556-2250. Many students have had internships in federal agencies, such as the U.S. Environmental Protection Agency and the U.S. Geological Survey.

## **Master's International Program**

The master's international (MI) program is a cooperative effort between the U.S. Peace Corps and UC Denver that provides students with the opportunity to earn a master of science in environmental sciences degree and at the same time gain a Peace Corps experience. The objective of the program is to have students interested in international environmental issues gain firsthand overseas experiences and earn credit toward their degree.

To qualify for the program, students must meet the admissions requirements for the university master's degree program and the requirements established by the Peace Corps for volunteer service. In some cases, enrolled students will be able to apply to the Peace Corps as a program applicant during their first semester of graduate study. Students in the MI program must complete the same degree requirements as non-MI students in the MS in environmental sciences program. A diverse pool of applicants and participants to the program will be encouraged.

MI program participants entering the Peace Corps will complete approximately 12 weeks of preservice training. Upon successful completion of training, program participants will become Peace Corps volunteers and begin a two-year tour of service in their country of assignment. Before beginning their Peace Corps assignments, program participants will be expected to meet academic requirements of the program. The program will be designed to prepare them for Peace Corps service and volunteer activities generally.

## **Program Requirements**

The MS in environmental sciences is a 39-hour program that provides students with two alternate plans: Plan I requires a thesis, while Plan II is a nonthesis program. General requirements for the program include: a set of core courses (15 semester hours), the MS in environmental sciences seminar course (ENVS 6002, 3 semester hours), an environmental policy course (3 semester hours), and elective courses (12 semester hours minimum). Students

choosing Plan I must also complete 6 hours of thesis, while those choosing Plan II must complete 6 hours of additional elective course work. Students opting for Plan II are encouraged to enroll in 3 hours of independent study (ENVS 6840) as one of their electives.

The degree is offered through the College of Liberal Arts and Sciences with the cooperation of the College of Engineering and Applied Science. In addition, some courses offered by the College of Architecture and Planning, the School of Public Affairs and the Business School are relevant and applicable to the program.

### **Required Core Courses**

#### **Fall**

C E 5401 - Introduction to Environmental Engineering. **Semester Hours: 3**

ENVS 5030 - Environmental Geology. **Semester Hours: 3**

ENVS 6200 - Risk Assessment. **Semester Hours: 3**

#### **Spring**

BIOL 5445 - Applied Environmental Biology. **Semester Hours: 3**

CHEM 5700 - Environmental Chemistry. **Semester Hours: 3**

**Total: 15 Hours**

**The core courses are to be taken first upon entry into the program. They are the foundation for other courses in environmental sciences.**

#### **Seminar Course**

Students are required to register for ENVS 6002, Environmental Sciences Seminar, in the first semester they are enrolled in the MS in environmental sciences program. The seminar serves as an introduction to the program and helps students to develop research skills and further their professional development.

ENVS 6002 - Environmental Sciences Seminar. **Semester Hours: 3**

#### **Policy Courses**

Students are required to enroll in at least one course (3 semester hours) that deals with environmental policy. The environmental policy requirement of the master's program is intended to expose students whose background is largely in the natural sciences or engineering to the legal, political and social aspects of environmental issues. To satisfy this requirement, students must enroll in one of the following courses (other courses may be acceptable if approved by the program director):

Choose one:

GEOG 5265 - Sustainability in Resources Management. **Semester Hours: 3**

P AD 5631 - Seminar in Environmental Politics and Policy. **Semester Hours: 3**  
P AD 5633 - Seminar in Natural Resource and Environmental Health Law. **Semester Hours: 3**  
P SC 4354 - Environmental Politics. **Semester Hours: 3**  
URP 6651 - Environmental Impact Assessment. **Semester Hours: 3**

**Total: 3 Hours**

### **Elective Courses**

(See the MS in Environmental Sciences Web site for a complete list of elective courses for the MS in environmental sciences program.)

Students, with the coordinator and/or an advisor, will complete a program plan that will include 12-21 semester hours of elective requirements that will meet their interests. Students may choose to use four of the electives to fulfill one of the following options offered in environmental sciences: air quality, ecosystems, environmental health, geospatial analysis, hazardous waste and water quality. Students must have the prerequisites for each course and must meet the requirements listed in the notes below. Contact the option advisor for the particular option of interest before starting. Upon graduation, the option will be noted on the student's transcript.

**Following are the requirements for each environmental sciences option:**

#### **AIR QUALITY OPTION**

**Option Advisor:** Larry Anderson  
**Telephone:** 303-556-2963  
**E-mail:** Larry.Anderson@ucdenver.edu

#### **Required Courses**

CHEM 5710 - Air Pollution Chemistry. **Semester Hours: 3**  
ENVS 5730 - Air Quality Modeling and Analysis. **Semester Hours: 3**

**Total: 6 Hours**

#### **Electives**

Choose two:

C E 5800-583X - Special Topics. **Semester Hours: 1 to 6**  
(when Air Pollution Control is the topic)  
CHEM 5720 - Atmospheric Sampling and Analysis. **Semester Hours: 3**  
URP 6686 - Special Topics in Urban and Regional Planning. **Semester Hours: 1 to 3**  
(when Air Quality Planning and Policy is the topic)

**Total: 6 Hours**

**Option Total: 12 Hours**

### **ECOSYSTEMS OPTION\***

**Option Advisor:** Gregory Cronin  
**Telephone:** 303-556-6036  
**E-mail:** Gregory.Cronin@ucdenver.edu

#### **Required Courses**

BIOL 5415 - Microbial Ecology. **Semester Hours:** 3  
ENVS 5000 - Biogeochemical Cycles. **Semester Hours:** 3

**Total: 6 Hours**

#### **Electives**

Choose two:

BIOL 5050 - Advanced Biology Topics. **Semester Hours:** 1 to 8  
BIOL 5154 - Conservation Biology. **Semester Hours:** 3  
ENVS 6220 - Toxicology. **Semester Hours:** 3  
(see Note 2)  
GEOG 5060 - Remote Sensing I: Introduction to Environmental Remote Sensing. **Semester Hours:** 3

**Total: 6 Hours**

**Option Total: 12 Hours**

\* BIOL 5445, Applied Environmental Biology, required as a prerequisite for the ecosystems option.

### **ENVIRONMENTAL HEALTH OPTION\***

**Option Advisor:** Deborah Thomas  
**Telephone:** 303-556-5292  
**E-mail:** Deborah.Thomas@ucdenver.edu

#### **Required Courses**

ENVS 6220 - Toxicology. **Semester Hours:** 3  
(see Note 2) (fall, even years)

ENVS 6230 - Environmental Epidemiology. **Semester Hours: 3**  
(spring, even years)

**Total: 6 Hours**

### **Electives**

Choose two:

ANTH 4010 - Global Health Studies I: The Biocultural Basis of Health. **Semester Hours: 3**

ENVS 6210 - Human Health and Environmental Pollution. **Semester Hours: 3**  
(spring, odd years)

P AD 5633 - Seminar in Natural Resource and Environmental Health Law. **Semester Hours: 3**

**Total: 6 Hours**

**Option Total: 12 Hours**

\* ENVS 6200, Risk Assessment, required as a prerequisite for the environmental health option.

### **GEOSPATIAL ANALYSIS OPTION\***

**Option Advisor:** Rafael Moreno

**Telephone:** 303-556-3762

**E-mail:** Rafael.Moreno@ucdenver.edu

### **Required Courses**

GEOG 5080 - Introduction to GIS. **Semester Hours: 3**

GEOG 5090 - Environmental Modeling with Geographic Information Systems. **Semester Hours: 3**

**Total: 6 Hours**

### **Electives**

Choose two:

C E 5382 - GIS Spatial Database Development. **Semester Hours: 3**

C E 5385 - GIS Relational Database Systems. **Semester Hours: 3**

C E 5386 - GIS Laboratory. **Semester Hours: 3**

**Total: 6 Hours**

### **Option Total: 12 Hours**

\* GEOG 3080, Introduction to Mapping and Map Analysis, is required as a prerequisite of the geospatial analysis option.

For more information, contact the option advisor or Jon Barbour at 303-556-4520, Jon.Barbour@ucdenver.edu.

### **HAZARDOUS WASTE OPTION\***

**Option Advisor:** Anu Ramaswami

**Telephone:** 303-556-4734

**E-mail:** Anu.Ramaswami@ucdenver.edu

### **Required Courses**

C E 5480 - Hazardous Wastes and Site Remediation. **Semester Hours:** 3

C E 5800-583X - Special Topics. **Semester Hours:** 1 to 6  
(when Hazardous Waste Regulations is the topic)

**Total: 6 Hours**

### **Electives**

Choose two:

BIOL 5051 - Advanced Topics In Microbiology. **Semester Hours:** 3

C E 5402 - Environmental and Water Quality Modeling. **Semester Hours:** 3

ENVS 5403 - Unsaturated Zone Hydrology. **Semester Hours:** 3

**Total: 6 Hours**

### **Option Total: 12 Hours**

\*C E 5401, Introduction to Environmental Engineering, required as a prerequisite for the hazardous waste option.

### **WATER QUALITY OPTION\***

**Option Advisor:** John Wyckoff

**Telephone:** 303-556-2590

**E-mail:** John.Wyckoff@ucdenver.edu

## Required Courses

BIOL 5416 - Aquatic Ecology. **Semester Hours: 3**  
ENVS 5410 - Aquatic Chemistry. **Semester Hours: 3**

**Total: 6 Hours**

## Electives

Choose two:

C E 5333 - Applied Hydrology. **Semester Hours: 3**  
C E 5393 - Water Resources Development and Management. **Semester Hours: 3**  
ENVS 5403 - Unsaturated Zone Hydrology. **Semester Hours: 3**

**Total: 6 Hours**

**Option Total: 12 Hours**

\*CHEM 5700, Environmental Chemistry, is required as a prerequisite of the water quality option.

## Notes:

Many of the courses have prerequisites; student must check the catalog for prerequisite requirements for these courses. Some options have a prerequisite course requirement. One course may not be used for more than one option, even if it is listed in several options. Other courses may be offered that will be acceptable as electives with approval of the option advisor and the director of the program.

No more than three courses may be from any one discipline (excluding ENVS); i.e., chemistry, biology, civil engineering.

Courses used by the student to fulfill a core requirement may not be used to fulfill the options.

All work submitted for the environmental sciences options must have a grade of *B* (3.0) or better.

All courses for the environmental sciences options must be completed at the Downtown Campus.

Courses applied to either a certificate\* or an MS degree may later be applied toward the other if all pertinent course work is completed within a five-year time period.

\* The above options of the program may be taken to earn a corresponding environmental sciences certificate. However, certificates may be earned without entrance into the MS in environmental sciences program. (See the Environmental Sciences Graduate Certificate description).

# Executive MBA in Health Administration

## Distinctive Features of the Executive Program in Health Administration

Drawing on the expertise represented by the faculties of a consortium of western universities, the program offers high-quality courses taught by instructors that are typically not available from a single university.

The executive program facilitates learning for professionals who have continuing career and family responsibilities. The program is especially tailored for working individuals, allowing students to remain on their jobs while completing their educational program.

The program employs innovation in the technology of educational delivery. Learning methods include:

- computer-assisted instruction and self-paced learning packages
- computer conferencing and electronic case analyses
- on-campus sessions

### For application and additional information, write to:

Executive Program in Health Administration  
The Business School  
University of Colorado Denver  
P.O. Box 480006  
Denver, CO 80248-0006  
[www.colorado.edu/execed](http://www.colorado.edu/execed)

## Finance MS

**Program Director:** Associate Dean of Programs and Students

**Telephone:** 303-556-5804

## Faculty

### Professors:

Marcelle Arak, PhD, Massachusetts Institute of Technology

Jean-Claude Bosch, PhD, University of Washington

E. Woodrow Eckard, PhD, University of California-Los Angeles

Richard Foster, PhD, University of Chicago

James Morris, PhD, University of California-Berkeley

Dean Taylor, PhD, University of Chicago

**Associate Professors:**

Ajeyo Banerjee, PhD, University of Massachusetts-Amherst

Elizabeth Cooperman, PhD, University of Georgia

Jian Yang, PhD, Texas A&M University

**Senior Instructors:**

John Byrd, PhD, University of Oregon

Chen Ji, MS, University of Colorado

Barbara Pelter, PhD, University of California-Davis

John Turner, PhD, St. Louis University

**Instructors:**

John Daley, PhD, University of Washington

Cindy Sutfin, MS, University of Colorado

The master of science in finance provides the necessary depth and specialized expertise to meet the need of businesses for financial managers, investment analysts and other finance specialists.

The program emphasizes a familiarity with the institutions in our financial system, an understanding of financial markets and instruments, and the analytical skills and tools necessary to make informed decisions about investment and financing.

The program is suited to students from a wide variety of undergraduate backgrounds and is particularly appropriate to students with strong technical and analytical backgrounds.

The MS in finance offers flexibility with on-campus and online courses. The MS finance degree requirements are met by the following courses and options:

## **Required Courses**

BUSN 6620 - Applied Economics for Managers. **Semester Hours: 3**  
BUSN 6640 - Financial Management. **Semester Hours: 3**  
FNCE 6290 - Quantitative Methods for Finance. **Semester Hours: 3**  
FNCE 6300 - Macroeconomics and Financial Markets. **Semester Hours: 3**  
FNCE 6330 - Investment Management Analysis. **Semester Hours: 3**  
FNCE 6380 - Futures and Options. **Semester Hours: 3** or  
FNCE 6382 - Survey of Financial Derivatives: Futures, Options and Swaps. **Semester Hours: 3**  
FNCE Electives (3) (9 semester hours)  
Free Elective (1) (3 semester hours)

## **Total: 30 Hours**

Prerequisites: BUSN 6550, Analyzing and Interpreting Accounting Information, or the equivalent accounting background. Students are also expected to be knowledgeable in spreadsheet software.

## **Notes and Restrictions**

*Finance Electives.* Choose three courses in finance from the list of regularly scheduled graduate classes in consultation with an advisor.

*Free Elective.* Students complete 3 semester hours of graduate business course work (excluding BUSN courses numbered below 6800). Modern finance is heavily mathematical and draws extensively on economics and accounting. Courses in these areas are especially useful. Petitions may be submitted to the program director for special courses that fit a student's individual needs.

# **Global Energy Management MS**

**Program Advisor:** Sarah Dushame  
**Telephone:** 303-556-5819  
**E-mail:** Sarah.Dushame@ucdenver.edu

## **Faculty**

### **Professors/Instructors**

Timothy Antoniuk, MDes, University of Alberta  
William Ascher, PhD, Yale University

Stephen Brown, PhD, University of Maryland  
Matthew Clarke, PhD, University of Calgary  
William Fox, JD, Catholic University of America  
Mean Husein, PhD, McGill University  
Merrily Kaut, PhD, University of Colorado Denver  
L. Ann Martin, PhD, University of Minnesota

The master of science in global energy management (GEM) prepares individuals for leadership careers in the energy industry. This degree is particularly appropriate for individuals seeking to advance their existing careers in the energy field. Prior work experience within the field is preferred, but not required. The program consists of two components: the core curriculum and the more advanced and specialized elective courses. The MS GEM program requires the completion of the following core classes as well as four elective courses from the selection listed below.

## Required Courses

- GEMM 6000 - 21st Century Global Energy Issues and Realities. **Semester Hours: 3**
- GEMM 6100 - Global Energy Economics and Geography. **Semester Hours: 3**
- GEMM 6200 - Environmental, Regulatory, Legal & Political Environment in the Energy Industry. **Semester Hours: 3**
- GEMM 6300 - Renewable and Alternative Energy: Opportunities & Challenges. **Semester Hours: 3**
- GEMM 6400 - Leadership and Decision Making in the Global Energy Environment. **Semester Hours: 3**
- GEMM 6500 - Energy Accounting in Global Markets. **Semester Hours: 3**
- GEMM 6600 - Financial Management and Hedging in the Global Energy Markets. **Semester Hours: 3**
- GEMM 6410 - People Management in the Global Energy Environment. **Semester Hours: 3**

## Choose four

Choose four of the following courses. These courses are taken during the last two terms of the program and are offered based on enrollment.

- GEMM 6210 - Land Management and Energy Contracts. **Semester Hours: 3**
- GEMM 6430 - Organizational Behavior in the Energy Industry. **Semester Hours: 3**
- GEMM 6450 - Strategic Management of the Energy Industry. **Semester Hours: 3**
- GEMM 6460 - Integrated Information Management for Energy Firms. **Semester Hours: 3**
- GEMM 6470 - Energy Marketing. **Semester Hours: 3**
- GEMM 6610 - Advanced Financial Management in the Energy Industry. **Semester Hours: 3**
- GEMM 6620 - Energy Asset Management. **Semester Hours: 3**

GEMM 6630 - Production and Supply Chain Management for the Energy Industry.  
**Semester Hours: 3**

## **Prerequisites**

Applicants that do not have a science- or energy-related field undergraduate degree or three-plus years experience in the industry are required to take two prerequisite courses as well as the GMAT.

The prerequisite courses include physical geology and introduction to physical engineering. These courses can be taken at any accredited university, but must be approved by a GEM team staff member before registering. Also the prerequisites may be taken prior or concurrently with GEMM 6000 and GEMM 6100.

## **Notes and Restrictions**

The program is a cohort group, hybrid online, 18-month master of science degree program. As a cohort program, all students start together, progress together and graduate together. Students cannot take time out from the program once it starts and need to plan on remaining in the program for the full 18 months. If it becomes necessary to take a term off, students may not re-enroll until the next cohort group catches up to the point where the student originally dropped out, which is 6 months later. As a hybrid online program, professors and students meet in class face to face for four days (Fridays through Mondays) at the start of each 3-month term with the rest of the term completed online. Please note that the GEM degree program runs on a completely separate schedule from the normal semester terms of the Business School. Please check the Business School Web site for deadlines and dates of each GEM term. All GEMM courses are restricted to those students who have been admitted to the MS GEM program.

## **Dual Degrees**

In order to participate in the dual degree options offered by the Business School, students in the GEM program must first complete their entire GEM degree before they can begin their second degree.

# **Health Administration MS**

**Program Director:** Errol L. Biggs  
**Telephone:** 303-556-5845  
**E-mail:** [errol.biggs@ucdenver.edu](mailto:errol.biggs@ucdenver.edu)

## **Faculty**

**Professors:**

Heidi Boerstler, PhD/JD, Yale University/University of Denver

Peter Bryant, PhD, Stanford University

C.Marlena Fiol, PhD, University of Illinois-Urbana-Champaign

Richard Foster, PhD, University of Chicago

Bruce Neumann, PhD, University of Illinois

Edward O'Connor, PhD, University of Akron

**Associate Professors:**

Murray Cote, PhD, Texas A & M University

Blair Gifford, PhD, University of Chicago

Deborah Kellogg, PhD, University of Southern California

Stephen Ross, MD, University of North Carolina

**Instructor:**

Errol Biggs, PhD, Pennsylvania State University

The goal of the master of science in health administration degree is to prepare men and women who, after appropriate practical experience in responsible managerial positions, are capable of assuming positions as chief executive officers or senior administrators in complex, multiservice health care organizations or in organizations' purchasing and health services.

The curriculum is a synthesis of management concepts and techniques that are applicable to any economic organization and tools that can be specifically applied to health and health services systems. The program emphasizes skills that heighten basic analytical and decision-making processes used by top-level managers in selecting broad strategies for the institutions and by junior managers in administering subunits of health care organizations. The faculty guide the students in their mastery of theoretical, conceptual and quantitative topics.

The program has enjoyed continuous accreditation by the Commission on Accreditation of Healthcare Management Education since 1970.

**A. Common Body of Knowledge (CBK)**

BUSN 6521 - Managing Individuals and Teams (Health Section). **Semester Hours: 3**

BUSN 6530 - Data Analysis for Managers. **Semester Hours: 3**  
BUSN 6550 - Analyzing and Interpreting Accounting Information. **Semester Hours: 3**  
BUSN 6560 - Marketing Management. **Semester Hours: 3**  
BUSN 6630 - Management of Operations. **Semester Hours: 3**  
BUSN 6640 - Financial Management. **Semester Hours: 3**

**Total: 18 Hours**

Waivers of CBK courses are possible. The entire CBK may be waived if the student has completed an undergraduate business degree from an AACSB-accredited college or university within the last 10 years. Specific courses may be waived based on a case-by-case evaluation of undergraduate or graduate course work in business completed at a regionally accredited college or university within the last 10 years.

## **B. Graduate Core in Health Administration**

HLTH 6010 - Health Care Systems. **Semester Hours: 3**  
HLTH 6040 - Health Care Financial Management. **Semester Hours: 3**  
HLTH 6911 - Health Field Studies. **Semester Hours: 3**  
BUSN 6541 - Legal and Ethical Environment of Business (Health Section). **Semester Hours: 3**  
BUSN 6621 - Applied Economics for Managers (health section). **Semester Hours: 3**  
BUSN 6711 - Strategic Management (health section). **Semester Hours: 3**  
HLTH Electives (3) (9 semester hours)  
Free Elective (1) (3 semester hours)

**Total: 30 Hours**

## **Notes and Restrictions**

*Free Elective.* The free elective course can be chosen from the areas of accounting, finance, health administration, information systems, international business, management and marketing. A course with the BUSN prefix can be used as a free elective if the course number is 6800 or higher.

*Management Residency.* A management residency is optional, but recommended for all students, especially those with limited health care experience. The faculty of the program provide assistance to students in securing the residency, as well as regular consultation during the residency period. Information on the full range of local, regional and national residencies is available in the program office.

*Length of Program.* The didactic portion of the degree will take at least two academic years, since most HA courses are offered only once each year and many have prerequisites. Part-time study is facilitated by courses being scheduled for late afternoon and evening hours.

## Specialized Tracks in MS Health Administration

Each track carries its own specific course requirements. To provide a variety of perspectives and experiences within a specific area of health administration, each track includes courses that span various departments within the Business School, other schools on the Downtown Campus and other University of Colorado campuses.

- International health management and policy track
- Financial management track
- Health information technology management track

## Institute for International Business

The international health track is affiliated with the Institute for International Business at UC Denver. The Institute for International Business is one of a few university programs to have received the prestigious CIBER grant from U.S. Department of Education. The grant is being used by the institute to provide effective internationally oriented education, research and outreach activities. Also, the institute is a participant in an international consortium of universities for faculty and student program and course exchanges. Students in the international health management and policy track will have access to the institute's exchange networks.

## International Health Travel/Study Course

**Program Director:** Blair Gifford  
**Telephone:** 303-556-6614  
**E-mail:** Global-Health@cudenver.edu\

A unique feature of our international health management and policy track is its emphasis on making sure students gain international experience during their education. The travel study course requirement can be met by taking a University of Colorado health travel/study course, or a student can take a course at a partnering university. An example of a health travel/study was a three-week trip to Thailand and Vietnam to visit numerous cultural- and health-related facilities.

## History MA

► Graduate School Rules apply to this program

The master of arts in history requires 36 semester hours (12 courses). Students applying for admission to the program should have some background in history, though not necessarily a BA in the subject. The department encourages applications from individuals of any age interested in resuming their education. Graduate students in history develop skills in critical thinking, writing and independent research. Our program prepares students for a wide variety of professions,

including teaching, government service, museum and archive management and historic preservation, as well as further degree work in history, law, librarianship and business. The department expects that students graduating with an MA in history will master the following general skills for their degrees:

- The ability to pursue independent historical research projects
- The ability to analyze historiographical arguments
- The ability to analyze primary documents and develop arguments from them
- The ability to create bibliographies using archival, library and Internet resources
- The ability to write in a variety of formats, including historiographical essays, book reviews and research papers

Students will also master knowledge of the basic historical content of both their major and minor fields, and an understanding of the historiographies and historical methods in their major and minor fields.

## Admission Requirements

In addition to the general admission requirements of the Graduate School, the Department of History requires an undergraduate GPA of at least 3.25.

All applicants to the history program must take the GRE. GRE scores form a part of the department's consideration of students' qualifications.

Applicants are required to submit a sample of written work, usually a term paper or project of similar length.

Applicants should address any gaps, weaknesses or special circumstances in their academic records in the statement of purpose portion of the application. In special circumstances, the department may modify its admission standards.

### APPLICATION DEADLINES

<b>April 1</b>	<b>Fall admission</b>
<b>October 1</b>	<b>Spring admission</b>

Admission decisions are made by a graduate committee comprising the graduate advisor and faculty representing fields in U.S., European, global and public history.

## Graduate School Policies

All history MA students are subject to Graduate School policies related to graduate study, as well as to all relevant university policies. These policies cover such topics as time limits on degree completion, changing degree programs, incomplete grades, and more. Further information on these policies can be found in the Graduate School section of this online catalog.

## Transfer Credits

With approval from the graduate advisor and the appropriate faculty, students may transfer twelve graduate-level credits accrued before enrollment in the UC Denver MA history degree

program, provided that they earned a grade of *B+* or better in these courses. Students must submit a syllabus for each course they wish to transfer, and faculty may require students to complete additional assignments to meet the expectations of the department. The department will not accept transfer of courses comparable to HIST 6013. Introduction to the Professional Study of History.

## **Grade Requirements**

A minimum grade of *B-* (2.7) is required in all UC Denver history courses applied toward the degree. Students who earn less than a *B-* in HIST 6013 must retake the class.

## **Residency Requirements**

The history department requires a residency of at least one academic year for the degree.

## **Graduate Advising**

Upon admission, students will sign a check list indicating their understanding and acceptance of the department's expectations. Early in their first semester students should contact a history department graduate advisor to discuss their path through the program and to receive advice regarding the selection of major and minor fields.

## **Degree Tracking Responsibility**

Although faculty will provide reasonable guidance, it is up to students to monitor their own progress through the program in consultation with the graduate advisor and their major advisor; this includes knowledge and understanding of application and graduate deadlines, degree requirements, thesis guidelines, etc.

## **Choosing Advisors and Fields of Study**

All history MA candidates choose a major and minor field. Students will take courses in these fields (see Degree Requirements below) and will be tested in these fields (see Comprehensive Examinations). As soon as possible after consulting with the graduate advisor, students are responsible for contacting two field advisors, one to oversee their progress in the major field, the other to oversee their minor field. All students should have chosen a major field and major advisor by the beginning of their second semester.

## **Major Fields, Minor Fields and Concentrations**

The MA in history seeks to provide students with a balance of breadth and depth in the study of history. Major fields are broad areas of study within which students gain a general picture of

historical processes. Concentrations provide focus for developing expertise within the major, either regionally or thematically. Minor fields provide a complementary or comparative area and must be from outside the major field.

Advisors and students together will work out Plans of Study, which indicate the courses students intend to take to meet their requirements, based on their selection of major and minor fields. *Students should make every effort to enroll in courses which best fit their major field, major concentration and minor field.*

Students can choose to major in one of the following four fields:

- European History
- Global History
- Public History
- U.S. History

The department has compiled a core readings list for each of these major fields. Students will draw on the core lists for their comprehensive exams. Core lists contain a number of themes with bibliographies for each theme. In consultation with their major advisor, students choose at least two books from each theme; for some themes, students will read more than two books.

### **Major Field Concentrations**

Students work with advisors to select one of the major field concentrations listed above. Concentrations provide thematic or regional focus to a broad geographical major (e.g. for the global history major, students could concentrate on trade, borders, imperialism, etc. or any of the areas of regional expertise of our faculty). Readings for the major field concentration are in addition to the core reading list.

### **Minor Fields**

Students choose minor fields from the list of major fields or the list of major field concentrations. They choose their minor field list in consultation with the minor field advisor.

## **Degree Requirements**

All history MA students must have a major field and a minor field, and they must complete half of their course work at the 6000 level.

### **Required Introductory Course: 3 Semester Hours**

HIST 6013 - Introduction to the Professional Study of History. **Semester Hours: 3**

### **Major Field: 18 Semester Hours**

#### **Core course in Major Field (3 semester hours)**

Each major field has a core course covering major approaches and themes. The core course familiarizes students with the field in a broad sense.

#### **Research Seminars (3-6 semester hours)**

Research seminars focus on students' development of an original, primary research paper. One 3-semester-hour research seminar is required of all students. A second research seminar is required for students not pursuing an extended research option; the second 3 semester hours can be taken within the major or minor field.

#### Major electives (9-12 semester hours)

Electives are made up of courses in the major and concentration, including readings courses, which address specific field historiographies, and optional extended research credits. Students who choose to do a thesis may apply 6 thesis semester hours (HIST 6950) toward the major electives requirement.

#### **Minor Field: 12 Semester Hours**

##### **Minor Electives**

Electives are made up of courses in the minor field, including readings courses, which address specific field historiographies, or research seminars.

#### **Open Elective: 3 Semester Hours**

Students may use the open elective to explore a course outside their major or minor or to do extra course work in one of their fields.

#### **Total: 36 Semester Hours**

### **PUBLIC HISTORY MA MAJOR PROGRAM**

## **INDEPENDENT STUDIES AND/OR INTERNSHIPS**

Candidates may register for up to 6 hours of internships or independent study, only one of which may be at the 6000-level. Only in exceptional circumstances will students be allowed to satisfy the research seminar requirement via independent study. Any independent study at the 6000-level needs the permission of the graduate advisor. Students interested in pursuing an independent study must find a faculty member willing to oversee their work, and they should expect the workload for an independent study to equal or exceed that required for other courses at the same level.

HIST 5840 - Independent Study. **Semester Hours:** 1 to 3

HIST 6840 - Independent Study. **Semester Hours:** 1 to 3

HIST 6939 - Cooperative Education. **Semester Hours:** 1 to 6

## COMPREHENSIVE EXAMINATIONS

All history MA candidates must pass a comprehensive examination in the major and minor fields after the completion of course work and before embarking on a thesis, curriculum project or public history project. The comprehensive exam evaluates students' knowledge of their course work and their reading lists for their major, minor and concentration. The exam consists of a take-home written section, with broad essay questions in both the major and minor fields; this is followed by an oral exam with the student's faculty committee. In answering their exam questions, students are expected to construct arguments and to show mastery of the historiographies, narratives and historical content in their fields. The comprehensive exam is administered and evaluated by a committee of the major advisor, the minor advisor and an outside reader from the history faculty.

## Master's Degree Extended Research Options

The MA program in history offers a set of courses in which students can develop extended research interests. Students must select an advisor and develop a proposal for a specific research agenda in the semester before beginning work on a project.

### **REQUIRED PUBLIC HISTORY THESIS (HIST 6950) OR PROJECT (HIST 6952)**

Students majoring in public history must complete either a thesis (6 semester hours) or a project (3 semester hours).

### **OPTIONAL THESIS FOR STUDENTS IN U.S., GLOBAL AND EUROPEAN HISTORY (HIST 6950)**

Students majoring in U.S., global or European history can choose to write a thesis (6 semester hours in their major field).

### **OPTIONAL ADVANCED HISTORY CURRICULUM DEVELOPMENT (HIST 6951)**

Students who undertake their master's program when they are already teachers can choose to construct curriculum projects relevant to their teaching practice. See the separate section below on "Opportunities for Teachers and Teachers-in-Training."

HIST 6950 - Master's Thesis. **Semester Hours:** 1 to 6

HIST 6951 - Masters Project: Advanced History Curriculum Development. **Semester Hours:** 1 to 6

## Thesis Requirements

Students writing theses are expected to develop an original research agenda resulting in an extended paper. Students work with their major field advisor, who will help guide them through the process of research and writing. Students are expected to take no less than two semesters (enrolled in HIST 6950) to complete their theses. Before registering for HIST 6950, students must have a thesis proposal and initial bibliography approved by their advisor. The first semester of the thesis course is organized as a seminar in which students meet regularly with a department member and other thesis writers.

A thesis is evaluated by a committee of three, including the major advisor and two other faculty members chosen by the student in consultation with the major advisor. Upon completion of the thesis, the student meets with the committee members, who ask questions about the research and conclusions which the student must defend. In many instances, the committee will require further revisions, sometimes major in scope, before the thesis is accepted and cleared for submission to the Graduate School in fulfillment of degree requirements.

### **Project Requirements**

In lieu of a thesis, public history majors may choose to enroll in one semester of HIST 6952 to complete a public history project. Projects, which are usually conducted in collaboration with a public history organization, can entail creating an exhibit, organizing a museum or archival collection, conducting a preservation survey or similar activities. Students are required to prepare a paper describing the process and results of their project.

## **Opportunities for Teachers and Teachers-in-Training**

### **Curriculum Projects**

Licensed teachers enrolled in the history graduate program may choose to complete a curriculum development project. Students arrange curriculum development projects with a sponsoring faculty member. Generally, students are expected to develop and submit a complete course curriculum plan for each 3-semester-hour project. Projects need to show evidence of familiarity with the relevant historiographies and primary sources. Students may apply the hours from HIST 6951 to either the major field or the minor field, depending on the project subjects. Curriculum plans must meet minimum criteria established by the history department in the document "Advanced History Curriculum Development Projects."

HIST 6951 - Masters Project: Advanced History Curriculum Development. **Semester Hours:**  
1 to 6  
(3 or 6 semester hours in their major field, or 3 semester hours in their major and 3 semester hours in their minor)

### **Secondary Teacher Licensure**

Students interested in becoming secondary history and social studies teachers may choose to earn both the MA in history and secondary teacher licensure. For detailed information, see the following URL: <http://thunder1.cudenver.edu/clas/history/maPlanV.html>

We strongly encourage students to complete the School of Education & Human Development's initial professional teacher education (IPTE) program before enrolling in the history MA program; the history graduate program and the IPTE program require separate admission. Students complete 36 semester hours in history and 37 semester hours in the IPTE program. For the history degree, students take 18 semester hours in their major field, 12 semester hours in their minor field and 6 semester hours in curriculum and methods course work, which apply both to the IPTE program and the MA in history:

HIST 5464 - Problems and Methods in Teaching History and Social Studies I. **Semester Hours: 3**

-and-

HIST 5465 - Problems and Methods in Teaching History and Social Studies II. **Semester Hours: 3**

## Humanities MH

► Graduate School Rules apply to this program

### Requirements for Admission

In addition to the general requirements of the Graduate School governing acceptance to a master's degree program, applicants must submit the following:

a bachelor's degree

two official copies of all transcripts, with an overall GPA of at least 3.0 out of 4.0

a writing sample

three letters of recommendation (at least two from academic sources)

appropriate undergraduate training or professional background, or indicators that supply evidence of ability to pursue the MH degree

a typed statement specifying the goal of advanced study in the humanities expressed in clear, correct and effective English

standardized test scores are not required, but will be considered if submitted

After meeting all other requirements for admission, applicants may be required to have an interview to discuss their interest in the program and their plans for study. For out-of-state applicants, an appropriate substitute for the interview may be determined by the director.

#### *Provisional admission:*

Applicants may be admitted as provisional-status graduate students if their complete record indicates a high probability of success.

#### *Nondegree students:*

Potential applicants may take graduate-level courses as nondegree students (unclassified student with a bachelor's degree) if they:

Wish to strengthen their record in order to demonstrate that they can successfully complete courses in the program

-or-

Wish to start courses in the program prior to completing their application.

Up to 12 semester hours taken as a nondegree student may be accepted by the program once a student has been admitted to the program (the 12-hour limit also includes graduate work from another university).

#### *International Students:*

International students must also meet UC Denver requirements for international admission. See the Information for International Students section of this catalog or call 303-315-2230 for further information.

## Degree Requirements

Thirty-six semester hours are required for Track I and 39 semester hours are required for Track II. All courses credited toward the MH degree must be taken at UC Denver over a period not exceeding five years (a maximum of 12 graduate semester hours may be transferred from other institutions). At least a *B* average (3.0) must be maintained. A grade of *B-* or below will not be counted toward the degree. Each student's program is supervised by a faculty advisor. All independent study contracts must be approved in advance by one of the program directors. A total of two independent study courses and two 4000-level undergraduate courses may count toward the degree. The rest must be 5000/6000-level courses offered through various departments. All students must pass an oral comprehensive exam in order to graduate.

The master of humanities offers two general plans of study: Track I (individualized program) and Track II (cultural studies in interdisciplinary cluster areas).

## TRACK I (Individualized Program) Requirements—Thesis or Project Option

Students in Track I have the opportunity to fashion a course of study based on their individual interests and goals. In consultation with a faculty advisor, students choose two or three academic disciplines as areas of concentration. Students who select a thesis (6 semester hours) will submit a thesis proposal after completing 30 hours of course work. In the case of a project (3 semester hours), students will submit a project proposal after 33 hours.

### TRACK I REQUIREMENTS:

#### Three interdisciplinary seminars

HUM 5025 - Methods and Texts of the Humanities. **Semester Hours: 3**  
(Must be taken during the first year of entrance into the program.)

**Mid-Program Seminar**, an interdisciplinary seminar with a HUM prefix, which is approved for the student's program by one of the program directors (note that a Mid-Program Seminar **must** have a HUM prefix).

HUM 5924 - Directed Research and Reading in Interdisciplinary Humanities. **Semester Hours: 3**

(A final seminar that provides background reading, theory and research approaches for students to develop a thesis or project.)

## **Electives**

21-24 elective semester hours, depending on whether the student chooses the thesis or project option.

## **Thesis or Project**

A thesis (6 semester hours) or a final project (3 semester hours), which must include a substantial scholarly paper and may include a creative exercise involving at least two disciplines. In order to proceed with a thesis or project, all students must submit a proposal approved by three faculty members (and approved by one of the program directors in cases where one of the directors is not serving on the committee).

HUM 5950 - Master's Thesis. **Semester Hours:** 1 to 8

HUM 5960 - Master's Project. **Semester Hours:** 1 to 8

## **Oral Exam**

An oral exam before a committee of three faculty members in order to graduate.

## **Track I Total: 36 Hours**

## **TRACK II (Cultural Studies)—Non-thesis or Project Option**

This track is somewhat more structured than Track I, but does not require a thesis or a project. In consultation with a faculty advisor, students choose from courses organized into eight interdisciplinary clusters:

- classics
- identity and gender
- meaning and values
- philosophy and theory
- self, society and community
- social and political thought
- technology and culture
- understanding America/understanding the world

## **TRACK II REQUIREMENTS:**

### **Core cluster courses**

Complete 15 semester hours in one of the above clusters.

### **Three required interdisciplinary seminars**

HUM 5025 - Methods and Texts of the Humanities. **Semester Hours:** 3

(Must be taken during the first year of entrance into the program.)

**Mid-Program Seminar**, an interdisciplinary seminar with a HUM prefix, which is approved for the student's program by one of the program directors (note that a Mid-Program Seminar **must** have a HUM prefix).

HUM 5924 - Directed Research and Reading in Interdisciplinary Humanities. **Semester Hours: 3**

(A final seminar that provides background reading, theory and research approaches for students to develop a theme for the oral exam.)

### **Electives**

15 additional elective semester hours (students retain considerable flexibility in selecting these hours).

### **Comprehensive Exam**

A comprehensive oral exam and a brief paper (15-20 pages) presented before a committee of three faculty members in order to graduate.

**Track II Total: 39 Hours**

# **Information and Learning Technologies MA**

Lawrence Street Center, 701

**Telephone:** 303-315-6300

**Fax:** 303-315-6311

**E-mail:** [education@ucdenver.edu](mailto:education@ucdenver.edu)

**Web site:** [www.ucdenver.edu/education](http://www.ucdenver.edu/education)

## **Faculty**

Information about Information ILT faculty is available online at [www.ucdenver.edu/education](http://www.ucdenver.edu/education)

## **Master's Degree**

The ILT master's program helps people design and use various resources and technologies for learning. Applying sound principles of instructional design, graduates can integrate a variety of learning technologies into their teaching including multimedia presentations, social-networking tools, and tools for authoring, production, assessment, and participation. Program

graduates learn to implement learning technologies in specific professional settings—either K–12 schools or adult learning settings such as business or higher education.

Students are assigned to tracks according to their professional goals:

The instructional design track prepares students to work in adult learning settings such as business, higher education, healthcare, nonprofits or government.

The eLearning track prepares educators to develop online courses and learning materials, and to teach and facilitate learning in those eLearning environments.

The K–12 teaching track helps teachers integrate technologies into schools and classrooms with a focus on improving teaching practices. Teachers may earn a state endorsement in instructional technology

Once admitted, students begin a plan of study that typically takes about two years to complete. Some students are organized into a cohort to complete courses together at a fixed sequence. Other students select courses at a more flexible pace. Consult the ILT Web site for more information about specific plans of study, course offerings and expectations of cohort groups.

ILT faculty members also participate in the school's doctoral program. Students interested in a PhD may participate in a technology-focused doctoral lab with a number of ILT faculty members. The program also delivers an online certificate on eLearning design.

## **Admission Requirements**

Admission decisions are based on undergraduate and graduate grades, external letters of recommendation, writing samples and fit with the program as reflected in a letter of intent. In some cases, results of a test (GRE) are also required. Prospective students should consult the ILT program Web site for complete admission procedures and requirements.

## **Professional Expectations**

All students in the ILT program are expected to show a strong commitment to the program and to maintain high academic, professional and ethical standards. Inappropriate or unprofessional conduct is cause for discipline or dismissal from the program.

## **Technology Expectations**

The ILT program uses computers and related technologies either as a focus or a tool for learning. Students are expected to obtain an e-mail account and check it frequently. In addition to on-campus facilities, ILT students need convenient access to Internet-connected computers off campus, either at their place of work or at home. In addition to textbooks, software purchases may be required or recommended for specific classes.

## **Program Requirements**

### **Instructional Design**

Students complete at least 36 graduate semester hours of course work from a set of core courses and approved electives within and outside the ILT program. The plan of study is nationally accredited by NCATE and AECT and is consistent with standards for instructional designers.

To stay current with the needs of a changing industry, faculty in the Information and Learning Technologies program may choose to change curriculum requirements at semester for incoming students to the program. For the 2009-2010 term, please refer to the most current version of the handbook for academic requirements for this program. ILT Instructional Design Handbook Feb 09

## eLearning Design and Implementation

Students may complete a 30 semester hours online master's degree with an eLearning emphasis. The focus of this master's track is on the planning, design, development, delivery, facilitation and evaluation of online learning resources and programs. A certificate is also available in this area, constituting the first-year requirements of the master's program.

Sample plan for eLearning			
	Fall	Spring	Summer
Year 1	I T 5660 - Designing and Teaching in eLearning Environments.	I T 5670 - Developing eLearning Instruction.	I T 5680 - Integrating Media in eLearning Environments.
Year 2	I T 5130 - Instructional Message Design. I T 5650 - Policies and Planning for eLearning Programs.	I T 6720 - Research in Information and Learning Technologies. I T 6740 - Learning Processes Applied to Instructional Technology.	I T 5160 - Managing Information and Learning Technology Programs. Elective

## K-12 Teaching

Students may select a master's program or an endorsement program in instructional technology. For the full master of arts degree, students complete at least 36 graduate semester hours of course work consisting of a core set of courses and approved electives. The plan of study is accredited by NCATE and AECT and is designed in line with standards of the Colorado Department of Education. Students may also complete an endorsement-only program in Instructional Technology consisting of 24 graduate semester hours.

To stay current with the needs of a changing industry, faculty in the Information and Learning Technologies program may choose to change curriculum requirements at semester for incoming students to the program. For the 2009-2010 term, please refer to the most current version of the handbook for academic requirements for this program. ILT K-12 Hndbk Feb 09 , ILT Instruct Tech Endsmt Hndbk Feb 09

# Information Systems MS

**Program Director:** Jahangir Karimi

**Telephone:** 303-556-5881

**E-mail:** Jahangir.Karimi@ucdenver.edu

**Web site:** <http://business.ucdenver.edu/Disciplines/InfoSystems/InfoSystemsMS.htm>

## Faculty

### Professors:

James Gerlach, PhD, Purdue University

Jahangir Karimi, PhD, University of Arizona

### Associate Professors:

Dawn Gregg, PhD, Arizona State University

Michael Mannino, PhD, University of Arizona

Judy Scott, PhD, University of California-Irvine

Steven Walczak, PhD, University of Florida

### Assistant Professors:

Ronald Ramirez, PhD, University of California-Irvine

Zhiping Walter, PhD, University of Rochester

### Senior Instructors:

Eric Thompson, MS, University of Colorado

### Instructor:

Linda Fried, JD/LLM, University of Miami

The master of science in information systems (MSIS) program at the Business School meets industry needs by providing specializations. The program prepares students for career paths in systems development and management services, enterprise application services, business intelligence, health information technology, information security audit and control, business consulting and development and consumer products and services. Whether students aim to be systems analysts or designers, software engineers, applications programmers, database administrators, Web developers, systems integrators, project managers, LAN administrators or application and technology consultants, the MSIS program provides the necessary knowledge and skills. This entire MS in information systems can be completed online.

The MSIS program offers a wide choice of courses. The course work consists of a common body of knowledge courses plus 30 semester hours, which includes a choice of a specialization. Those specializations include two required courses, 6 courses from a list specific to your chosen specialization and two elective courses. Candidates for the MS degree are not required to take a comprehensive examination or to complete a thesis in the major field.

## **A. Common Body of Knowledge (CBK)**

Waivers of CBK courses are possible. The entire CBK may be waived if the student has completed an undergraduate business degree from an AACSB-accredited college or university within the last 10 years. Specific courses may be waived based on a case-by-case evaluation of undergraduate or graduate course work in business completed at a regionally accredited college or university within the last 10 years.

Four of the following courses are required if you do not meet the above waiver policy.

BUSN 6530 - Data Analysis for Managers. **Semester Hours: 3**

BUSN 6550 - Analyzing and Interpreting Accounting Information. **Semester Hours: 3**

BUSN 6560 - Marketing Management. **Semester Hours: 3**

BUSN 6630 - Management of Operations. **Semester Hours: 3**

BUSN 6640 - Financial Management. **Semester Hours: 3**

**Total: 12 Hours for Common Body of Knowledge (CBK)**

## **B. Information Systems Specializations**

This set of courses consists of selected areas of specialization designed to provide the fundamental knowledge necessary for a career as an IS professional. Up to 9 semester hours may be transferred from an AACSB international accredited graduate school and applied to the information systems specializations upon approval. Students should take the required courses in each specialization before taking the chosen electives in each specialization.

The IS specializations provide students with a set of related courses necessary to acquire skills and expertise within a specific area in the development, management and use of information technology applications. Students are required to choose one specialization and complete the 6 hours of required coursework, 18 hours of selected electives, 3 hours of any other ISMG course or an internship in IS, and 3 hours of any Business School graduate course.

## **Accounting and Information Systems Audit and Control (AISAAC) Specialization**

Recently, new regulatory environments have required companies to provide better documentation of their accounting and IT systems to improve the management and disclosure of their business processes for better financial and regulatory controls. Accounting and IT professionals have significant roles in audit and control activities, since they control the systems that monitor and report on finance, planning and operations. The courses within this specialization cover business-process management and financial controls; the emerging trends and practices in privacy and security; the strategies for integrating governance and compliance; and the IT organization's financial and business intelligence services. These courses will focus on how to leverage the existing IT infrastructure to establish quality in financial and internal audit processes and address the regulatory issues associated with reporting, consolidation and document/content management more effectively and completely.

### **Prerequisite**

ACCT 6030 - Financial Accounting. **Semester Hours: 3**

### **Required Courses**

ACCT 6020 - Auditing. **Semester Hours: 3**

ISMG 6040 - Business Process Management. **Semester Hours: 3**

ISMG 6060 - Analysis, Modeling and Design. **Semester Hours: 3**

ISMG 6080 - Database Management Systems. **Semester Hours: 3**

ISMG 6180 - Information Systems Management and Strategy. **Semester Hours: 3**

ISMG 6220 - Business Intelligence Systems. **Semester Hours: 3**

ISMG 6420 - Global Enterprise Systems. **Semester Hours: 3**

#### **Either**

ACCT 6510 - Accounting IS Processes and Control. **Semester Hours: 3**

#### **OR**

ISMG 6510 - Accounting and Information Systems Processes and Controls. **Semester Hours: 3**

### **Choose two:**

ACCT 6340 - Financial Statement Analysis. **Semester Hours: 3**

ACCT 6360 - Fraud Examination. **Semester Hours: 3**

ISMG 6430 - Information Systems Security and Privacy. **Semester Hours: 3**

ISMG 6450 - IT Project Management. **Semester Hours: 3**

ACCT 6470 - Internal Auditing. **Semester Hours: 3**

ACCT 6620 - Advanced Auditing. **Semester Hours: 3**

## **Business Intelligence Specialization**

Business intelligence (BI) systems combine operational data with analytical tools to present complex and competitive information to planners and decision makers. The objective is to improve the timeliness and quality of inputs to the decision process. BI is used to understand the capabilities available in the firm; the state-of-the-art, trends, and future directions in the markets, the technologies, and the regulatory environment in which the firm compete; and the actions of competitors and the implications of these actions. With this specialization, you get the necessary skills and knowledge in real-time data warehousing, data visualization, data mining, online analytical processing, customer relationships management, dashboards and scorecards, corporate performance management, expert and advanced intelligent systems, and hands-on experience with leading BI tools.

### **Required Courses**

ISMG 6080 - Database Management Systems. **Semester Hours: 3**

### **Choose six:**

DSCI 6828 - Business Applications of Data Mining. **Semester Hours: 3**

ISMG 6180 - Information Systems Management and Strategy. **Semester Hours: 3**

ISMG 6420 - Global Enterprise Systems. **Semester Hours: 3**

ISMG 6430 - Information Systems Security and Privacy. **Semester Hours: 3**

ISMG 6480 - Data Warehousing and Administration. **Semester Hours: 3**

ISMG 6810 - Business Intelligence in Healthcare. **Semester Hours: 3 OR**

ISMG 6820 - Business Intelligence and Financial Modeling. **Semester Hours: 3**

MKTG 6090 - Customer Relationship Management. **Semester Hours: 3**

## **Enterprise Technology Management (ETM) Specialization**

This specialization focuses on information technology as the prime driver of business strategy. It focuses on the strategic, technological, financial and organizational issues involved with the effective management of information technology within an enterprise. The courses in this specialization cover the emerging technologies and the evolving roles and importance of IT in modern organizations; IT-enabled organizational processes and knowledge management; methods to develop, acquire and implement information systems; implementing and managing complex IT projects; security and privacy issues associated with IT.

## Required Courses

ISMG 6040 - Business Process Management. **Semester Hours: 3**

ISMG 6180 - Information Systems Management and Strategy. **Semester Hours: 3**

### Choose six:

ISMG 6080 - Database Management Systems. **Semester Hours: 3**

ISMG 6120 - Internet and Mobile Technologies. **Semester Hours: 3**

ISMG 6420 - Global Enterprise Systems. **Semester Hours: 3**

ISMG 6430 - Information Systems Security and Privacy. **Semester Hours: 3**

ISMG 6450 - IT Project Management. **Semester Hours: 3**

ISMG 6460 - Emerging Technologies. **Semester Hours: 3**

## Health Information Technology Management Specialization

Recently, the health care industry has shifted its focus from using proprietary and expensive IT solutions to more innovative IT applications in electronic health records (EHR) and other health information technology (HIT) innovations for sharing information effectively to help manage health care crisis. The courses within this specialization cover the evolving roles and importance of IT in health care industry; the innovative IT applications for delivering health care with reduced cost and increased quality; the management of health care using effective IT systems; and the security and privacy issues associated with health information. These courses will focus on how IT-enabled health care organizations can integrate information from various resources in order to deliver innovative IT solutions to meet unique requirements of health care industry.

### Required Courses

ISMG 6060 - Analysis, Modeling and Design. **Semester Hours: 3**

ISMG 6080 - Database Management Systems. **Semester Hours: 3**

### Choose six:

HLTH 6071 - Introduction To Health Information Technology. **Semester Hours: 3**

HLTH 6072 - Fundamentals of Health Information Technology Management. **Semester Hours: 3**

ISMG 6220 - Business Intelligence Systems. **Semester Hours: 3**

ISMG 6280 - Service Oriented Architecture. **Semester Hours: 3**

ISMG 6430 - Information Systems Security and Privacy. **Semester Hours: 3**

ISMG 6460 - Emerging Technologies. **Semester Hours: 3**

ISMG 6810 - Business Intelligence in Healthcare. **Semester Hours: 3**

## Web and Mobile Computing Specialization

This specialization focuses on building and managing large systems using platforms for Web site development, mobile and wireless applications, and Web services and service oriented architectures. The courses provide expertise in .Net programming, business process management, Internet and mobile technologies, Web site development technologies, data warehousing and administration, and service oriented architecture. Project management course work enables graduates to successfully handle highly complex systems development projects in the business world.

## Required Courses

ISMG 6060 - Analysis, Modeling and Design. **Semester Hours: 3**  
ISMG 6080 - Database Management Systems. **Semester Hours: 3**

## Choose six:

ISMG 6020 - Net Programming Fundamentals. **Semester Hours: 3**  
ISMG 6040 - Business Process Management. **Semester Hours: 3**  
ISMG 6120 - Internet and Mobile Technologies. **Semester Hours: 3**  
ISMG 6240 - Website Development Practice and Technologies. **Semester Hours: 3**  
ISMG 6280 - Service Oriented Architecture. **Semester Hours: 3**  
ISMG 6450 - IT Project Management. **Semester Hours: 3**  
ISMG 6480 - Data Warehousing and Administration. **Semester Hours: 3**

## Electives

Students fulfill an additional 6 semester hours by completing the following:

**Note: If you are pursuing the accounting and information systems audit and control specialization, you do not complete these electives. All other students will complete the following electives.**

an elective course from any of the ISMG graduate courses OR an internship **AND**  
a free elective selected from any graduate course offered by the Business School, except  
BUSN courses numbered below 6800.

Candidates for the MS degree are not required to take a comprehensive examination or to complete a thesis in the major field.

## Total: 30 hours for MS in Information Systems

## Geographic Information Systems (GIS) Option

The geographic information systems option expands upon system development skills through the understanding geographic information systems work flows, analysis processes and data models. This option for the mobil and Internet computing specialization and business intelligence specialization addresses how map representations can be abstracted in geo-

databases to develop intelligent GIS systems. Learn how GIS can improve efficiencies, decision making, planning, geographic accountability, science-based plans and communication. The GIS option is offered in conjunction with the College of Engineering and Applied Science and a certificate in GIS is awarded by the College of Engineering and Applied Science.

Students must complete all requirements for the MS in information systems, as well as the requirements below.

C E 5381 - Introduction to Geographic Information Systems. **Semester Hours: 3**

## **Total: 12 Hours**

GIS courses are offered online and can be completed concurrently with the information systems courses.

Students will be able to register for the classes on the Web. There are not any special registration requirements.

Students need to notify the graduate advising office at the Business School, 303-556-5900, prior to graduation if they are planning to complete the GIS option. Students also need to indicate the completion of the course work when they submit their application for diploma card.

## **Choose three:**

C E 5382 - GIS Spatial Database Development. **Semester Hours: 3**

C E 5383 - GIS Analyses -- Theory and Practice. **Semester Hours: 3**

C E 5384 - GIS Management and Policies. **Semester Hours: 3**

C E 5385 - GIS Relational Database Systems. **Semester Hours: 3**

C E 5386 - GIS Laboratory. **Semester Hours: 3**

# **Integrated Sciences MIS**

- ▶ Graduate School Rules apply to this program

## **Degree Requirements**

### **Minimum Hours**

Students must complete a minimum of 30 semester hours at the 4000+ level, of which 1-4 must be project hours or 4-6 must be thesis hours. In accordance with Graduate School rules, a minimum of 18 hours must be at the 5000+ level.

### **Breadth Requirement**

Students are required to take classes in a minimum of two (2) areas and maximum of three (3) areas within the disciplines of computer science, math, chemistry, biology, physics or geology. With approval, students may take a maximum of three (3) hours at the 4000+ level in one other school or college. All classes counted toward the degree must be related to the student's stated program goal and be approved as part of a program of study by the program director. The student is responsible for insuring that all prerequisite requirements for the classes they take have been met.

## **Depth Requirement**

The student must designate a primary area (either within a department or as an interdisciplinary concentration including, but not limited to, biophysics, biochemistry and computational biology). The student must take a minimum of nine (9) semester hours in the chosen area of concentration.

## **Project or Thesis**

All students must conduct independent research that results in either a thesis or project, which is presented to their committee in written form and is subject to an oral defense.

## **Graduate Advisor and Project Committee**

All candidates for the master of integrated sciences degree must select a faculty advisor and two other faculty members to serve with the advisor as the candidate's graduate committee. The committee members must be part of the graduate faculty and approved by the program director. The name of the faculty advisor must be submitted to the MIS director no later than two semesters following full admission to the program.

# **International Business MS**

**Advisor:** Manuel G. Serapio, Jr.

**Telephone:** 303-556-5832

**E-mail:** Manuel.Serapio@ucdenver.edu

## **Faculty**

### **Professors:**

Herman Aguinis, PhD, State University of NewYork-Albany

Wayne Cascio, PhD, University of Rochester

Lawrence Cunningham, DBA, University of Tennessee

John Ruhnka, JD/LLM, Yale School of Law/Cambridge University

**Associate Professors:**

L. AnnMartin, PhD, University of Minnesota

Kang RaeCho, PhD, University of Washington

Manuel Serapio, PhD, University of Illinois

**Senior Instructors:**

John Byrd, PhD, University of Oregon

John Turner, PhD, St. Louis University

**Instructors:**

Chen Ji, MS, University of Colorado

Mary Lee Stansifer, PhD, Northwestern University

The master of science in international business prepares individuals for the careers in international business or with international organizations.

The MS program in international business requires the completion of the following:

**A. Common Body of Knowledge (CBK)**

*Required CBK*

BUSN 6520 - Managing Individuals and Teams. **Semester Hours: 3**

BUSN 6530 - Data Analysis for Managers. **Semester Hours: 3**

BUSN 6540 - Legal and Ethical Environment of Business. **Semester Hours: 3**

BUSN 6550 - Analyzing and Interpreting Accounting Information. **Semester Hours: 3**

BUSN 6560 - Marketing Management. **Semester Hours: 3**

BUSN 6620 - Applied Economics for Managers. **Semester Hours: 3**

BUSN 6640 - Financial Management. **Semester Hours: 3**

**Total: 21 Hours**

Waivers of CBK courses are possible. Specific courses may be waived based on a case-by-case evaluation of undergraduate or graduate course work in business completed at a regionally accredited college or university within the last 10 years.

**B. Foreign Language Competency**

Prior to graduation, students must demonstrate proficiency in a foreign language (other than English). This is accomplished through completion of three semesters of college-level course work in a single foreign language with a grade of C or better in all three terms or by passing a proficiency exam.

## C. Graduate Core in International Business

### *Required Courses*

INTB 6000 - Introduction to International Business. **Semester Hours: 3**

INTB 6020 - Cross-Cultural Management. **Semester Hours: 3**

INTB 6200 - International Business Policy. **Semester Hours: 3**

International Electives (4) (12 semester hours)

Free Elective (1) (3 semester hours)

Advanced Study Requirements in International Business (2) (6 semester hours)

**Total: 30 Hours**

## Notes and Restrictions

*International Topics Electives.* Choose four courses (12 semester hours) from any INTB 6000-level course or higher or any approved international course.

*Free Elective.* One graduate-level class may be selected from any functional area of business, including international business topics classes, except BUSN courses numbered below 6800. International business majors can petition for transfer of 3 semester hours of relevant nonbusiness graduate courses offered at UC Denver's Downtown Campus.

*Advanced Study Requirements.* This 6-semester-hour requirement may be fulfilled by a master's thesis, research internship, international field study/study abroad or advanced courses in international business.

## Landscape Architecture MLA

### Prerequisites

Students are expected to have achieved a basic level of computer literacy. A graphics workshop is recommended for students who do not have a background in drawing or computer graphics. The workshop is scheduled each year before the beginning of the fall semester.

### Program Requirements

The landscape architecture program offers professional and advanced professional graduate degree curricula leading to the degree master of landscape architecture (MLA).

The first-professional degree program, requiring a six-semester sequence of course work totaling 90 semester hours, is fully accredited by the Landscape Architecture Accreditation Board (LAAB) and recognized by the Council of Educators in Landscape Architecture (CELA).

Students completing the college's bachelor of environmental design on the Boulder campus—or completing an undergraduate design degree at another institution—may be given advanced standing in the three-year program. Advanced standing will be based on prior academic accomplishment.

The advanced professional degree program for qualified students having already earned a first professional degree in landscape architecture or related discipline requires 48 semester hours. Advanced standing will be based on prior academic accomplishment.

## Course Sequence

### **(90-semester-hour MLA for students without a professional degree in landscape architecture or related profession)**

The curriculum consists of core and elective course work. Core courses are grouped into five components:

	<i>Semester hours</i>
Design Studios	36
History and Theory	12
Landscape Architectural Technology	15
Ethics and Practice	3
Media	6
<i>Total core courses</i>	<i>72</i>
Electives	18
<i>Total courses</i>	<i>90</i>

**Typical 90-semester-hour program of study in required courses for the first professional MLA degree**

## First Year

## Fall

- L A 5501 - Landscape Architecture Design Studio 1. **Semester Hours: 6**
- L A 5510 - Graphic Media in Landscape Architecture. **Semester Hours: 3**
- L A 5521 - History of Landscape Architecture. **Semester Hours: 3**
- L A 5572 - Landscape Ecology. **Semester Hours: 3**

**Total: 15 Hours**

## Spring

- L A 5502 - Landscape Architecture Design Studio 2. **Semester Hours: 6**
- L A 5532 - Landform Manipulation. **Semester Hours: 3**
- L A 6632 - Site Planning. **Semester Hours: 3**
- L A 6641 - Computer Applications in Landscape Architecture. **Semester Hours: 3**

**Total: 15 Hours**

## Second Year

### Fall

- L A 5503 - Landscape Architecture Design Studio 3. **Semester Hours: 6**
- L A 6631 - Landscape Construction Materials and Methods. **Semester Hours: 3**
- L A 6670 - Plants in Design. **Semester Hours: 3**
- One Elective. **Semester hours: 3**

**Total: 15 Hours**

### Spring

- L A 6604 - Landscape Architecture Design Studio 4. **Semester Hours: 3**
- L A 6605 - Landscape Architecture Design Studio 5. **Semester Hours: 3**
- L A 6620 - Landscape Architecture Theory and Criticism. **Semester Hours: 3**
- Two Electives. **Semester hours: 6**

**Total: 15 Hours**

## Third Year

## Fall

L A 6606 - Landscape Architecture Design Studio 6. **Semester Hours: 6**  
Three Electives. **Semester hours: 9**

**Total: 15 Hours**

## Spring

L A 6750 - Professional Practice. **Semester Hours: 3**  
L A 6607 - Landscape Architecture Design Studio 7. **Semester Hours: 3**  
L A 6608 - Landscape Architecture Design Studio 8. **Semester Hours: 3**  
L A 6721 - Regionalism. **Semester Hours: 3**  
One Elective. **Semester hours: 3**

**Total: 15 Hours**

### Course Sequence

#### **(48-semester-hour MLA for students with a professional degree in landscape architecture or related disciplines)**

This route requires 48 semester hours and typically two years of full-time study. The core curriculum consists of two groups:

	<i>Semester Hours</i>
Design	24
History and Theory	12
<i>Total core courses</i>	36
Electives	12
<i>Total courses</i>	48

The program director will advise each student engaged in this program of study.

## **Thesis**

The graduate thesis in landscape architecture provides an opportunity for students to conduct independent research and design investigations that demonstrate their capacity for rigorous original thinking. The thesis is not required for graduation and not all students are approved to write a thesis. Choosing to pursue a thesis project constitutes a significant commitment to the endeavor; the topic must be chosen with care and thoughtfully and critically developed. Topics can explore material that has been previously unstudied, reinterpret existing material in a new light, or engage research and design practices in ways that strengthen and define the final project. For all theses, the research and products must meet the highest standards of academic excellence and contribute significantly to the discipline and/or profession.

Pursuing a thesis requires students to enroll in a three-course sequence for a maximum total of 12 semester hours. Students are required to formulate their research proposals two full semesters prior to their enrollment for the 6-semester-hour thesis, typically taken in lieu of the final studio. To proceed through the sequence, students must have completed and passed the research tools and methods class (LA6940) and have secured departmental approval of the thesis proposal. The completion of the thesis is dependent on acceptance of the student's work by the faculty member acting as the thesis chair and by the committee. For work to be accepted it must meet the standards established by the University of Colorado Denver for graduate thesis projects.

## **Dual Degree Options**

Students may enroll in a dual degree program with architecture (MArch), with urban design (MUD) or with urban and regional planning (MURP).

# **Linguistically Diverse Education, MA curriculum and instruction**

## **Linguistically Diverse Education**

### **Requirements for LDE Program**

### **(Degree/Endorsement or Certificates - TESOL, CIEL, CRUE)**

**Office:** Lawrence Street Center, 701

**Telephone:** 303-315-6300

**Fax:** 303-315-6311

**E-mail:** [education@ucdenver.edu](mailto:education@ucdenver.edu)

**Web site:** [www.ucdenver.edu/education/lde](http://www.ucdenver.edu/education/lde)

## Faculty

Information about faculty in this program is available at [www.ucdenver.edu/education/lde](http://www.ucdenver.edu/education/lde). The faculty of linguistically diverse education (LDE) believe that effective teaching requires an awareness of and the ability to respond to individual differences. LDE faculty also emphasize the importance of teachers as scholars and reflective practitioners. In particular, teachers must understand how linguistic and cultural diversity affect their teaching. Two themes run throughout all program offerings. The first concerns the importance of recognizing a variety of literacies—“home” literacies, school literacy, “mainstream” literacy, first and second language literacies—and to develop teaching practices that utilize an understanding of the complexity of literacy development across language contexts. The second theme involves the meaningful use of language and literacy to improve the quality of one’s life. As an approach to teaching, this theme emphasizes the creation of diverse, rich environments in which learners experience oral and written language as part of authentic tasks, and where concern for the cultural and linguistic heritage of the students is evident.

## Program Options

The LDE program offers options leading to the following:

- a master of arts in curriculum and instruction
- the Colorado Endorsement for Linguistically Diverse Education
- a Teaching English to Speakers of Other Languages (TESOL) certificate
- a Content Instruction for English Learners (CIEL) certificate
- a Culturally Responsive Urban Education (CRUE) certificate

The program is intended for:

- novice teachers who have completed their Colorado teaching credentials in UC Denver’s graduate teacher education licensure program and are enrolled in the MA in curriculum and instruction with an emphasis in LDE (see 27 semester-hour option)
- veteran elementary and secondary teachers returning to graduate studies for the master’s degree (36 semester hours)
- veteran elementary and secondary teachers returning to acquire Colorado endorsement credentials (24 semester hours)
- individuals interested in teaching English abroad (TESOL: 15 semester hours)
- veteran elementary and secondary teachers returning to graduate studies for a certificate to aid them in helping their English language learners succeed (CIEL: 9 semester hours)
- elementary and secondary teachers who desire preparation in better meeting the needs of culturally diverse learners (CRUE: 9 semester hours)
- individuals interested in teaching adults (MA: 36 semester hours)

The MA is a field-based professional development program involving university faculty and practicing LDE instructors in public school and intensive English settings. Courses, laboratories and practica emphasize scholarly approaches to complex problems of practice and feature interactive, collaborative and practical approaches to working with English language learners.

We advocate a sociocultural approach to issues of language and learning, acknowledging the legitimacy of linguistic and cultural differences and recognizing that academic settings represent important socializing forces in students' lives. Because of this, we emphasize the "whole learner" in our teaching and in teacher education and teacher development, understanding that individuals do not merely add a language to their repertoire of communication but make fundamental identity adjustments as they progress in their studies. For this reason, all our course work, laboratories and practica experiences are field-based, putting our program participants in contact with veteran teachers and English language learners. We draw heavily on recent scholarship in collaborative approaches to school-university partnerships and systemic school change in developing classroom methods and materials, curricula and teacher development experiences.

The MA program also provides a foundation in teaching English in a variety of contexts in the United States and abroad. Teachers who work in LDE programs or in other content areas (such as art, language arts, math, music, science, social studies or technology), but who wish to integrate LDE principles and strategies into their instruction for their English language learners, will find the MA program relevant to their interests and goals.

Course work includes language teaching methodology, language acquisition, linguistic analysis of English, multicultural foundations, assessment, literacy and other areas. This program has been developed as an advanced course of study for practicing teachers or individuals with some teaching experience.

Applicants who are new to teaching, and who wish to teach in U.S. K–12 public school settings, should inquire about the teacher education licensure program. Applicants who are new to teaching, but who do not need a teaching license (certification) because they do not wish to teach in U.S. public schools, may consider the TESOL certificate to gain initial teaching experiences before applying for the MA.

## **Program Requirements and Courses**

To complete the LDE program and earn a master's degree and/or endorsement, or to earn a TESOL certificate, students must complete the appropriate course work as outlined in the table below.

<h3><b>Requirements for LDE Program (Degree/Endorsement or TESOL Certificate)</b></h3>
----------------------------------------------------------------------------------------

<b>Course</b>	<b>MA without CDE Endorsement in LDE</b>	<b>MA and CDE Endorsement in LDE</b>	<b>CDE Endorsement in LDE Only</b>	<b>MA and CDE Endorsement in LDE (when added to UC Denver's graduate teacher education licensure program)</b>	<b>TESOL Certificate</b>
LLC 5910 - Foundations of Language, Literacy and Culture.	Required	Required	Required	Required	
<i>One course from culture options:</i> LLC 5140 - Multicultural Education. LLC 5150 - Culture of the Classroom. LLC 5160 - Historical and Legal Foundations of Bilingual Education.	Select One	Select One	Select One	Select One	
LLC 5070 - Linguistic Analysis of English: Implications for Teaching.	Required	Required	Required	Required	Required
LLC 5030 - Language/Literacy Acquisition Part I.	Required	Required	Required	Required	Required
LLC 5820 - Techniques in Teaching English as a Second Language.	Required	Required	Required	Required	Required
LLC 5050 - Linguistic and Cultural Issues in Linking	Required	Required	Required	Required	Required

Assessment and Instruction.					
<i>One course from field-based teaching options:</i> LLC 5020 - Workshop in Literacy and Language Teaching. LLC 5825 - Methods and Materials of Language Teaching. LLC 5826 - Language Teaching Lab. LLC 5730 - Language and Literacy Across the Curriculum. LLC 5770 - Effective Literacy Instruction for Second Language Learners.	5826 preferred	Elem: 5825 preferred  Sec: 5826 preferred	Elem: 5825 preferred  Sec: 5826 preferred	Elem: 5825 preferred  Sec: 5826 preferred	5826
LLC 5035 - Language and Literacy: Acquisition, Processes, and Cognition, Part II.	Required	Required			
LLC 6912 - Seminar and Practicum in Literacy and Language, ESL and Bilingual Education.	Required	Required	Required	Required	
<i>One course from research and evaluation methodology:</i> REM 5050 - Assessment for Teachers. REM 5080 -	Select One	Select One		Select One	

Research for Teachers.					
<i>One course from educational psychology:</i> EPSY 5110 - Human Learning. EPSY 5220 - Adult Learning and Education.	Select One	Select One			
Graduate-level University of Colorado elective	Select One	Select One			
Cumulative online portfolio	Required	Required	Required	Required	
LDE PLACE Exam		Required	Required	Required	
Total Semester Hours	36	36	24	27	15

## CRUE or CIEL Certificate Requirements

Those considering the CRUE certificate will find course requirements at [www.cruecenter.org/certificate.php](http://www.cruecenter.org/certificate.php). Students interested in the CIEL certificate must complete the following:

LLC 5030 – Language and Literacy Acquisition I. Semester Hours: 3

-OR-

LLC 5070 – Linguistic Analysis of English. Semester Hours: 3

LLC 5050 – Linguistic and Cultural Issues in Linking Assessment and Instruction. Semester Hours: 3

-OR-

LLC 5820 – Techniques in Teaching ESL. Semester Hours: 3

-OR-

LLC 5825 – Methods and Materials of Language Teaching. Semester Hours: 3

-OR-

LLC 5826 – Language Teaching Laboratory. Semester Hours: 3

LLC 6912 - Seminar and Practicum in Literacy and Language, ESL and Bilingual Education  
Semester Hours: 3

**Total: 9 Hours**

## **Cumulative Portfolio of Performance Based Assessments (PBAS)**

The portfolio is required for the CDE endorsement, counts as the comprehensive exam for the master's degree and permits you to document your development over the course of your program. Portfolios are reviewed by LDE faculty members. At least two faculty members must agree that the portfolio is acceptable in order to pass. The portfolio process is reviewed in every class as each of the PBAs is completed in the classes, helping students to update their portfolios throughout the program. For more portfolio guidelines, visit the Web site at [www.ucdenver.edu/education/lde](http://www.ucdenver.edu/education/lde).

## **PLACE Exam for Linguistically Diverse Education Endorsement**

To add the endorsement to their teaching license, students must pass the PLACE (Program for Licensing Assessments for Colorado Educators) exam for linguistically diverse education, secure and submit the appropriate paperwork from the Colorado Department of Education, and pay fees required for the PLACE and for the endorsement paperwork. Information about PLACE is online at [www.place.nesinc.com](http://www.place.nesinc.com).

## **Course Scheduling**

During the fall and spring semesters, most university courses are offered in the late afternoon and evening and meet for three hours once a week over a 16-week semester. Some alternative course schedules are available, such as meeting on five Friday-evening/all-day Saturday combinations. In the summer semester, three-to eight-week sessions are offered, and courses may be in the morning, afternoon or evening. A current schedule of courses is available online at <http://courses.cudenver.edu>.

## **Planning**

For practicing full-time teachers, we recommend taking one course each fall and spring semester and up to two courses each summer. Students may simultaneously complete requirements for the MA and the endorsement for linguistically diverse education. Support for course planning is available in LDE advising sessions—usually held once in fall and once in spring. These sessions help students build their programs around course sequences and availability (some courses are offered only once per year).

## **Active Status in the Graduate School**

Students must complete their programs within seven years, maintaining a GPA of 3.0. Students typically take four courses each calendar year. Failure to enroll over three contiguous semesters will result in a requirement to resubmit part I of the application for admission and a letter of intent.

# Management and Organization MS

**Program Director:** Kenneth L. Bettenhausen  
**Telephone:** 303-556-5816  
**E-mail:** Kenneth.Bettenhausen@ucdenver.edu

## Faculty

### Professors:

Heidi Boerstler, PhD/JD, Yale University/University of Denver

Wayne Cascio, PhD, University of Rochester

C. Marlena Fiol, PhD, University of Illinois-Urbana-Champaign

Edward O'Connor, PhD, University of Akron

John Ruhnka, JD/LLM, Yale School of Law/Cambridge University

### Associate Professors:

Kenneth Bettenhausen, PhD, University of Illinois-Urbana-Champaign

Blair Gifford, PhD, University of Chicago

Sarah Koovor-Misra, PhD, University of Southern California

### Assistant Professor:

Vinit Desai, PhD, University of California at Berkeley

Stephanie Johnson, PhD, Rice University

### Instructors:

Linda Fried, JD/LLM, University of Miami

Barry McConnell, MBA, University of Colorado

Jeffrey Nystrom, MS, University of Colorado

Ira Selkowitz, JD, University of Denver

The MS management program prepares students for significant managerial responsibilities in the private and public sectors. Core course requirements provide students with advanced understanding of how to manage interpersonal dynamics, effectively design organizations, implement planned change and organizational transformations and develop human resources. Students build on this foundation with any four electives in MGMT, ENTP or INTB, or with the courses that comprise one of 12 career-focused specializations.

**The specializations include: business strategy, change and innovation, communications management, enterprise technology management, entrepreneurship and innovation, human resources management, global management, leadership, strategic management, managing for sustainability, quantitative decision methods and sports and entertainment management.** These specializations will help students master the tools and knowledge to be successful in each focused competency.

The MS management and organization degree requirements are met by the following:

## **Management MS Core**

### **Required Management Courses**

BUSN 6520 - Managing Individuals and Teams. **Semester Hours: 3**

MGMT 6320 - Organizational Development. **Semester Hours: 3**

MGMT 6360 - Designing Effective Organizations. **Semester Hours: 3**

MGMT 6380 - Managing People for Competitive Advantage. **Semester Hours: 3**

**Total: 12 Hours**

### **Management Emphasis (or elective) courses (12-18 semester hours)**

A student may choose to complete the program by taking any four MGMT, INTB or ENTP elective courses.

### **Choose from one of the following emphasis areas:**

- communications management
- enterprise technology management
- entrepreneurship and innovation
- global management

human resources management  
leadership  
quantitative decision methods  
sports and entertainment management  
strategic management  
sustainability management

## **Communications Management**

### **Required Courses**

CMMU 5240 - Organizational Communication. **Semester Hours: 3**  
CMMU 5250 - Difference Matters and Organizational Communication. **Semester Hours: 3**  
CMMU 5405 - Technical Communication: Writing. **Semester Hours: 3**

### **Choose one:**

MGMT 6800 - Special Topics in Management. **Semester Hours: 3**  
MGMT 6803 - Visionary Leadership. **Semester Hours: 3**  
MGMT 6804 - Bargaining and Negotiation. **Semester Hours: 3**  
Any approved CMMU 5000-level course (see below) (3 semester hours)

**Total: 12 Hours**

### **Approved CMMU Elective Courses**

Choose one:

CMMU 5151 - Group Communication. **Semester Hours: 3**  
CMMU 5222 - Professional Communication. **Semester Hours: 3**  
CMMU 5245 - Advanced Organizational Communication. **Semester Hours: 3**  
CMMU 5260 - Communication and Conflict. **Semester Hours: 3**  
CMMU 5262 - Mediation. **Semester Hours: 3**  
CMMU 5270 - Intercultural Communication. **Semester Hours: 3**  
CMMU 5280 - Communication and Change. **Semester Hours: 3**  
CMMU 5500 - Health Communication. **Semester Hours: 3**  
CMMU 5505 - Technical Communication: Editing. **Semester Hours: 3**  
CMMU 5640 - Advanced Public Relations. **Semester Hours: 3**  
CMMU 5760 - Computer-Mediated Communication. **Semester Hours: 3**  
CMMU 5830 - Visual Principles in Technical Communication. **Semester Hours: 3**

## **Enterprise Technology Management**

*Required Courses*

Choose four:

ISMG 6430 - Information Systems Security and Privacy. **Semester Hours: 3**

ISMG 6450 - IT Project Management. **Semester Hours: 3**

ISMG 6460 - Emerging Technologies. **Semester Hours: 3**

ISMG 6420 - Global Enterprise Systems. **Semester Hours: 3**

**Total: 12 Hours**

## **Entrepreneurship and Innovation**

ENTP 6000 - Fundamentals of Entrepreneurship. **Semester Hours: 3**

ENTP 6020 - The Business Plan. **Semester Hours: 3** and

6000-level ENTP courses (2) or

6000-level ENTP course (1) and 6000-level MGMT course (1) (6 semester hours)

**Total: 12 Hours**

## **Global Management**

### *Required Courses*

INTB 6000 - Introduction to International Business. **Semester Hours: 3**

INTB 6020 - Cross-Cultural Management. **Semester Hours: 3**

MGMT 6040 - International Human Resources Management. **Semester Hours: 3** or

INTB 6040 - International Human Resources Management. **Semester Hours: 3**

Any travel-study program or

6000-level INTB course (3 semester hours)

**Total: 12 Hours**

## **Leadership**

### **Prerequisite**

BUSN 6530 - Data Analysis for Managers. **Semester Hours: 3**

### **Required Courses**

INTB 6000 - Introduction to International Business. **Semester Hours: 3** or

ENTP 6000 - Fundamentals of Entrepreneurship. **Semester Hours: 3**

MGMT 6803 - Visionary Leadership. **Semester Hours: 3**

MGMT 6804 - Bargaining and Negotiation. **Semester Hours: 3**

MGMT 6800 - Special Topics in Management. **Semester Hours: 3**

**Total: 12 Hours**

## **Management of Change**

### *Required Courses*

Choose four:

BUSN 6811 - IT and New Business Paradigms. **Semester Hours: 3**

BUSN 6830 - Business and the Natural Environment. **Semester Hours: 3**

ENTP 6820 - Business Consulting. **Semester Hours: 3**

MGMT 6730 - Human Resources Management: Performance Management. **Semester Hours: 3**

MGMT 6803 - Visionary Leadership. **Semester Hours: 3**

MGMT 6804 - Bargaining and Negotiation. **Semester Hours: 3**

MGMT 68\_\_ - Leadership in Difficult Times (3 semester hours)

MGMT 6821 - Managing for Sustainability. **Semester Hours: 3**

**Total: 12 Hours**

## **Managing Human Resources**

### **Prerequisites**

BUSN 6530 - Data Analysis for Managers. **Semester Hours: 3**

MGMT 6380 - Managing People for Competitive Advantage. **Semester Hours: 3**

HR emphasis prerequisite courses are in addition to the 30-hour MS core.

### **Required Courses**

Choose four:

BUSN 6540 - Legal and Ethical Environment of Business. **Semester Hours: 3**

MGMT 6040 - International Human Resources Management. **Semester Hours: 3** or

INTB 6040 - International Human Resources Management. **Semester Hours: 3**

MGMT 6710 - Human Resources Management: Staffing. **Semester Hours: 3**

MGMT 6720 - Human Resources Management: Training. **Semester Hours: 3**

MGMT 6730 - Human Resources Management: Performance Management. **Semester Hours: 3**

MGMT 6740 - Human Resources Management: Compensation. **Semester Hours: 3**

**Total: 12 Hours**

## Managing for Sustainability

Courses and course numbers in this emphasis were still being finalized when this catalog went to print. See a graduate advisor for details.

## Quantitative Decision Methods

### Prerequisite

*(completion of prerequisite is in addition to the 30-hour MS in management and organization)*

BUSN 6530 - Data Analysis for Managers. **Semester Hours: 3**

### Required Courses

Choose four:

BUSN 6630 - Management of Operations. **Semester Hours: 3**

BUSN 6820 - Project Management. **Semester Hours: 3** or

DSCI 6820 - Project Management. **Semester Hours: 3**

BUSN 6822 - Services Operations. **Semester Hours: 3** or

DSCI 6822 - Services Operations. **Semester Hours: 3**

BUSN 6824 - Business Forecasting. **Semester Hours: 3** or

DSCI 6230 - Business Forecasting. **Semester Hours: 3**

BUSN 6826 - Supply Chain Management. **Semester Hours: 3**

BUSN 6828 - Business Applications of Data Mining. **Semester Hours: 3** or

DSCI 6828 - Business Applications of Data Mining. **Semester Hours: 3**

DSCI 6440 - Quality and Process Improvement. **Semester Hours: 3**

**Total: 12 Hours**

*Note:* One of two free electives must be aMGMT, ENTP or INTB course.

## Sports and Entertainment Management

### Required Courses

Choose four:

FNCE 6\_\_\_ - Sports and Entertainment Finance (3 semester hours)

MGMT 68\_\_ - Sports and Entertainment Management (3 semester hours)

MGMT 68\_\_ - Law, Contracts and Negotiation in the Sports and Entertainment Industries (3 semester hours)

MKTG 6\_\_\_ - Sports and Entertainment Marketing (3 semester hours)

MGMT 5939 - Internship or Cooperative Education. **Semester Hours: 1 to 3**

## **Total: 12 Hours**

Courses and course numbers in this emphasis were still being finalized when this catalog went to print. See a graduate advisor for details.

## **Strategic Management**

Students pursuing a dual MBA/MS in organization and management are not eligible for this emphasis.

### **Prerequisites**

BUSN 6530 - Data Analysis for Managers. **Semester Hours: 3**

BUSN 6550 - Analyzing and Interpreting Accounting Information. **Semester Hours: 3**

### **Required Courses**

BUSN 6560 - Marketing Management. **Semester Hours: 3**

BUSN 6640 - Financial Management. **Semester Hours: 3**

BUSN 6710 - Strategic Management. **Semester Hours: 3**

MGMT 6803 - Visionary Leadership. **Semester Hours: 3**

## **Total: 12 Hours**

## **Free Electives (6 semester hours)**

Free electives can be anything in the Business School (graduate level), except BUSN prefix courses below 6800. Any 6000-level or higher ACCT, FNCE, ENTP, MKTG, MGMT, ISMG, INTB or HLTH course can count as your free elective requirement.

\*For the **communications emphasis**, the student is allowed to use an approved CMMU course as the free elective.

# **Marketing MS**

**Program Director:** David Forlani

**Telephone:** 303-556-6616

**E-mail:** David.Forlani@ucdenver.edu

## **Faculty**

### **Professors:**

Lawrence Cunningham, DBA, University of Tennessee

Susan Keaveney, PhD, University of Colorado

Clifford Young, PhD, University of Utah

**Assistant Professors:**

David Forlani, PhD, University of Minnesota

Vick Lane, PhD, University of Washington

Madhavan Parthasarathy, PhD, University of Nebraska

**Senior Instructor:**

Mary Lee Stansifer, PhD, Northwestern University

**Instructors:**

Peter Miller, MA, Farleigh Dickenson University

Nicole Vowles, PhD, Victoria University of Wellington, New Zealand

The MS in marketing degree is designed to provide the skill sets necessary for you to succeed in middle (e.g., brand manager, advertising account executive) and upper level (e.g., CMO) positions in marketing and for those who interface with an organization's markets (e.g., customer service or operations).

Your MS in marketing degree from the University of Colorado Denver consists of 30 hours:

- 18 semester hours of marketing core courses

- 12 semester hours of graduate electives

We highly recommend that one of the electives include a marketing-related internship, especially for those making a career change or without prior experience in marketing. Further, as has been our policy, if you feel that you would benefit by substituting a one or two graduate electives for a marketing elective, the marketing program director will help to work out a plan designed to meet your specific career needs. You must complete the following 18 hours of marketing core courses and then you can choose from two paths to complete the remaining 12 hours. You can select the “build your own MS marketing degree” option or one of the nine specializations.

## **Graduate Core in Marketing**

### **Required Courses**

BUSN 6560 - Marketing Management. **Semester Hours: 3**  
MKTG 6010 - Marketing Strategy, Evaluation and Development. **Semester Hours: 3**  
MKTG 6020 - International Marketing. **Semester Hours: 3**  
MKTG 6050 - Marketing Research. **Semester Hours: 3**  
MKTG 6060 - Buyer Behavior. **Semester Hours: 3**  
MKTG 6200 - Marketing Dashboards & Scorecards. **Semester Hours: 3**

## **Marketing Electives**

### **Build Your Own MS Marketing Degree with 12 semester hours of MKTG electives**

Choose any four MKTG electives, such as:

MKTG 5939 - Internship/Cooperative Education. **Semester Hours: 1 to 3**  
MKTG 6030 - Sales and Sales Force Management. **Semester Hours: 3**  
MKTG 6040 - Services Marketing. **Semester Hours: 3**  
MKTG 6070 - Integrated Marketing Communications and Brand Identity. **Semester Hours: 3**  
MKTG 6080 - Marketing in Emerging Markets. **Semester Hours: 3**  
MKTG 6090 - Customer Relationship Management. **Semester Hours: 3**  
MKTG 6091 - Strategic Product Marketing. **Semester Hours: 3**  
MKTG 6092 - Internet Marketing. **Semester Hours: 3**  
MKTG 6094 - Marketing Issues in the Chinese Environment. **Semester Hours: 3**  
MKTG 6120 - Non-Profit and Social Marketing. **Semester Hours: 3**  
MKTG 6700 - Marketing Travel Study. **Semester Hours: 3**

**Total: 30 Hours**

**...or complete one of the following marketing specializations (listed alphabetically).**

## **Marketing Specializations**

The specializations are areas of focus that will appeal to those who have specific interests or are looking to apply their marketing acumen in particular contexts (e.g., interface with engineering or work in a multinational or nonprofit environment). A 3-semester-hour internship can be substituted for an elective in any area of specialization with the approval of the marketing program director.

## **Brand Management and Marketing Communications**

Are you interested in a career in advertising, promotions or public relations? How about furthering your career in marketing management? Advertising, promotion and public relations managers are creative, highly-motivated individuals who are flexible yet can meet a deadline. They need good verbal and written communication skills and the ability to work well with people. Similar talents are needed by those involved with brand management. This task is central to all marketers, especially those involved with perceptual positioning and the deliverance of positions in a target market (e.g., those working in any phase of market communication and R&D) The U.S. Bureau of Labor Statistics reports that, because of the high visibility of these positions, these managers are often prime candidates for top C-level positions. The job outlook remains promising but competition will be keen, and the best opportunities will go to those with an MS in marketing or an MS marketing /MBA dual degree. (Don't take our word for it, see <http://www.bls.gov/oco/ocos020.htm>).

**Required:**

MKTG 6070 - Integrated Marketing Communications and Brand Identity. **Semester Hours:** 3

Choose three of the following courses:

MKTG 6030 - Sales and Sales Force Management. **Semester Hours:** 3

MKTG 6040 - Services Marketing. **Semester Hours:** 3

MKTG 6091 - Strategic Product Marketing. **Semester Hours:** 3

MKTG 6092 - Internet Marketing. **Semester Hours:** 3

BUSN 6530 - Data Analysis for Managers. **Semester Hours:** 3

CMMU 5635 - Principles of Public Relations. **Semester Hours:** 3

CMMU 5640 - Advanced Public Relations. **Semester Hours:** 3

ISMG 6240 - Website Development Practice and Technologies. **Semester Hours:** 3

## Global Marketing

One of the growing themes of the 21st century economy is the growth of world trade. There is continuing demand for individuals who understand the how to conduct marketing across many different international environments as well as rapidly growing areas such as China and the emerging markets. This specialization prepares you to effectively compete and succeed in this environment.

**Required (select one of the following courses):**

MKTG 6080 - Marketing in Emerging Markets. **Semester Hours:** 3

MKTG 6094 - Marketing Issues in the Chinese Environment. **Semester Hours:** 3

Choose three of the following courses:

ENTP 6826 - International Entrepreneurship. **Semester Hours:** 3

INTB 6020 - Cross-Cultural Management. **Semester Hours:** 3

INTB 6022 - International Business Negotiations. **Semester Hours:** 3

INTB 6080 - Global Competition. **Semester Hours:** 3

INTB 6200 - International Business Policy. **Semester Hours: 3**

MKTG 6700 - Marketing Travel Study. **Semester Hours: 3**

## High-Tech/Entrepreneurial Marketing

The American economy was built on a spirit of innovation, hard work and entrepreneurship, and this is surely going to be the path that assures continued American dominance in the technology and business development fields. Most smart innovators know that, in addition to the financial and managerial aspects of a business, it is the marketing function that often makes the difference between success and failure. Whether your interest is in corporate intrapreneurship and the development of high-technology oriented innovations or individual entrepreneurship and the development of a small business with minimal funds, knowing how to create and implement appropriate marketing strategies is fundamental to achieving your goals. This specialization allows you to focus on the type of new business creation path that best suits your aspirations while greatly enhancing your endeavor's probability of success. If you aspire to be the next Bill Gates, this is a "must take" degree path for you.

### **Required:**

MKTG 6091 - Strategic Product Marketing. **Semester Hours: 3**

ENTP 6842 - New Concept Development. **Semester Hours: 3**

Choose two of the following courses:

MKTG 6030 - Sales and Sales Force Management. **Semester Hours: 3**

MKTG 6040 - Services Marketing. **Semester Hours: 3**

MKTG 6070 - Integrated Marketing Communications and Brand Identity. **Semester Hours: 3**

MKTG 6092 - Internet Marketing. **Semester Hours: 3**

CMMU 5285 - Communication Processes in Technology Transfer. **Semester Hours: 3**

ENTP 6000 - Fundamentals of Entrepreneurship. **Semester Hours: 3**

ENTP 6020 - The Business Plan. **Semester Hours: 3**

ENTP 6826 - International Entrepreneurship. **Semester Hours: 3**

ENTP 6860 - Business Planning for Social Entrepreneurs. **Semester Hours: 3**

## Internet Marketing

Are you interested in a degree that blends Web development and application strategies with marketing? This, then, is the specialization for you. This specialization covers all aspects of Internet marketing including the functions associated with Web sites for marketing communication and customer support, one-to-one communication to many different receiving

devices, marketing via social networks, consumer behavior insights based on offline and online data combination, inventory optimization through CRM-SCM integration, and a focus on ROI and associated performance metrics. With Internet marketing poised to take off globally, especially in developing countries where consumers may not have access to the latest products in local stores, this is indeed the wave of the future.

**Required:**

MKTG 6040 - Services Marketing. **Semester Hours: 3**

MKTG 6092 - Internet Marketing. **Semester Hours: 3**

Choose two of the following courses:

MKTG 6070 - Integrated Marketing Communications and Brand Identity. **Semester Hours: 3**

MKTG 6090 - Customer Relationship Management. **Semester Hours: 3**

BUSN 6828 - Business Applications of Data Mining. **Semester Hours: 3**

**OR** DSCI 6828 - Business Applications of Data Mining. **Semester Hours: 3**

ISMG 6080 - Database Management Systems. **Semester Hours: 3**

ISMG 6240 - Website Development Practice and Technologies. **Semester Hours: 3**

ISMG 6430 - Information Systems Security and Privacy. **Semester Hours: 3**

## Marketing and Business Intelligence

A great increase in ERP, CRM, HRMS and SCM applications over the last decade has created a need for specialists who can manage the many sources of information critical for business growth. Further, increased competition due to globalization has made it critical to have effective and faster decision making across all functions, especially the marketing function, where smart analysis and interpretation of enterprise data is often paramount in the formulation of competitive marketing strategy. If you are seeking a fast-growing and fast-paced area of specialization, this may well be the degree path for you.

**Required:**

MKTG 6090 - Customer Relationship Management. **Semester Hours: 3**

ISMG 6080 - Database Management Systems. **Semester Hours: 3**

Choose one of the following courses:

ISMG 6480 - Data Warehousing and Administration. **Semester Hours: 3**

BUSN 6828 - Business Applications of Data Mining. **Semester Hours: 3**

**OR** DSCI 6828 - Business Applications of Data Mining. **Semester Hours: 3**

## Marketing for Sustainability

The world has changed. More than ever, companies around the globe need to introduce smart, sustainable brands to lead the way into the future. The strong core of MS marketing courses will give you the skills to become an effective marketing manager, while the specialized set of sustainability courses will give you the knowledge to work toward a better tomorrow. The sustainability courses will focus on the triad of economic, environmental and social sustainable development.

### **Required:**

MKTG 6040 - Services Marketing. **Semester Hours: 3**

MKTG 6120 - Non-Profit and Social Marketing. **Semester Hours: 3**

Choose two of the following courses:

BUSN 6830 - Business and the Natural Environment. **Semester Hours: 3**

BUSN 6850 - Accounting and Finance for Sustainability. **Semester Hours: 3**

ENTP 6858 - Innovation in the Social Sector. **Semester Hours: 3**

MGMT 6821 - Managing for Sustainability. **Semester Hours: 3**

MGMT 6822 - Business Ethics and Corporate Social Responsibility. **Semester Hours: 3**

## Marketing in Nonprofit Organizations

Are you someone who would rather help people, communities and the environment rather than focus on turning a profit? Many of our alumni have followed career paths with nonprofit organizations. They tell us that a strong core in marketing combined with specialized knowledge of the unique needs of not-for-profit organizations helped them to succeed.

### **Required:**

MKTG 6040 - Services Marketing. **Semester Hours: 3**

MKTG 6120 - Non-Profit and Social Marketing. **Semester Hours: 3**

Choose two of the following courses:

BUSN 6550 - Analyzing and Interpreting Accounting Information. **Semester Hours: 3**

BUSN 6822 - Services Operations. **Semester Hours: 3**

OR DSCI 6822 - Services Operations. **Semester Hours: 3**

ENTP 6858 - Innovation in the Social Sector. **Semester Hours: 3**

ENTP 6860 - Business Planning for Social Entrepreneurs. **Semester Hours: 3**

MGMT 6822 - Business Ethics and Corporate Social Responsibility. **Semester Hours: 3**

MKTG 6030 - Sales and Sales Force Management. **Semester Hours: 3**

MKTG 6070 - Integrated Marketing Communications and Brand Identity. **Semester Hours: 3**

## Marketing Research

Marketing and survey researchers gather information about what people think, measure customer satisfaction and repurchase intentions, help companies decide what goods and services to offer and at what price, and detect up-and-coming trends. Marketing researchers need good quantitative skills, strong analytical skills and a good understanding of marketing and buyer behavior. Many of our alumni got their starts in marketing research positions. According to the U.S. Bureau of Labor Statistics, employment is expected to grow faster than average with the best job opportunities for those with an MS marketing degree (Don't just take our word for it; check out <http://www.bls.gov/oco/ocos013.htm>).

### Required:

MKTG 6040 - Services Marketing. **Semester Hours: 3**

MKTG 6090 - Customer Relationship Management. **Semester Hours: 3**

Choose two of the following courses:

BUSN 6530 - Data Analysis for Managers. **Semester Hours: 3**

DSCI 6480 - Simulation Modeling. **Semester Hours: 3**

BUSN 6828 - Business Applications of Data Mining. **Semester Hours: 3**

**OR** DSCI 6828 - Business Applications of Data Mining. **Semester Hours: 3**

MKTG 6070 - Integrated Marketing Communications and Brand Identity. **Semester Hours: 3**

## Sports and Entertainment Marketing

The sports business industry is one of the largest and fastest growing in the United States. Add to that the burgeoning music, film, theater, television, cable and other entertainment industries and you've got virtually limitless choices. Every one of those industries needs good marketers. The strong core of marketing courses in the MS marketing program will give you the skills you need to hit the ground running with the specialized courses to teach you how to tailor your skills to the unique needs of the sports and entertainment industries.

### Required:

MKTG 6040 - Services Marketing. **Semester Hours: 3**

MKTG 6820 - Sports & Entertainment Marketing. **Semester Hours: 3**

Choose two of the following courses:

BUSN 6860 - Finance in the Sports Entertainment Industries. **Semester Hours: 3**

MGMT 6832 - Law and Negotiation in the Sports/ Entertainment Industries. **Semester Hours: 3**

MGMT 6830 - Sports and Entertainment Management. **Semester Hours: 3**

MKTG 6070 - Integrated Marketing Communications and Brand Identity. **Semester Hours: 3**

## **Master in Business Administration for Executives, MBA**

**Program Director:** W. Scott Guthrie  
**Telephone:** 303-623-1888 or 1-800-228-5778

The executive MBA program provides executive-level students with a broad, rigorous 21-month academic experience leading to the master of business administration degree. The program is designed for persons who hold managerial positions in the private and public sectors. It builds upon the knowledge and experience of these executives with a sophisticated, challenging curriculum that can be pursued simultaneously without career interruption.

The executive MBA program emphasizes strategic leadership; the organization in a complex, international environment; and the applied tools of management. Courses are taught through a variety of methods. Case studies, lectures and computer simulation are combined with research projects and other teaching methods to provide students with tools useful in their present positions and applicable to more advanced responsibilities as they progress in their management careers.

Each new session of the executive MBA program begins the last week of August. Classes meet for a full day, once a week, on alternating Fridays and Saturdays, making it possible for those who live outside the Denver area to participate.

Two courses are taken simultaneously throughout the program. The program is supplemented by an intensive orientation at the beginning and a two-day seminar at the conclusion of the first academic year. A second-year seminar is held at an international business center outside of North America.

## **Mechanical Engineering MEng**

► Graduate School Rules apply to this program

The master of engineering (MEng) is an interdisciplinary degree program designed to meet the needs of those practicing engineers who wish to follow an integrated program of studies in

engineering and allied subjects related to the individual student's professional work. Students can combine advanced engineering course work with graduate-level non-engineering courses such as business administration, environmental sciences, social sciences, biological sciences or public administration.

Prospective students are required to present a well-defined objective in order to be admitted to the program. In consultation with faculty advisors, an academic program is developed to meet this objective.

An advisory committee will be appointed for each student by the department. The advisory committee that guides the student is responsible for approving the individual's degree program and admission to candidacy, and approves the student's written report and the awarding of the degree.

The requirements for admission are the same as those for the MS degree awarded through the College of Engineering and Applied Science. A minimum of 30 semester hours of academic work are required for the MEng degree. At least 15 of these hours must be at the 5000 level or above in mechanical engineering. A maximum of 12 semester hours may be taken outside of engineering. In addition to course work, a written report is required in the MEng program as a final project (3 semester hours). The report may be related to the student's professional work. The report will be of the same general quality as that required for the master of science thesis and must be defended orally. It may be based on work done for credit under independent study.

## Mechanical Engineering MS

► Graduate School Rules apply to this program

For the master of science (MS) degree in mechanical engineering, students may choose between two plans with each plan totaling 30 semester hours. Students following Plan I (thesis option) take 24 semester hours of formal course work plus 6 semester hours of thesis work. Students following Plan II (project option) take 27 semester hours of formal course work plus a 3 semester hour final project requiring a report. Students following Plan I or Plan II must submit a proposal to their examination committee prior to the semester in which they register for their thesis or project semester hours, and the examination committee must approve the proposal for the thesis or project.

Students in either plan may choose one of three options. In the first two options, the student may choose to specialize in either thermal science or mechanics. The third option is the general mechanical engineering option.

The **thermal science option** requires 12 semester hours of course work in analytical methods, numerical methods, fluid mechanics and thermodynamics. The student then selects 9 semester hours of course work in approved electives from a selection of thermal science electives.

The **mechanics option** requires 12 semester hours of course work in analytical methods, numerical methods, elasticity and dynamics. The student then selects 9 semester hours of course work in approved electives from a selection of mechanics electives. For students

following Plan I, both the thermal science and mechanics options allow the student to pick one approved 3-semester-hour elective not necessarily in the chosen specialty. For students following Plan II, both the thermal science and mechanics options allow the student to pick two approved 3-semester hour electives not necessarily in the chosen specialty.

The **general mechanical engineering option** requires the student to take 18 semester hours of required course work in analytical methods, numerical methods, fluid mechanics, thermodynamics, elasticity and dynamics. For students following Plan I, the general mechanical engineering option allows the student to pick two approved 3-semester hour electives. For students following Plan II, the general mechanical engineering option allows the student to pick three approved 3-semester hour electives.

## Political Science MA

► Graduate School Rules apply to this program

The political science department offers a master of arts (MA) degree in political science with an emphasis on building academic and practical skills in key areas of the discipline. Research and teaching in the department centers on the major fields of American politics, comparative politics, international relations, political theory and public policy; however, the department also offers more specialized training in human rights, legal studies, gender politics, race and ethnic politics, European studies, indigenous politics and urban politics. Students pursuing the MA have the option of completing the traditional track or an alternative track centered on the study on politics, public policy and leadership. Students completing the program have gone on to PhD programs across the country and work in a variety of areas, including; state and local elected office, government service, directors of community-based organizations and nongovernmental organizations, legislative analysts, UN affiliates, lobbyists, teachers, media analysis and political consulting.

### Requirements for Admission

Students applying for admission to the MA program in political science should present at least 18 semester hours of previous academic work in political science, at least 9 hours of which should be at the upper-division or graduate level. The department may make exceptions to these requirements in unusual cases (for instance, if course work in related fields such as psychology, economics and history compensates for the deficiencies in political science). Applicants should present an undergraduate GPA of at least 3.0 to be considered; however, the department typically admits students with a GPA of 3.2 or higher. In their applications, students must submit transcripts and letters of recommendation (from academic sources) as specified by the Graduate School. In addition, applicants must submit a statement of academic objectives and an academic writing sample. Standardized test scores are not required of applicants, but will be considered if submitted.

In order to take graduate courses in political science, students must either be admitted to the MA program or secure permission as a nondegree student. Nondegree students may take up to 12 semester hours of graduate course work; however, they must first secure permission from

the department graduate advisor to enroll in all graduate course work. Nondegree students are not eligible to enroll in P SC 5000. The State of the Discipline.

## **Degree Requirements**

In addition to the requirements for admission and details of the program spelled out here, graduate students in political science must also abide by department rules and procedures specified in the Graduate Student Handbook. Failure to meet these policies may result in a student being dropped from the program.

Under the MA program in political science, two degree plans are available:

Plan I requires the completion of eight graduate courses (24 semester hours) and a 6-credit thesis

Plan II requires the completion of nine graduate courses (27 semester hours) and a 3-credit project.

Course work in both plans completed under the traditional track offered on the Downtown Campus must include P SC 5000. The State of the Discipline and at least one graduate seminar in each of the following areas: American politics, comparative politics or international relations, and political theory.

Students will complete between 12 and 15 elective semester hours, depending on whether they are working under Plan I or II, which may be fulfilled through graduate course work in political science, related disciplines, independent study or internships. Ultimately, the total combination of independent study, graduate course work in related disciplines and internship cannot exceed 9 semester hours. With either plan, students are required to complete a minimum of 16 semester hours with the political science department at the University of Colorado Denver, and maintain a minimum *B* (3.0) overall GPA or better. Students who are on probation must meet regularly with the graduate advisor and must secure approval from the advisor for all course work while on probation.

Plan II is available both under the traditional MA track offered on the Denver campus, as well as through an alternative track offered off-campus through the Center for New Directions in Politics and Public Policy at Chaparral in Douglas County and on the Fort Lewis College campus in Durango. This second track provides an MA in political science with an emphasis in politics and public policy, and courses in this track are offered in an intensive weekend format. The emphasis on politics and the policy-making process relates to the ability of leaders to mobilize resources and achieve constituent goals consistent with the public interest. In this context, politics entails communication, and effective politics *requires* communication. In short, this emphasis on political awareness seeks to help participants utilize the political process as the “art of making what appears to be impossible, possible.” For details about this off-campus track in politics and public policy, contact the Center for New Directions at 303-556-5950.

# **Psychology MA**

- ▶ Graduate School Rules apply to this program

## Objectives and Requirements

The two major objectives of the MA program are to prepare graduates for doctoral-level study in both PhD and PsyD programs and to train graduates to provide direct service, under supervision, in mental health agencies. Assessment training includes theory, diagnostic interviewing, intelligence testing and some personality testing with both children and adults. We introduce students to the theory and application of major models of psychotherapy and to psychopathology theory and research. We also emphasize the ethical principles that permeate clinical psychology and the application of these principles to problems in mental health practice, teaching and research. Finally, students become well versed in statistical methods. Students take the required courses during their first year in the program. During the second year, they choose to specialize by opting for a research-based thesis and/or an applied internship at a mental health agency. Students also demonstrate competency by defending a thesis or an internship competency project. Students can complete the program in slightly less than two years, and have up to five years to complete the program according to Graduate School Rules. See the department Web site for complete information on the MA in psychology.

## Public Administration MPA

**Program Director:** Mary Guy, PhD

### Faculty

#### Professors:

Kathleen Beatty, PhD, Washington State University

Lloyd Burton, PhD, University of California, Berkley

Peter deLeon, PhD, Pardee RAND Graduate School

Robert Gage, PhD, Indiana University

Mary Guy, PhD, University of South Carolina

Richard Stillman, PhD, Syracuse University

Paul Teske, PhD, Princeton University

#### Associate Professors:

Linda deLeon, PhD, University of California, Los Angeles

Angela Gover, PhD, University of Maryland

Jody Fitzpatrick, PhD, University of Texas, Austin

Christine Martell, PhD, Indiana University

Allan Wallis, PhD, City University Graduate Center

**Assistant Professors:**

George Busenberg, PhD, University of North Carolina at Chapel Hill

Danielle Varda, PhD, University of Colorado Denver

Chris Weible, PhD, University of California-Davis

**MPA, West Slope Director:**

Fred Rainquet, PhD, University of Colorado

**Wirth Chair:**

Sen. Gary Hart (Ret.), JD, Yale University

**Research Professor:**

Stephen Block, PhD, University of Colorado

**Clinical Professor:**

Malcolm Goggin, PhD, Stanford University

**Research Associate:**

Robert Reichardt, PhD, Pardee RAND Graduate School

Kelly Hupfeld, JD, Northwestern University

**Professors Emeritus:**

John Buechner, PhD, University of Michigan

Dale Neugarten, PhD, University of Southern California

The master of public administration (MPA) is designed to provide graduate professional education for students who wish to prepare themselves for careers in public management or policy, in nonprofit organizations or in private corporations that interface with the other sectors.

The program also offers to those already in public service an opportunity to pursue additional education as a means of furthering their careers.

## MPA AND MCJ—General Information

### Admission Requirements

A baccalaureate degree from a college or university of accredited standing, with a minimum GPA of 3.0. Two sets of official transcripts are required from all higher education institutions attended.

Three recommendations from qualified references. Recommendations may be from professors, employers and/or others acquainted with the prospective student's professional and/or academic work.

Applicants are required to take the GRE, the GMAT or the LSAT unless they meet the requirements for waiver. Standard graduate admission test scores are normally waived when the candidate already has a graduate degree in another field from an accredited institution. Other applicants may have test scores waived if they have an undergraduate GPA of 3.0 or better *and* they have *significant* professional employment in management or policymaking positions for a minimum of 10 years or the equivalent.

A current resume highlighting professional accomplishments and community involvement.

International students whose first language is not English are required to take the TOEFL or IELTS. A score of 550 or higher on the paper-based exam or 213 or higher on the computer-based exam is required for the MPA or 525/197 for the MCJ.

All application material and test scores should be sent to SPA, University of Colorado Denver, Campus Box 142, P.O. Box 173364, Denver, CO 80217-3364.

SPA will process applications as they come in. Master-level applicants generally receive notification of their admission status three weeks after all materials have been received in the office. The preferred deadlines listed below allow students to receive best consideration for scholarships, financial aid and course selection. *Students who do not meet the preferred deadline may still submit application materials until approximately one month before the start of classes and will be considered on a space-available basis.*

<i>Semester</i>	<i>Preferred Application Deadline</i>	<i>Final Deadline*</i>
Fall	March 15	August 1
Spring	October 15	December 1
Summer	March 15	May 1

\*Final deadline does not apply to international students who should contact the Office of International Admissions for deadline information.

## Provisional Admission

Under special circumstances, a student may be admitted on provisional status for one semester. Students admitted on a provisional basis take two courses in their first semester. MPA students may select two of the following: P AD 5001, 5003 or 5004. They may take no other courses during that semester. Based on their performance in these courses, a decision will be made concerning their admission into the program.

## Nondegree Admissions

Students may register as nondegree students while developing their application packet. However, students are discouraged from taking many courses as a nondegree student if they hope to pursue a degree. **Nine semester hours taken in the program as a nondegree student may be applied to the master's degree programs with approval of an advisor.** Nondegree student application forms are available in the Office of Admissions or online.

## Transfer of Credit to SPA

Up to 9 semester hours of appropriate graduate work from an accredited college or university may transfer, if such credit was not applied to a completed degree.

## Limitation of Course Load

The normal course load for a full-time student is 9 semester hours. A student who is employed full time may not carry more than 9 hours unless an excess load has been approved in advance by the faculty advisor.

## Financial Assistance

Students in the master's degree programs are eligible for several types of financial assistance. Educational loans require application to the Office of Financial Aid on the Downtown Campus and completion of the FAFSA. A number of students secure internships or other part-time positions with local, state and federal agencies in the Denver metropolitan area. Scholarship assistance is available on a limited basis.

The school receives announcements for fellowships from various government organizations and actively seeks additional funding for student support in the form of internship positions and research assistantships.

Persons interested in applying for financial assistance should inquire in the SPA office. The deadline for current students is March 15 for the fall term. Prospective students seeking

scholarship funds should have complete scholarship applications on file at the SPA office by the preferred application deadline for the semester they are requesting funds.

## The Internship Program

An internship for the MPA and MCJ programs is required for students who have not had significant public, nonprofit or private-sector experience. The purpose of the internship is to continue the linkage between theory and practice that is the philosophical basis of SPA. The internships generally involve part-time work. A maximum of three semester hours will be awarded for internship service. Great care is taken by the SPA to ensure that the internship experience meets the intellectual needs of the student. Placements have included the Governor's Office, Colorado General Assembly, Denver Mayor's Office, City of Denver, Denver Police Department, Boulder Crime Lab, Western Governor's Association, the National Conference of State Legislatures, the Colorado Department of Public Health and Environment and the Denver Center for the Performing Arts.

## Time Limit for Master's Degree

Master's degree students must complete all course work and degree requirements within six years of registration in their first course.

## Degree Requirements

The minimum requirements for the basic MPA degree are outlined below. Occasionally, changes are made; students may graduate under the requirements that were in effect when they were admitted.

### 1. Graduate Course Work

All students must complete a minimum of 36 semester hours of graduate course work, with an average of B or better. No more than 6 semester hours of independent study can be applied toward the degree. Students who have not had professional work experience in the public or nonprofit sectors must complete an internship through an additional 3-semester-hour course described in No. 6 below, bringing their total semester-hour requirements to 39.

### 2. Complete the Following Core Courses

All MPA students (with the exception of those in the executive MPA option) must complete the following core courses or approved equivalents:

P AD 5001 - Introduction to Public Administration and Public Service. **Semester Hours: 3**

P AD 5002 - Organizational Management and Change. **Semester Hours: 3**

P AD 5003 - Research and Analytic Methods. **Semester Hours: 3**

P AD 5004 - Economics and Public Finance. **Semester Hours: 3**

P AD 5005 - The Policy Process and Democracy. **Semester Hours: 3**

P AD 5006 - Leadership and Professional Ethics. **Semester Hours: 3**

**Total: 18 Hours**

Students must receive a grade of *B-* or better in each core course. Students who earn a lower grade may repeat the course once to attempt to earn a *B-* or better.

### **3. Electives**

All MPA students must complete 15 hours of electives. Courses in which a student earns a grade of less than a *C* will not be counted toward a degree.

### **4. Advanced Seminar Class**

All MPA students, except those pursuing the thesis option, must complete the advanced seminar class during the last semester of their degree program. All core courses must be completed before beginning the advanced seminar.

P AD 5361 - Advanced Seminar in Public Policy and Management. **Semester Hours: 3**

### **5. Thesis Option**

The thesis option is available in lieu of PAD 5361 for MPA students who have an interest in pursuing a topic in-depth or who are planning to pursue a career in research or academia. Students must receive approval from their faculty advisor or the MPA director to pursue the thesis option. The thesis is a six credit course that normally spans two semesters.

### **6. Internships**

Students who have limited experience (generally defined as less than one year of experience) in public, nonprofit or relevant private-sector service must enroll in P AD 6910, Field Study in Public Administration. The decision to require P AD 6910 for a particular student is made by the faculty admissions committee or the student's faculty advisor upon the student's acceptance to the MPA program. A minimum of 300 hours of supervised work and study is required to earn 3 semester hours of credit. This requirement raises the total semester hours needed to earn the MPA degree to 39.

## **MPA Options**

### **Concentrations and Graduate Certificates**

All SPA concentrations are a total of 15 semester hours and may either be taken as part of the MPA program or as a stand-alone graduate certificate.

A student *may* choose to select one of the concentrations described below or may complete the MPA without a specified concentration. Students completing a concentration take their electives in the area of their concentration, complete the advanced seminar project in the area of their concentration and are advised by faculty from the concentration. The concentrations and their particular required courses are:

## **Environmental Policy, Management and Law Concentration**

Students take at least two of the three courses listed below:

P AD 5631 - Seminar in Environmental Politics and Policy. **Semester Hours: 3**

P AD 5632 - Seminar in Environmental Management. **Semester Hours: 3**

P AD 5633 - Seminar in Natural Resource and Environmental Health Law. **Semester Hours: 3**

Electives approved by advisor (3) (6-9 semester hours)

**Total: 15 Hours**

## **Local Government Concentration**

Students take at least two of the three courses listed below:

P AD 5625 - Local Government Management. **Semester Hours: 3**

P AD 5626 - Local Government Politics and Policy. **Semester Hours: 3**

P AD 5628 - Urban Social Problems. **Semester Hours: 3**

Electives approved by advisor (3) (6-9 semester hours)

**Total: 15 Hours**

## **Domestic Violence Concentration**

Students take four specified courses and one elective.

P AD 5110 - Seminar in Nonprofit Management. **Semester Hours: 3**

P AD 5910 - Women and Violence: A Sociological Perspective. **Semester Hours: 3**

P AD 5920 - Psychology of Violence Against Women. **Semester Hours: 3**

P AD 5930 - Battered Women and the Legal System. **Semester Hours: 3**

Elective approved by advisor (1) (3 semester hours)

**Total: 15 Hours**

## **Emergency Management and Homeland Security Concentration**

Students take two required courses as well as electives approved by advisor.

GEOG 5230 - Hazard Mitigation and Vulnerability Assessment. **Semester Hours: 3**

P AD 5650 - Disaster and Emergency Management Policies. **Semester Hours: 3**

Electives approved by advisor (3) (6-9 semester hours)

**Total: 15 Hours**

The emergency management and homeland security concentration requires the completion of three electives chosen from a preapproved, multidisciplinary list of courses relevant to emergency management. Students may choose electives in one of three tracks: policy and management; spatial analysis, planning and quantitative assessment; or public safety, homeland security and justice.

## **Nonprofit Organizations Concentration**

Students take two required courses as well as nonprofit electives approved by advisor.

P AD 5110 - Seminar in Nonprofit Management. **Semester Hours: 3**

P AD 5140 - Nonprofit Financial Management. **Semester Hours: 3**

Other nonprofit courses (9 semester hours)

**Total: 15 Hours**

## **The Accelerated Cohort**

The accelerated MPA is a fast-paced, full-time option that brings academically superior students together with a dedicated research and teaching faculty in the midst of the vibrant downtown Denver environment.

The accelerated option enables students to focus their energies in a concentrated program of study and earn a nationally accredited, 36-hour MPA in 12 months. (It is preferred that applicants have some knowledge of economics, statistics and political science.)

The cost for the accelerated option is the same for both in-state and out-of-state students, providing out-of-state students with substantial savings.

The students in the cohort enjoy a unique experience as they go through all classes in the MPA together, fostering a community of scholar-practitioners.

Students are admitted to the program in cohorts of approximately 20 participants. A new cohort starts each fall. The cohort format helps to increase the opportunity to become acquainted with other graduate students and increases the opportunities for interaction between program participants and faculty.

## **The Executive Option**

The School of Public Affairs and the management development centers of the federal Office of Personnel Management have formed a partnership to offer an innovative course of study for selected senior level professionals in the public and nonprofit sectors.

The executive MPA option provides students with an opportunity to earn a master's degree targeted at improving their leadership competencies, while also offering significant flexibility in customizing coursework to fit students' individual needs and career objectives. In addition, the course formats—online courses and weekend or week-long intensive meetings—enable students to fit their study into the framework of busy lives.

The executive MPA option is intended to serve high-level managers and policy experts from public agencies—federal, state and local—as well as those from the nonprofit sector.

## **Program Design**

The executive MPA option requires 30 semester hours of credit plus two required seminars at one of the management development centers of the federal Office of Personnel Management. One is in Aurora, Colorado; the other is outside Washington, D.C. The first required seminar is an assessment seminar. Students explore their own managerial and leadership styles, their personality types and their levels of competence in a variety of executive skills. A group of highly-skilled trainers and psychologists administers and interprets test results, and participants use this self-knowledge to plan their MPA degree.

Near the end of the program, students also participate in one of the management development centers' core leadership seminars. These seminars focus on developing competencies identified by the federal government as necessary for its highest-level managers, the senior executive service. The required Western Management Development Center courses should total six semester hours of graduate credit. More information is available online at [www.leadership.opm.gov](http://www.leadership.opm.gov) or by e-mail from WMDC Program Manager Bruce Kirschner at [bhkirsch@opm.gov](mailto:bhkirsch@opm.gov).

Executive students must take P AD 5001, Introduction to Public Administration and Public Service, as one of their first courses. They then must select a minimum of three of the core courses listed below. Their advisor will assist in this selection. They must be able to demonstrate that they have gained competencies in the core courses they do not take through job experience and/or past course work.

Three of five are required:

P AD 5002 - Organizational Management and Change. **Semester Hours: 3**

P AD 5003 - Research and Analytic Methods. **Semester Hours: 3**

P AD 5004 - Economics and Public Finance. **Semester Hours: 3**

P AD 5005 - The Policy Process and Democracy. **Semester Hours: 3**

P AD 5006 - Leadership and Professional Ethics. **Semester Hours: 3**

### **Total: 9 Hours**

These courses may be taken at one of SPA's sites in Denver, Colorado Springs or Grand Junction, or, for students who live outside of Colorado, online.

Students also take five elective courses (15 semester hours), which may be selected either from the offerings at the management development centers or from SPA. Both partners provide a wide variety of courses. At least 18 semester hours must be SPA course work.

At or very near the end of their program, students participate in P AD 5361, Advanced Seminar. In this course, students engage in a self-designed professional project that integrates their new skills and knowledge. In addition, they reassess their professional competencies, charting the progress they have made during the program and designing a plan for future developmental experiences.

## **Online Option**

SPA provides a unique opportunity for students who live at a distance from the university to obtain a MPA degree.

Designed to serve students who are looking for a high-quality education, but who need an alternative to traditional classroom instruction, students may elect to do one or all of their courses online. This option allows students to complete the entire degree at a distance or to choose to come to campus for some courses while using an interactive online format for others. For both in-state and out-of-state online students, tuition is comparable to the rate charged to in-state students for courses that meet in the classroom. The nonprofit organization concentration is available online, as well as a variety of other electives leading to a general MPA degree. Students in the executive option may also choose to do all SPA course work online.

## **Domestic Violence Cohort**

The first graduate program of its kind in the nation, the University of Colorado Denver's MPA concentration in domestic violence focuses on the management and policies surrounding domestic violence, as well as grass-roots social justice work and best practices in this emerging field. Each fall, 10 to 20 students are accepted into the cohort program, allowing the participants to build a strong community of advocates and learners.

The program invites students from around the world to participate in a unique cohort program, which combines online courses with five intensive campus seminars spaced throughout the two-year program. Students may choose to take all courses in the classroom if they wish.

The cost of the domestic violence concentration courses is the same for in-state and out-of-state students. Nonresident students pursuing the MPA with a concentration in domestic violence may also qualify for reduced tuition through the Western Regional Graduate Program which covers 14 western states.

## **Western Slope Cohort**

Public and nonprofit sector professionals living in Colorado's Western Slope have the opportunity to earn a MPA without traveling to the Front Range. SPA offers one MPA course each semester in Grand Junction at Mesa State College and supplements these offerings with online courses. Courses are designed to integrate the academic and applied experiences necessary to be an effective modern manager. The courses are offered in an intensive weekend format and emphasize the needs of small and rural communities.

## **Public History, MA in History**

The MA program in history offers graduate-level major and minor fields in public history. Public history is a field of study that applies historical methods to the public sphere. This graduate major does not require a concentration, but students can choose to concentrate in museum studies or historic preservation. Public history majors can minor in any subspecialty the department currently offers. Students majoring in U.S., European or global history can also minor in public history.

**Admission Requirements—See History MA**

### **Degree Requirements**

#### **Required Introductory Course: 3 Hours**

HIST 6013 - Introduction to the Professional Study of History. **Semester Hours: 3**

#### **Major Courses: 18 Hours**

HIST 5234 - Introduction to Public History. **Semester Hours: 3**

**Concentration Requirement (optional)**

Students who choose to concentrate in museum studies or historic preservation must take either

HIST 5231 - History in Museums. **Semester Hours: 3**

-OR-

HIST 5232 - Historic Preservation. **Semester Hours: 3**

**Research Seminar (3 hours)**

Research seminars focus on students' development of an original, primary research paper.

**Major Electives (9-12 hours)**

Electives are made up of courses in public history, which focus on methodology and practice and thesis or project credits. These courses include:

HIST 5133 - Management of Material Culture and Museum Collections. **Semester Hours: 3**

HIST 5228 - Western Art and Architecture. **Semester Hours: 3**

HIST 5229 - Colorado Historic Places. **Semester Hours: 3**

HIST 5240 - National Parks History. **Semester Hours: 3**

HIST 5242 - Oral History. **Semester Hours: 3**

HIST 5243 - Public History Administration. **Semester Hours: 3**

HIST 5244 - Interpretation of History in Museums: Exhibits and Education. **Semester Hours: 3**

HIST 5245 - Heritage Tourism. **Semester Hours: 3**

HIST 6645 - Archival Management. **Semester Hours: 3**

HIST 6992 - Seminar: Colorado Studies. **Semester Hours: 3**

Additionally, special topics courses may be offered in such areas as historic reenactments, monuments and memory and recreating historic house interiors. Students who didn't take HIST 5231 or HIST 5232 as their concentration requirement may use these courses toward their elective requirements.

**Minor Electives: 12 Hours**

Electives are made up of courses in the minor field, including readings courses, which address specific field historiographies, or research seminars.

## **Open Elective: 3 Hours**

Students may use the open elective to explore a course outside their major or minor or to do extra course work in one of their fields.

## **Total: 36 Hours**

### **INDEPENDENT STUDIES AND/OR INTERNSHIPS**

Candidates may register for up to 6 hours of internships or independent study, only one of which may be at the 6000-level. Only in exceptional circumstances will students be allowed to satisfy the research seminar requirement via independent study. *Any independent study at the 6000-level needs the permission of the graduate advisor.* Students interested in pursuing an independent study must find a faculty member willing to oversee their work, and they should expect the workload for an independent study to equal or exceed that required for other courses at the same level.

HIST 5840 - Independent Study. **Semester Hours:** 1 to 3

HIST 6840 - Independent Study. **Semester Hours:** 1 to 3

HIST 6939 - Cooperative Education. **Semester Hours:** 1 to 6

### **COMPREHENSIVE EXAMINATIONS**

All history MA candidates must pass a comprehensive examination in the major and minor fields after the completion of course work and before embarking on a thesis, curriculum project or public history project. The comprehensive exam evaluates students' knowledge of their course work and their reading lists for their major, minor and concentration. In answering their exam questions, students are expected to construct arguments and to show mastery of the historiographies, narratives and historical content in their fields. The comprehensive exam is administered and evaluated by a committee of the major advisor, the minor advisor and an outside reader from the history faculty.

## **Master's Degree Extended Research Options**

The MA program in history offers a set of courses in which students can develop extended research interests. Students must select an advisor and develop a proposal for a specific research agenda in the semester before beginning work on a project.

### **REQUIRED PUBLIC HISTORY THESIS (HIST 6950) OR PROJECT (HIST 6952)**

Students majoring in public history must complete either a thesis (6 semester hours) or a project (3 semester hours).

### **OPTIONAL ADVANCED HISTORY CURRICULUM DEVELOPMENT (HIST 6951)**

Students who undertake their master's program when they are already teachers can choose to construct curriculum projects relevant to their teaching practice. See the separate section below on "Opportunities for Teachers and Teachers-in-Training."

HIST 6950 - Master's Thesis. **Semester Hours:** 1 to 6

HIST 6951 - Masters Project: Advanced History Curriculum Development. **Semester Hours:** 1 to 6

## **Thesis Requirements**

Students writing theses are expected to develop an original research agenda resulting in an extended paper. Students work with their major field advisor, who will help guide them through the process of research and writing. Students are expected to take no less than two semesters (enrolled in HIST 6950) to complete their theses. Before registering for HIST 6950, students must have a thesis proposal and initial bibliography approved by their advisor. The first semester of the thesis course is organized as a seminar in which students meet regularly with a department member and other thesis writers.

A thesis is evaluated by a committee of three, including the major advisor and two other faculty members chosen by the student in consultation with the major advisor. Upon completion of the thesis, the student meets with the committee members, who ask questions about the research and conclusions which the student must defend. In many instances, the committee will require further revisions, sometimes major in scope, before the thesis is accepted and cleared for submission to the Graduate School in fulfillment of degree requirements.

## **Project Requirements**

In lieu of a thesis, public history majors may choose to enroll in one semester of HIST 6952 to complete a public history project. Projects, which are usually conducted in collaboration with a public history organization, can entail creating an exhibit, organizing a museum or archival collection, conducting a preservation survey, or similar activities. Students are required to prepare a paper describing the process and results of their project.

## **Opportunities for Teachers and Teachers-in-Training**

### **Curriculum Projects**

Licensed teachers enrolled in the history graduate program may choose to complete a curriculum development project. Students arrange curriculum development projects with a sponsoring faculty member. Generally, students are expected to develop and submit a complete course curriculum plan for each 3-semester-hour project. Projects need to show evidence of

familiarity with the relevant historiographies and primary sources. Students may apply the credits from HIST 6951 to either the major field or the minor field, depending on the project subjects. Curriculum plans must meet minimum criteria established by the history department in the document "Advanced History Curriculum Development Projects" section.

HIST 6951 - Masters Project: Advanced History Curriculum Development. **Semester Hours:**  
1 to 6

(3 or 6 semester hours in their major field, or 3 semester hours in their major and 3 semester hours in their minor)

## Secondary Teacher Licensure

Students interested in becoming secondary history and social studies teachers may choose to earn both the MA in history and secondary teacher licensure. For detailed information, see the following URL: <http://thunder1.cudenver.edu/clas/history/maPlanV.html>

We strongly encourage students to complete the School of Education & Human Development's initial professional teacher education (IPTE) program before enrolling in the history MA program; the history graduate program and the IPTE program require separate admission. Students complete 36 semester hours in history and 37 semester hours in the IPTE program. For the history degree, students take 18 semester hours in their major field, 12 semester hours in their minor field and 6 semester hours in curriculum and methods course work, which apply both to the IPTE program and the MA in history:

HIST 5464 - Problems and Methods in Teaching History and Social Studies I. **Semester Hours:** 3

-and-

HIST 5465 - Problems and Methods in Teaching History and Social Studies II. **Semester Hours:** 3

## Certificate in Historic Preservation

The history department also offers a certificate in historic preservation in conjunction with the College of Architecture and Planning. History students pursuing the certificate should consult the Web page for this program as well as their history advisor to determine appropriate course work.

**History MA**

# Reading and Writing Option, MA curriculum and instruction

# **Literacy, Language and Culturally Responsive Teaching**

## **MA Requirements for the Reading and Writing Option and Secondary English Education Option, plus Reading Teacher Endorsement and Certificate Programs**

**Office:** Lawrence Street Center, 701

**Telephone:** 303-315-6300

**Fax:** 303-315-6311

**E-mail:** [education@ucdenver.edu](mailto:education@ucdenver.edu)

**Web sites:** [www.ucdenver.edu/education/literacy](http://www.ucdenver.edu/education/literacy) and [www.ucdenver.edu/education/englished](http://www.ucdenver.edu/education/englished)

### **Reading and Writing**

#### **Secondary English**

#### **Early and Adolescent Literacy Certificates**

## **Faculty**

Information about faculty in this program is available online at [www.ucdenver.edu/education/literacy](http://www.ucdenver.edu/education/literacy).

The faculty of literacy, language and culturally responsive teaching (L2CRT) believe that effective teaching requires an awareness of and the ability to respond to individual differences. L2CRT faculty also emphasize the importance of teachers as scholars and reflective practitioners. In particular, teachers must understand how linguistic and cultural diversity affect their teaching. Two themes run throughout all program offerings. The first concerns the importance of recognizing a variety of literacies—“home” literacies, school literacy, “mainstream” literacy, first and second language literacies—and to develop teaching practices that utilize an understanding of the complexity of literacy development across language contexts. The second theme involves the meaningful use of language and literacy to improve the quality of one’s life. As an approach to teaching, this theme emphasizes the creation of diverse, rich environments in which learners experience oral and written language as part of authentic tasks, and where concern for the cultural and linguistic heritage of the students is evident.

## **Reading and Writing Option and Reading Teacher Endorsement**

This master’s program is designed for K-6 and 7-12 teachers. Those interested in elementary reading and writing should communicate with Professors Espinoza, Nathenson-Mejia or Taylor.

Those interested in secondary and adult reading and writing should communicate with Professor Shanklin (see Web site for faculty contact information).

Reading is a credentialed program meeting the Colorado Department of Education requirements for reading teacher endorsement. Therefore, students who obtain a master's degree emphasizing reading education from UC Denver are certified to hold positions in public and private schools as special developmental and remedial reading teachers in K–6 or 7–12. This program is also valuable for elementary and secondary teachers who wish to enhance reading and writing instruction in their classrooms.

By placing emphasis on the reading, writing and oral and visual language development of culturally, linguistically and academically diverse student populations, this master's program is at the forefront of the field. Language is approached from a socio-psycholinguistic perspective that emphasizes the learner's construction of meaning rather than the learning of isolated skills. Importance is placed on using theory, inquiry and personal reflection to inform classroom practice. The program prepares teachers to become decision makers capable of developing learner-centered curricula where each student's reading and writing abilities are assessed to address developmental or special needs.

## Curriculum

Course offerings lead to an MA degree in curriculum and instruction with an emphasis in reading and writing, as well as a reading teacher endorsement, at one of two levels: K–6 or 7–12.

Those who have completed UC Denver's graduate teacher education licensure program must earn an additional 27 semester hours to obtain the MA and endorsement. Those who completed licensure through other means must earn an additional 36 semester hours to obtain the MA and endorsement.

Teachers may add a reading teacher endorsement to an already-earned master's degree in education by taking those courses listed under the chosen endorsement level. (In the state of Colorado, the reading teacher endorsement cannot simply be added to a bachelor's degree.) Electives and core courses are not required. Two additional courses must be taken in other areas specified by the Colorado Department of Education. In many cases, previous master's degree courses will satisfy this requirement.

<b>Requirements for Reading and Writing Program (Degree/Endorsement Options)</b>						
	<b>ELEMENTARY (K-6)</b>			<b>SECONDARY (7-12)</b>		
<b>Course</b>	<b>MA &amp; CDE Endorsement</b>	<b>MA &amp; CDE Endorsement (when</b>	<b>CDE Endorsement Only</b>	<b>MA &amp; CDE Endorsement</b>	<b>MA &amp; CDE Endorsement (when added</b>	<b>CDE Endorsement Only</b>

		<i>added to UC Denver's graduate teacher education licensure program)</i>			<i>to UC Denver's graduate teacher education licensure program)</i>	
LLC 5020 - Workshop in Literacy and Language Teaching.	Required		Required	Required	Required	Required
LLC 5810 - Workshop in Language Acquisition and Development .	Required	Required	Required	Required	Required	Required
LLC 5910 - Foundations of Language, Literacy and Culture.	Required	Required	Required	Required	Required	Required
LLC 5710 - Primary Literacy: Pre-3rd Grade.	Required	Required	Required			
LLC 5720 - Writing: Process, Development , and Teaching Grades 3-12.	Required	Required	Required	Required	Required	Required
LLC 5730 - Language and Literacy Across the Curriculum.	Required		Required	Required		Required
Children's literature	Select one	Select one	Select one			

course, per advisor approval						
LLC 5740 - Adolescent Literature.				Required	Required <i>(waived if taken as part of English Licensure)</i>	Required
LLC 6910 - Seminar and Practicum in Literacy and Language, K-6.	Required	Required	Required			
LLC 6911 - Seminar and Practicum in Literacy and Language, 7-12+.				Required	Required	Required
LLC 5055 - Linking Assessment and Instruction in Language and Literacy, Part I.	Required	Required	Required	Required	Required	Required
LLC 6915 - Seminar and Practicum in Literacy Professional Development .	Required	Required		Required	Required	Required
Core course in Research and Evaluation Methodology (REM) - see list below	Select one	5080		Select one	5080	
Interdisciplinary core	Select one			Select one		

course - see list below						
Graduate-level School of Education and Human Development elective				Select one		
Portfolio	Required	Required		Required	Required	
PLACE Exam	Required	Required	Required	Required	Required	Required
Total Semester Hours	36	27	27	36	27	27

## Secondary English Education Option

The master's program in secondary English education is designed to enhance the preparation of middle and high school English/language arts teachers. Students complete course work in language development, assessment and field experiences. With the help of their advisor, they also select specific courses from the English Department or within the School of Education and Human Development that provide a well-rounded repertoire of knowledge and skills to fulfill the needs of an English educator. Special consideration is given to working with diverse ethnic populations. Students interested in English education should see Professor Shanklin (see Web site for faculty contact information).

## Program Requirements

To earn a master of arts degree in curriculum and instruction with an emphasis in secondary English education, students must complete the following:

30 graduate semester hours in English education

6 graduate semester hours of core courses

performance-based assessments that culminate in a portfolio finalized in the last semester of the program as fulfillment of the MA comprehensive exam requirement

Each student's course plan is developed in conjunction with his/her advisor. Please review [www.ucdenver.edu/education/englished](http://www.ucdenver.edu/education/englished) for recommended course sequence.

LLC 5055 – Linking Assessment and Instruction in Language and Literacy. Part I. Semester Hours: 3

LLC 5740 – Adolescent Literature. Semester Hours: 3

LLC 5760 – Theory and Methods of English Education. Semester Hours: 3

-OR-

LLC 5835 – Special Topics: Advanced Theories and Methods of English Education. Semester Hours: 3

LLC 5810 – Workshop in Language Acquisition and Development. Semester Hours: 3

LLC 5910 – Foundations of Language, Literacy and Culture. Semester Hours: 3

LLC 6911. Seminar and Practicum in Literacy and Language, Grades 7-12+. Semester Hours: 3  
Research and Evaluation Methodology core course (see list below).

Interdisciplinary core course (see list below).

Four electives, per advisor approval, from the English department and/or the School of Education & Human Development. The following are recommended:

LLC 5720 – Writing: Process, Development and Teaching, Grades 3-12. Semester Hours: 3

-OR-

ENGL 5110 – Denver Writing Project. Semester Hours: 3

Courses in working with English language learners and in instructional technology may also be helpful. For a technology course, please contact the professor about prerequisite knowledge.

**Total: 36 semester hours**

Program Requirements--When Added to UC Denver's Graduate Teacher Education Licensure Program

MA in curriculum and instruction with emphasis in secondary content leadership (English), when added to UC Denver's graduate teacher education licensure program:

18 graduate semester hours

performance-based assessments that culminate in a portfolio finalized in the last semester of the program as fulfillment of the MA comprehensive exam requirement

Each student's course plan is developed in conjunction with his/her advisor. Please review [www.ucdenver.edu/education/englished](http://www.ucdenver.edu/education/englished) for recommended course sequence.

FNDS 5050 – Critical Issues in American Education. Semester Hours: 3

-OR-

IPTE 5080 – Principals and Practice of Change. Semester Hours: 3

-OR-

SPED 5300 – Collaborating in Schools and Communities. Semester Hours: 3

REM 5080 – Research for Teachers. Semester Hours: 3

Four electives, per advisor approval, from the English Department and/or the School of Education and Human Development. The following are recommended:

LLC 5720 – Writing: Process, Development and Teaching, Grades 3-12. Semester Hours: 3

-OR-

ENGL 5110 – Denver Writing Project. Semester Hours: 3

Courses in working with English language learners and in instructional technology may also be helpful. For a technology course, please contact the professor about prerequisite knowledge.

**Total: 18 semester hours**

## Core Courses

### Research and Evaluation Methodology

REM 5000 - Orientation to Research and Measurement in Education. Semester Hours: 3  
REM 5050 - Assessment for Teachers. Semester Hours: 3  
REM 5080 - Research for Teachers. Semester Hours: 3  
REM 5100 - Basic Statistics. Semester Hours: 3  
REM 5200 - Introduction to Research Methods. Semester Hours: 3  
REM 5300 - Introduction to Measurement. Semester Hours: 3

### Interdisciplinary

EPSY 5100 - Advanced Child Growth and Development Semester Hours: 3  
EPSY 5140 - Advanced Adolescent Growth and Development. Semester Hours: 3  
EPSY 5220 - Adult Learning and Education. Semester Hours: 3  
EPSY 6200 - Human Development Over the Life Span. Semester Hours: 3  
FNDS 5050 - Critical Issues in American Education. Semester Hours: 3  
FNDS 5420 - History and Philosophy of Education: Twentieth Century America. Semester Hours: 3  
LLC 5140 - Multicultural Education. Semester Hours: 3  
LLC 5150 - Culture of the Classroom. Semester Hours: 3  
LLC 5160 - Historical and Legal Foundations of Bilingual Education. Semester Hours: 3  
LLC 5820 - Techniques in Teaching English as a Second Language. Semester Hours: 3

### Cumulative Portfolio

The MA portfolio counts as the comprehensive exam for the master's degree. The portfolio is an accumulation of the performance based assessments completed during program courses and reflects on the student's development over the course of the degree program. Reading and writing students must include confirmation of Reading Teacher PLACE exam registration in their portfolios. Information about the PLACE is online at [www.place.nesinc.com](http://www.place.nesinc.com).

### Course Scheduling

During the fall and spring semesters, most university courses are offered in the late afternoon and evening and meet for three hours once a week over a 16-week semester. Some alternative course schedules are available, such as meeting on five Friday-evening/all-day Saturday combinations. In the summer semester, three- to eight-week sessions are offered, and courses may be in the morning, afternoon or evening. A current schedule of courses is available online at <http://courses.cudenver.edu>.

### Planning

For practicing full-time teachers, we recommend taking one course each fall and spring semester, and up to two courses each summer. Plan carefully because courses are intended to build upon each other, and some courses are only offered once a year.

## **Active Status in the Graduate School**

Students must complete their programs within seven years, maintaining a GPA of 3.0. Students typically take four courses each calendar year. Failure to enroll over three contiguous semesters will result in a requirement to resubmit part I of the application for admission and a letter of intent.

## **Early and Adolescent Literacy Certificates**

The early literacy certificate and adolescent literacy certificate each include three graduate-level courses (for a total of 9 semester hours) and are conveniently offered entirely online. They are specifically designed to help licensed teachers develop the skills necessary to reach student readers. To find out more, please visit [www.ucdenver.edu/education](http://www.ucdenver.edu/education) or email [cpe@ucdenver.edu](mailto:cpe@ucdenver.edu).

To learn about how these certificate credits may apply toward one of the above programs in reading and writing, contact [education@ucdenver.edu](mailto:education@ucdenver.edu).

## **Recording Arts MS**

► Graduate School Rules apply to this program

### **CAM Core Requirements**

### **Intellectual Competencies**

Must earn grade of C- (1.7) or higher in each section

### **English Writing/Speech**

ENGL 1020 - Core Composition I: CO1. **Semester Hours: 3**

ENGL 2030 - Core Composition II: CO2. **Semester Hours: 3**

**Total: 6 Hours**

### **Mathematics**

Select one course from the following list:

MATH 1010 - Mathematics for the Liberal Arts: MA1. **Semester Hours: 3 \***

MATH 1070 - Algebra for Social Sciences and Business: MA1. **Semester Hours: 3**

MATH 1080 - Polynomial Calculus: MA1. **Semester Hours: 3**

MATH 1110 - College Algebra: MA1. **Semester Hours: 3**

MATH 1120 - College Trigonometry: MA1. **Semester Hours: 3**

MATH 1130 - Precalculus Mathematics: MA1. **Semester Hours: 4**

MATH 1401 - Calculus I: MA1. **Semester Hours: 4**

MATH 2411 - Calculus II: MA1. **Semester Hours: 4**

MATH 2421 - Calculus III: MA1. **Semester Hours: 4**

MATH 2830 - Introductory Statistics: MA1. **Semester Hours: 3**

\*Math placement not required; recommended for CAM majors

**Total: 3 Hours**

## **Knowledge Areas**

Must earn a passing grade of *D-* (.7) or higher in each section.

## **Natural and Physical Sciences**

Select two courses from the list below. One course must have a laboratory (4 semester hours). The non-laboratory, 3-semester-hour course can be selected from list below or the MATH list above.

ANTH 1303 - Introduction to Biological Anthropology: SC1. **Semester Hours: 4**

BIOL 1550 - Basic Biology: Ecology and the Diversity of Life: SC1. **Semester Hours: 4**

BIOL 1560 - Basic Biology: From Cells to Organisms: SC1. **Semester Hours: 4**

BIOL 2051 - General Biology I: SC1. **Semester Hours: 3**

BIOL 2071 - General Biology Laboratory I: SC1. **Semester Hours: 1**

BIOL 2061 - General Biology II: SC1. **Semester Hours: 3**

BIOL 2081 - General Biology Laboratory II: SC1. **Semester Hours:** 1

CHEM 1474 - Core Chemistry: Chemistry For the Consumer: SC1. **Semester Hours:** 4

ENVS 1042 - Introduction to Environmental Sciences: SC1. **Semester Hours:** 4

GEOG 1202 - Introduction to Physical Geography: SC2. **Semester Hours:** 3 (Non-laboratory)

GEOL 1072 - Physical Geology: Surface Processes: SC1. **Semester Hours:** 4

GEOL 1082 - Physical Geology: Internal Processes: SC1. **Semester Hours:** 4

PHYS 1000 - Introduction to Physics. **Semester Hours:** 4

PHYS 1052 - General Astronomy I: SC1. **Semester Hours:** 4

PHYS 1100 - Foundations of Physics: SC2. **Semester Hours:** 4

PHYS 2010 - College Physics I. **Semester Hours:** 4

PHYS 2030 - College Physics Lab I: SC1. **Semester Hours:** 1

PHYS 2020 - College Physics II: SC1. **Semester Hours:** 4

PHYS 2040 - College Physics Lab II: SC1. **Semester Hours:** 1

PSY 2220 - Biological Basis of Behavior: SC2. **Semester Hours:** 3 (Non-laboratory)

**Total: 7 Hours**

## **Behavioral Sciences**

Select one course from the following list:

ANTH 1302 - Introduction to Archaeology: SS3. **Semester Hours:** 4

ANTH 2102 - Culture and the Human Experience: SS3. **Semester Hours:** 3

CMMU 1011 - Fundamentals of Communication: SS3. **Semester Hours:** 3

CMMU 1021 - Fundamentals of Mass Communication: SS3. **Semester Hours:** 3

PSY 1000 - Introduction to Psychology I: SS3. **Semester Hours:** 3

PSY 1005 - Introduction to Psychology II: SS3. **Semester Hours:** 3

**Total: 3 Hours**

## Social Sciences

Select one course from the following list:

ECON 2012 - Principles of Economics: Macroeconomics: SS1. **Semester Hours: 3**

ECON 2022 - Principles of Economics: Microeconomics: SS1. **Semester Hours: 3**

ENVS 1342 - Introduction to Environment and Society: SS2. **Semester Hours: 3**

ETST 2000 - Introduction to Ethnic Studies: SS3. **Semester Hours: 3**

GEOG 1102 - World Regional Geography: SS2. **Semester Hours: 3**

GEOG 1602 - Introduction to Urban Studies: SS2. **Semester Hours: 3**

GEOG 2202 - Natural Hazards: SS2. **Semester Hours: 3**

HBSC 2001 - Introduction to Community and Population Health Science: SS3. **Semester Hours: 3**

P SC 1001 - Introduction to Political Science: The Quest for Freedom and Justice: SS1. **Semester Hours: 3**

P SC 1101 - American Political System: SS1. **Semester Hours: 3**

SOC 1001 - Introduction to Sociology: SS3. **Semester Hours: 3**

SOC 2462 - Introduction to Social Psychology: SS3. **Semester Hours: 3**

**Total: 3 Hours**

## Humanities

Select two courses from the following list:

ENGL 1601 - Telling Tales: Narrative Art in Literature and Film: AH2. **Semester Hours: 3**

ENGL 2600 - Great Works in British and American Literature: AH2. **Semester Hours: 3**

ETST 2155 - African American History: HI1. **Semester Hours: 3**

FR 1000 - Introduction to Cultures of the French- Speaking World: AH1. **Semester Hours: 3**

GER 1000 - Germany and the Germans: AH1. **Semester Hours: 3**

HIST 1361 - U.S. History to 1876: HI1. **Semester Hours: 3**

HIST 1362 - U.S. History Since 1876: HI1. **Semester Hours: 3**

HIST 1381 - Paths to the Present I: HI1. **Semester Hours: 3**

HIST 1382 - Getting Here: Paths to the Present II: HI1. **Semester Hours: 3**

PHIL 1012 - Introduction to Philosophy: Relationship of the Individual to the World: AH3.  
**Semester Hours: 3**

PHIL 1020 - Introduction to Ethics and Society: The Person and the Community: AH3.  
**Semester Hours: 3**

PHIL 2441 - Logic and Language: AH3. **Semester Hours: 3**

RLST 1610 - Introduction to Religious Studies: AH3. **Semester Hours: 3**

RLST 2660 - World Religions: AH3. **Semester Hours: 3**

## **Total: 6 Hours**

## **Arts**

Select an art course not in your major. Must earn a passing grade of *D-* (.7) or higher.

Students may mix and match disciplines to reach 3 semester hours, if desired, or take a 3-semester-hour course from one discipline. For example:

**Music majors:** must take 3 semester hours in theatre, film and/or visual arts

**Visual arts majors:** must take 3 semester hours in music and/or theatre, film

**Theatre/film majors:** must take 3 semester hours in visual arts and/or music

## **Total: 3 Hours**

## **Cultural Diversity**

Must earn a passing grade of *D-* (.7) or higher.

Select one course from the following list:

ANTH 3142 - Cultural Diversity in the Modern World. **Semester Hours: 3**

CMMU 3271 - Communication and Diversity. **Semester Hours: 3**

ECON 3100 - Economics of Race and Gender. **Semester Hours: 3**

ENGR 3400 - Technology and Culture. **Semester Hours: 3**

ETST 3704 - Culture, Racism and Alienation. **Semester Hours: 3**

ETST 3794 - Ethnic Diversity in American Literature. **Semester Hours: 3**

HIST 3345 - Immigration and Ethnicity in American History. **Semester Hours: 3**

MGMT 4100 - Managing Cultural Diversity. **Semester Hours: 3**

PHIL 3500 - Ideology and Culture: Racism and Sexism. **Semester Hours: 3**

P SC 3034 - Race, Gender, Law and Public Policy. **Semester Hours: 3**

P SC 3035 - Political Movements: Race and Gender. **Semester Hours: 3**

PSY 4485 - Psychology of Cultural Diversity. **Semester Hours: 3**

RLST 4000 - Religion and Cultural Diversity. **Semester Hours: 3**

SOC 3020 - Race and Ethnicity in the U.S.. **Semester Hours: 3**

THTR 3611 - Drama of Diversity. **Semester Hours: 3**

**Total: 3 Hours**

## **International Perspectives**

Must earn a passing grade of *D-* (.7) or higher.

Select one course from the following list:

ENGR 3600 - International Dimensions of Technology and Culture. **Semester Hours: 3**

P SC 3022 - Introduction to Comparative Politics. **Semester Hours: 3**

P SC 3042 - Introduction to International Relations. **Semester Hours: 3**

HIST 3121 - The World at War, 1914-1945. **Semester Hours: 3**

**Total: 3 Hours**

A semester abroad in a country where the language is not the student's native language may fulfill this requirement. Preapproval is required!

## **Foreign Language**

Second-semester proficiency, 0-10 semester hours

Second-semester proficiency demonstrated by one of the following:

Second-semester, college-level courses with minimum grade of *C-* (1.7)

Satisfactory proficiency test

Completion of a second year (level II) high school course with a minimum grade of C- (1.7)

BS students in music are exempt from this requirement.

The master of science in recording arts (MS) comprises 34 semester hours of credit: 14 hours are required courses, 15 hours are electives and 4 hours are thesis/portfolio. Courses must be completed with a B (3.0) or higher to count toward degree progress.

## Required Courses

MSRA 5000 - Introduction to Graduate Studies. **Semester Hours:** 3

MSRA 5580 - Graduate Audio Seminar. **Semester Hours:** 3

MSRA 5590 - Graduate Audio Production. **Semester Hours:** 4

MSRA 6510 - Graduate Audio Studies Pedagogy. **Semester Hours:** 4

MSRA 6950 - Thesis in Professional Audio. **Semester Hours:** 4

MSRA 6951 - Professional Audio Portfolio Thesis. **Semester Hours:** 4

**Total: 18 Hours**

## Electives

Students may take courses not listed here, per approval of the faculty or academic advisor.

MSRA 5500 - Topics in Professional Audio. **Semester Hours:** 1 to 4 (fall and spring)

MSRA 5505 - Graduate Audio Sweetening. **Semester Hours:** 4 (fall and spring)

MSRA 5575 - Graduate Surround Sound. **Semester Hours:** 4 (fall and spring)

MSRA 6530 - Graduate Audio Forensics. **Semester Hours:** 4 (spring only)

or other courses as approved by MSRA advisor or program director.

**Total: 34 Hours**

Students may take courses not listed here, per approval of the faculty or academic advisor. Below is the suggested semester-by-semester sequencing of courses and semester hours.

## Fall

MSRA 5000 - Introduction to Graduate Studies. **Semester Hours: 3**

MSRA 5590 - Graduate Audio Production. **Semester Hours: 4**

Topics course (1 semester hour)

Two MSRA electives (8 semester hours)

**Total: 16 Hours**

## **Spring**

MSRA 5580 - Graduate Audio Seminar. **Semester Hours: 3**

MSRA 6510 - Graduate Audio Studies Pedagogy. **Semester Hours: 4**

MSRA elective (4 semester hours)

Topics courses (3 semester hours)

**Total: 14 Hours**

## **Summer**

MSRA 6950 - Thesis in Professional Audio. **Semester Hours: 4 or**

MSRA 6951 - Professional Audio Portfolio Thesis. **Semester Hours: 4**

**Total: 4 Hours**

## **Program Total: 34 Hours**

*The above progression is merely suggested and shows the quickest possible schedule for graduation (three semesters). Students may elect to enroll for less than the suggested semester hour total, and/or enroll in additional semesters as needed. Students can apply for graduation in any semester (fall, spring or summer) provided they have completed the required course work. All course work must be completed with a satisfactory grade of "B" (3.0) or higher. Students should not register for thesis/portfolio, unless approved by the faculty advisor.*

*Please refer to the master of science in recording arts Web site for additional information:  
<http://thunder1.cudenver.edu/musictech/masterdegree>.*

# **School Library and Instructional Leadership MA**

**Office:** Lawrence Street Center, 701  
**Telephone:** 303-315-6300  
**Fax:** 303-315-6311  
**E-mail:** [education@ucdenver.edu](mailto:education@ucdenver.edu)  
**Web site:** [www.ucdenver.edu/education/schoollibrary](http://www.ucdenver.edu/education/schoollibrary)

## Faculty

Information about SLIL faculty is available online at [www.ucdenver.edu/education/schoollibrary](http://www.ucdenver.edu/education/schoollibrary).

## Program Overview

The school library and instructional leadership program within the ILT master's degree program is a nationally recognized NCATE-AASL revised and approved school library media education program that leads to the Colorado Department of Education endorsement for school libraries. The program integrates information literacy standards through the use of collaborative planning, as approved by the American Association of School Libraries. Technology and library resources are seen as tools to increase student achievement by integrating the information literacy standards with the content standards of the classroom teacher. The program adheres to the constructivist theory of resource-based learning and promotes an appreciation of children's and adolescent literature. The program believes that school librarians require education as a teacher as well as a librarian, as advocated by the American Library Association and the International Association of School Libraries. As a school librarian, you will provide collaborative instruction, information access and leadership through the management of your library program and the library resources. Courses are offered in a completely online program, an evening on-campus program, or a monthly Saturday cohort scheduled in communities across Colorado.

Once admitted, students begin a plan of study that typically takes about two years to complete. Consult the SLIL Web site for more information about specific plans of study, course offerings and expectations of cohort groups.

## Admission Requirements

Admission decisions are based on undergraduate and graduate grades, external letters of recommendation, writing samples and fit with the program as reflected in a letter of intent. In some cases, results of a test (GRE) are also required. Prospective students should consult the SLIL program Web site for complete admission procedures and requirements.

## Professional Expectations

All students in the SLIL program are expected to show a strong commitment to the program and to maintain high academic, professional and ethical standards. Inappropriate or unprofessional conduct is cause for discipline or dismissal from the program.

## Technology Expectations

The SLIL program uses computers and related technologies either as a focus or a tool for learning. Students are expected to obtain an e-mail account and check it frequently. In addition to on-campus facilities, SLIL students need convenient access to Internet-connected computers off campus, either at their place of work or at home. In addition to textbooks, software purchases may be required or recommended for specific classes.

## Program Requirements

School library students also have a choice between endorsement-only and full master's programs. The master's program requires a minimum of 36 graduate semester hours. Students complete a plan of study consisting of courses and professional field experience. To receive Colorado teacher endorsement, students are required to pass the PLACE test in school library. This is a Colorado Department of Education requirement.

### An Example of Two-Year Plan for School Library Program

Courses are offered only in certain semesters and courses should be taken in a particular sequence based on when you start the program. Advising is required prior to enrolling in a course, even as a non-degree student, in order to ensure the most effective course sequencing and availability of courses.

#### Typical First Year

Fall	Spring	Summer
SL 5530 - Foundations of School Librarianship.* LLC 5790 - Children's Literature Through the Ages.***	SL 5020 - Collection Development.	SL 5110 - Integrating Instructional Technology Practices in School Libraries. (MA only) LLC 5740 - Adolescent Literature. ***

#### Second Year

Fall	Spring	Summer
SL 5160 - Managing School Library Programs. REM 5080 - Research for Teachers. *** SL 5911 - School Library Field Experience-Elementary. **	SL 5030 - Information Literacy and Reference. SL 5912 - School Library Field Experience-Secondary. ** Elective (2 semester hours) (MA only)****	SL 5040 - Information Storage and Utilization. SL 6999 - Leadership and Practice in School Libraries. (MA Only)

\* SL 5530 Foundations in School Librarianship should be taken as the first course in your program.

\*\* 80 hours of field experience hours are required. Field experience may be completed over the course of a year; online seminar hours will be completed during the field experience timeframe. Field experiences are completed within a pre-approved school library. See Field Experience Policy for more information.

\*\*\* LLC 5740; LLC 5790; and REM 5080 are offered on-campus in other semesters as well.

\*\*\*\* Electives are usually attendance at Colorado Association of Libraries (CAL) conference in the fall; CASL in the spring; or TIE in the summer.

## Comprehensive Examination for All SLIL Students

The comprehensive exam consists of a professional portfolio where in students demonstrate program competencies through work products and related accomplishments. The portfolio is created throughout the student's program and submitted for faculty review the final semester. For more information, see the ILT Web site. For complete details about the SLIL program and endorsement requirements, see the ILT Web site at [www.ucdenver.edu/education/schoollibrary](http://www.ucdenver.edu/education/schoollibrary).

# School Psychology EdS/Licensure

Degree

Admission Requirements

**Program Leader:** Franci Crepeau-Hobson

**Office:** Lawrence Street Center, 1113

**Phone:** 303-315-6315

**Fax:** 303-315-6349

**E-mail:** [education@ucdenver.edu](mailto:education@ucdenver.edu)

**Web site:** [www.ucdenver.edu/education/spsy](http://www.ucdenver.edu/education/spsy)

## Faculty

Information about faculty in the school psychology program is available online at [www.ucdenver.edu/education](http://www.ucdenver.edu/education).

## Degree

The educational specialist degree in school psychology is a 74 graduate semester-hour program that leads to licensure in school psychology by the Colorado Department of Education, national certification in school psychology by the National School Psychology Certification Board and the educational specialist degree (EdS) in school psychology.

This NASP-approved program allows students to create individual plans for meeting program requirements on a full- or part-time basis, during summer and academic year terms and during evening and weekend hours.

The school psychology faculty have adopted a preventative model of school mental health services. Upon completion of the program, students will be able to:

- screen for and recognize the early warning signs of social, emotional or academic risk, distinguishing between these and the typical development of infants, children and adolescents (birth–age 21)

- communicate effectively and consult collaboratively with students, parents, school professionals and community leaders to enhance the academic and mental health skills of students

- incorporate data-based decision making through formal and informal assessment procedures and planning interventions that enhance students' cognitive, social-emotional and behavioral competencies

- plan, implement and evaluate the effectiveness of preventative and remedial therapeutic interventions that strengthen students' mental health and academic skills

- advocate for children and families through the application of legal, ethical and professional standards for practice

## **Admission Requirements**

Successful applicants to the school psychology (SPSY) program will have obtained a minimum 3.0 undergraduate GPA and will score at least 1000 on the verbal and quantitative sections of the GRE. Also, applicants will submit a current resume, a statement of goals and three letters of recommendations. Applicants meeting these minimum standards will be invited to a half-day group interview that involves program orientation, a writing assignment and a group dynamics exercise.

Application materials are available by calling the Student Services Center at 303-315-6300 or coming to Lawrence Street Center, Suite 701. All materials must be submitted to the Student Services Center in one complete packet by the appropriate deadline —February 15 for fall semester. Application materials include the following:

- part I of the application for admissions

- tuition classification form

- \$50 application fee (make checks payable to the University of Colorado Denver )

- written statement

- three letters of recommendations (in sealed and signed envelopes)

- two official transcripts from each higher education institution attended (in the original, sealed envelope)

official GRE scores sent directly to the University of Colorado Denver

oath and consent

fingerprint card

online written response

## Requirements for the Educational Specialist Degree in School Psychology and Licensure

Students will complete course work in child development, learning and cognition, educational methods, professional issues, assessment, counseling, intervention and consultation. Specific course requirements include one prerequisite course, 20 graduate courses and 14 graduate semester hours (1700 clock hours) of supervised experiences. Prerequisites include an undergraduate or graduate course in exceptional children and an undergraduate or graduate course in tests and measurement. Students will complete the following core course work:

CPCE 5100 - Techniques of Counseling. **Semester Hours: 3**

CPCE 5810 - Multicultural Counseling Issues for Individuals and Families. **Semester Hours: 3**

EPSY 5100 - Advanced Child Growth and Development. **Semester Hours: 3 or**

EPSY 5140 - Advanced Adolescent Growth and Development. **Semester Hours: 3**

EPSY 5240 - Cognition and Instruction. **Semester Hours: 3**

REM 5400 - Introduction to Evaluation of Programs and Persons. **Semester Hours: 3**

REM 7110 - Intermediate Statistics. **Semester Hours: 3**

SPED 5780 - Literacy Intervention for Students with Disabilities. **Semester Hours: 3**

SPSY 5600 - Functional Behavior Assessment and Planning. **Semester Hours: 3**

SPSY 5800 - Workshop: Topics in School Psychology. **Semester Hours: 1 to 3**

Early Childhood Assessment & Intervention

Advanced Topics in Assessment III

SPSY 6100 - School Psychology: Professional & Legal Foundations. **Semester Hours: 3**

SPSY 6150 - Psychoeducational Assessment I. **Semester Hours: 4**

SPSY 6160 - Psychoeducational Assessment II. **Semester Hours: 3**

SPSY 6200 - Risk, Resilience, and Prevention in School Mental Health. **Semester Hours: 3**

SPSY 6350 - School-Based Interventions: Children, Youth and Families. **Semester Hours:**  
4

SPSY 6400 - School-Based Interventions: Groups, Classrooms and Systems. **Semester Hours:** 3

SPSY 6410 - Psychoeducational Services for Linguistically Diverse Students. **Semester Hours:** 3

SPSY 6420 - Crisis Prevention, Planning and Intervention. **Semester Hours:** 3

SPSY 6450 - School-Based Consultation for Mental Health Professionals. **Semester Hours:**  
3

SPSY 6500 - Identifying and Planning for the Mental Health Needs of Children and Adolescents. **Semester Hours:** 3

## **Supervised Experiences**

SPSY 6911 - School Psychology Practicum. **Semester Hours:** 1 to 6

SPSY 6930 - School Psychology Internship. **Semester Hours:** 1 to 6

## **Total: 74 Hours**

The education specialist in school psychology degree also requires satisfactory completion of two professional portfolios (pre-internship and EdS) demonstrating mastery of the program objectives and passing scores ( = 660) on the PRAXIS specialty exam in school psychology.

## **Professional Expectations**

All students in the SPSY program are expected to show a strong commitment to the program and to maintain a high academic, professional, ethical standards and sensitivity to diversity. Inappropriate or unprofessional conduct is cause for discipline or dismissal from the program.

# **Secondary English Education Option, MA curriculum and instruction**

## **Literacy, Language and Culturally Responsive Teaching**

# **MA Requirements for the Reading and Writing Option and Secondary English Education Option, plus Reading Teacher Endorsement and Certificate Programs**

**Office:** Lawrence Street Center, 701

**Telephone:** 303-315-6300

**Fax:** 303-315-6311

**E-mail:** [education@ucdenver.edu](mailto:education@ucdenver.edu)

**Web sites:** [www.ucdenver.edu/education/literacy](http://www.ucdenver.edu/education/literacy) and [www.ucdenver.edu/education/englished](http://www.ucdenver.edu/education/englished)

## **Reading and Writing**

### **Secondary English**

### **Early and Adolescent Literacy Certificates**

## **Faculty**

Information about faculty in this program is available online at [www.ucdenver.edu/education/literacy](http://www.ucdenver.edu/education/literacy).

The faculty of literacy, language and culturally responsive teaching (L2CRT) believe that effective teaching requires an awareness of and the ability to respond to individual differences. L2CRT faculty also emphasize the importance of teachers as scholars and reflective practitioners. In particular, teachers must understand how linguistic and cultural diversity affect their teaching. Two themes run throughout all program offerings. The first concerns the importance of recognizing a variety of literacies—"home" literacies, school literacy, "mainstream" literacy, first and second language literacies—and to develop teaching practices that utilize an understanding of the complexity of literacy development across language contexts. The second theme involves the meaningful use of language and literacy to improve the quality of one's life. As an approach to teaching, this theme emphasizes the creation of diverse, rich environments in which learners experience oral and written language as part of authentic tasks, and where concern for the cultural and linguistic heritage of the students is evident.

## **Reading and Writing Option and Reading Teacher Endorsement**

This master's program is designed for K-6 and 7-12 teachers. Those interested in elementary reading and writing should communicate with Professors Espinoza, Nathenson-Mejia or Taylor. Those interested in secondary and adult reading and writing should communicate with Professor Shanklin (see Web site for faculty contact information).

Reading is a credentialed program meeting the Colorado Department of Education requirements for reading teacher endorsement. Therefore, students who obtain a master's degree emphasizing reading education from UC Denver are certified to hold positions in public

and private schools as special developmental and remedial reading teachers in K–6 or 7–12. This program is also valuable for elementary and secondary teachers who wish to enhance reading and writing instruction in their classrooms.

By placing emphasis on the reading, writing and oral and visual language development of culturally, linguistically and academically diverse student populations, this master’s program is at the forefront of the field. Language is approached from a socio-psycholinguistic perspective that emphasizes the learner’s construction of meaning rather than the learning of isolated skills. Importance is placed on using theory, inquiry and personal reflection to inform classroom practice. The program prepares teachers to become decision makers capable of developing learner-centered curricula where each student’s reading and writing abilities are assessed to address developmental or special needs.

## Curriculum

Course offerings lead to an MA degree in curriculum and instruction with an emphasis in reading and writing, as well as a reading teacher endorsement, at one of two levels: K–6 or 7–12.

Those who have completed UC Denver’s graduate teacher education licensure program must earn an additional 27 semester hours to obtain the MA and endorsement. Those who completed licensure through other means must earn an additional 36 semester hours to obtain the MA and endorsement.

Teachers may add a reading teacher endorsement to an already-earned master’s degree in education by taking those courses listed under the chosen endorsement level. (In the state of Colorado, the reading teacher endorsement cannot simply be added to a bachelor’s degree.) Electives and core courses are not required. Two additional courses must be taken in other areas specified by the Colorado Department of Education. In many cases, previous master’s degree courses will satisfy this requirement.

<b>Requirements for Reading and Writing Program (Degree/Endorsement Options)</b>						
	<b>ELEMENTARY (K-6)</b>			<b>SECONDARY (7-12)</b>		
<b>Course</b>	<b>MA &amp; CDE Endorsement</b>	<b>MA &amp; CDE Endorsement (when added to UC Denver's graduate teacher education)</b>	<b>CDE Endorsement Only</b>	<b>MA &amp; CDE Endorsement</b>	<b>MA &amp; CDE Endorsement (when added to UC Denver's graduate teacher education)</b>	<b>CDE Endorsement Only</b>

		<i>licensure program)</i>			<i>licensure program)</i>	
LLC 5020 - Workshop in Literacy and Language Teaching.	Required		Required	Required	Required	Required
LLC 5810 - Workshop in Language Acquisition and Development .	Required	Required	Required	Required	Required	Required
LLC 5910 - Foundations of Language, Literacy and Culture.	Required	Required	Required	Required	Required	Required
LLC 5710 - Primary Literacy: Pre-3rd Grade.	Required	Required	Required			
LLC 5720 - Writing: Process, Development , and Teaching Grades 3-12.	Required	Required	Required	Required	Required	Required
LLC 5730 - Language and Literacy Across the Curriculum.	Required		Required	Required		Required
Children's literature course, per advisor approval	Select one	Select one	Select one			

LLC 5740 - Adolescent Literature.				Required	Required <i>(waived if taken as part of English Licensure)</i>	Required
LLC 6910 - Seminar and Practicum in Literacy and Language, K-6.	Required	Required	Required			
LLC 6911 - Seminar and Practicum in Literacy and Language, 7-12+.				Required	Required	Required
LLC 5055 - Linking Assessment and Instruction in Language and Literacy, Part I.	Required	Required	Required	Required	Required	Required
LLC 6915 - Seminar and Practicum in Literacy Professional Development .	Required	Required		Required	Required	Required
Core course in Research and Evaluation Methodology (REM) - see list below	Select one	5080		Select one	5080	
Interdisciplinary core course - see list below	Select one			Select one		

Graduate-level School of Education and Human Development elective				Select one		
Portfolio	Required	Required		Required	Required	
PLACE Exam	Required	Required	Required	Required	Required	Required
Total Semester Hours	36	27	27	36	27	27

## Secondary English Education Option

The master's program in secondary English education is designed to enhance the preparation of middle and high school English/language arts teachers. Students complete course work in language development, assessment and field experiences. With the help of their advisor, they also select specific courses from the English Department or within the School of Education and Human Development that provide a well-rounded repertoire of knowledge and skills to fulfill the needs of an English educator. Special consideration is given to working with diverse ethnic populations. Students interested in English education should see Professor Shanklin (see Web site for faculty contact information).

## Program Requirements

To earn a master of arts degree in curriculum and instruction with an emphasis in secondary English education, students must complete the following:

30 graduate semester hours in English education

6 graduate semester hours of core courses

performance-based assessments that culminate in a portfolio finalized in the last semester of the program as fulfillment of the MA comprehensive exam requirement

Each student's course plan is developed in conjunction with his/her advisor. Please review [www.ucdenver.edu/education/englished](http://www.ucdenver.edu/education/englished) for recommended course sequence.

LLC 5055 – Linking Assessment and Instruction in Language and Literacy. Part I. Semester Hours: 3

LLC 5740 – Adolescent Literature. Semester Hours: 3

LLC 5760 – Theory and Methods of English Education. Semester Hours: 3

-OR-

LLC 5835 – Special Topics: Advanced Theories and Methods of English Education. Semester Hours: 3

LLC 5810 – Workshop in Language Acquisition and Development. Semester Hours: 3

LLC 5910 – Foundations of Language, Literacy and Culture. Semester Hours: 3

LLC 6911. Seminar and Practicum in Literacy and Language, Grades 7-12+. Semester Hours: 3

Research and Evaluation Methodology core course (see list below).

Interdisciplinary core course (see list below).

Four electives, per advisor approval, from the English department and/or the School of Education & Human Development. The following are recommended:

LLC 5720 – Writing: Process, Development and Teaching, Grades 3-12. Semester Hours: 3

-OR-

ENGL 5110 – Denver Writing Project. Semester Hours: 3

Courses in working with English language learners and in instructional technology may also be helpful. For a technology course, please contact the professor about prerequisite knowledge.

**Total: 36 semester hours**

Program Requirements--When Added to UC Denver's Graduate Teacher Education Licensure Program

MA in curriculum and instruction with emphasis in secondary content leadership (English), when added to UC Denver's graduate teacher education licensure program:

18 graduate semester hours

performance-based assessments that culminate in a portfolio finalized in the last semester of the program as fulfillment of the MA comprehensive exam requirement

Each student's course plan is developed in conjunction with his/her advisor. Please review [www.ucdenver.edu/education/englished](http://www.ucdenver.edu/education/englished) for recommended course sequence.

FNDS 5050 – Critical Issues in American Education. Semester Hours: 3

-OR-

IPTe 5080 – Principals and Practice of Change. Semester Hours: 3

-OR-

SPED 5300 – Collaborating in Schools and Communities. Semester Hours: 3

REM 5080 – Research for Teachers. Semester Hours: 3

Four electives, per advisor approval, from the English Department and/or the School of Education and Human Development. The following are recommended:

LLC 5720 – Writing: Process, Development and Teaching, Grades 3-12. Semester Hours: 3

-OR-

ENGL 5110 – Denver Writing Project. Semester Hours: 3

Courses in working with English language learners and in instructional technology may also be helpful. For a technology course, please contact the professor about prerequisite knowledge.

**Total: 18 semester hours**

## Core Courses

## **Research and Evaluation Methodology**

REM 5000 - Orientation to Research and Measurement in Education. Semester Hours: 3

REM 5050 - Assessment for Teachers. Semester Hours: 3

REM 5080 - Research for Teachers. Semester Hours: 3

REM 5100 - Basic Statistics. Semester Hours: 3

REM 5200 - Introduction to Research Methods. Semester Hours: 3

REM 5300 - Introduction to Measurement. Semester Hours: 3

## **Interdisciplinary**

EPSY 5100 - Advanced Child Growth and Development Semester Hours: 3

EPSY 5140 - Advanced Adolescent Growth and Development. Semester Hours: 3

EPSY 5220 - Adult Learning and Education. Semester Hours: 3

EPSY 6200 - Human Development Over the Life Span. Semester Hours: 3

FNDS 5050 - Critical Issues in American Education. Semester Hours: 3

FNDS 5420 - History and Philosophy of Education: Twentieth Century America. Semester Hours: 3

LLC 5140 - Multicultural Education. Semester Hours: 3

LLC 5150 - Culture of the Classroom. Semester Hours: 3

LLC 5160 - Historical and Legal Foundations of Bilingual Education. Semester Hours: 3

LLC 5820 - Techniques in Teaching English as a Second Language. Semester Hours: 3

## **Cumulative Portfolio**

The MA portfolio counts as the comprehensive exam for the master's degree. The portfolio is an accumulation of the performance based assessments completed during program courses and reflects on the student's development over the course of the degree program. Reading and writing students must include confirmation of Reading Teacher PLACE exam registration in their portfolios. Information about the PLACE is online at [www.place.nesinc.com](http://www.place.nesinc.com).

## **Course Scheduling**

During the fall and spring semesters, most university courses are offered in the late afternoon and evening and meet for three hours once a week over a 16-week semester. Some alternative course schedules are available, such as meeting on five Friday-evening/all-day Saturday combinations. In the summer semester, three- to eight-week sessions are offered, and courses may be in the morning, afternoon or evening. A current schedule of courses is available online at <http://courses.cudenver.edu>.

## **Planning**

For practicing full-time teachers, we recommend taking one course each fall and spring semester, and up to two courses each summer. Plan carefully because courses are intended to build upon each other, and some courses are only offered once a year.

## **Active Status in the Graduate School**

Students must complete their programs within seven years, maintaining a GPA of 3.0. Students typically take four courses each calendar year. Failure to enroll over three contiguous semesters will result in a requirement to resubmit part I of the application for admission and a letter of intent.

## **Early and Adolescent Literacy Certificates**

The early literacy certificate and adolescent literacy certificate each include three graduate-level courses (for a total of 9 semester hours) and are conveniently offered entirely online. They are specifically designed to help licensed teachers develop the skills necessary to reach student readers. To find out more, please visit [www.ucdenver.edu/education](http://www.ucdenver.edu/education) or email [cpe@ucdenver.edu](mailto:cpe@ucdenver.edu).

To learn about how these certificate credits may apply toward one of the above programs in reading and writing, contact [education@ucdenver.edu](mailto:education@ucdenver.edu).

## **Social Science MSS**

- ▶ Graduate School Rules apply to this program

### **Requirements for Admission**

General rules for admission into the Graduate School apply to admission into the MSS program.

*For admission as a regular graduate student, applicants must:*

have earned a bachelor's degree

submit two official copies of all transcripts, with an overall GPA of at least 3.0 out of 4.0

have appropriate undergraduate training or professional background or indicators that supply evidence of ability to pursue the MSS degree

include a writing sample

submit three letters of recommendation (at least two from academic sources)

submit a written statement specifying the goal of advanced study in the social sciences, expressed in clear, correct and effective English

standardized test scores are not required, but will be considered if submitted

After meeting all other requirements for admission, applicants may be required to have an interview to discuss their interest in the program and their plans for study. For out-of-state applicants, an appropriate substitute for the interview may be determined by the director.

*Provisional Admission:*

Applicants may be admitted as provisional-status graduate students if their complete record indicates a high probability of success.

*Non-degree Students:*

Potential applicants may take graduate-level courses as nondegree students (unclassified student with a bachelor's degree) if they:

Wish to strengthen their record in order to demonstrate that they can successfully complete courses in the program

–or–

Wish to start courses in the program prior to completing their application. Up to 12 semester hours taken as a nondegree student may be accepted by the program once a student has been admitted into the program (the 12-hour limit also includes graduate work from another university).

*International Students:*

International students must also meet UC Denver requirements for international admission. See the International Admissions web site or call 303-315-2230 for further information.

## **Degree Requirements**

The MSS is a 36-semester-hour program, of which 30 hours must meet all specifications of the Graduate School. Throughout their work toward the MSS degree, students must maintain at least a *B* (3.0) average in all courses. A grade of *B-* or below will not be counted toward the degree.

Students may pursue courses around any coherent theme with the approval of MSS program directors and advisors. In addition to the unlimited self-structured options, there are four tracks in place from which students can select: women's and gender studies, international studies, society and environment and community health science.

## **Three Required Core Seminars**

The following two courses must be taken during the first year following entrance to the program:

S SC 5013 - Philosophical Problems in the Social Sciences and Humanities. **Semester Hours: 3**

S SC 5020 - Elements of Social Thought. **Semester Hours: 3**

The third required course should be taken later in the program when students are ready to write a proposal for the thesis or project:

S SC 5023 - Research Perspectives in Social Science. **Semester Hours: 3**

**Total: 9 Hours**

## **Electives**

Additionally, students must complete a total of 21-24 semester hours comprising a coherent selection of courses from a variety of disciplines. All courses for the self-structured portion of the program must be selected with the approval of one of the MSS program directors.

A total of two independent study courses and two 4000-level undergraduate courses may count toward the degree. All independent study contracts must be approved by one of the program directors. The remaining course work must be 5000/6000-level courses offered through various departments.

Students completing a project take 24 hours of electives, while thesis students complete 21 hours of electives.

**Total: 21-24 Hours**

## **Thesis or Project**

In order to proceed with a thesis or project, all students must submit a proposal approved by three faculty members (and approved by one of the program directors in cases where one of the directors is not serving on the committee). Students must also pass an oral comprehensive exam to graduate. Total hours required are: 3 hours of project and 6 hours of thesis.

S SC 6950 - Master's Thesis. **Semester Hours: 1 to 8**

S SC 6960 - Master's Project or Report. **Semester Hours: 1 to 6**

**Total: 3-6 Hours**

**Degree Total: 36 Hours**

# **Sociology MA**

► Graduate School Rules apply to this program

## Program Requirements

Two plans of study are available for students. Both options require a minimum of 36 hours. A thesis is required for the thesis option, and a project and internship are required for the nonthesis option. Before beginning the required course work, attendance at an orientation is required for incoming cohorts as well as the completion of mandatory diagnostic exams.

## Required Courses

Core courses are required for all graduate students, regardless of plan. Students who are officially admitted to the program are required to follow a sequential plan. SOC 5000 must be taken in the first fall semester. Students must take SOC 5014 before taking SOC 5015. Similarly, SOC 5024 must be taken before SOC 5183.

SOC 5000 - Professional Seminar: Sociological Inquiry. **Semester Hours: 3**

SOC 5014 - Classical Sociological Theory. **Semester Hours: 3**

SOC 5015 - Contemporary Sociological Theory. **Semester Hours: 3**

SOC 5024 - Seminar: Research Methods I. **Semester Hours: 3**

SOC 5183 - Seminar: Quantitative Data Analysis. **Semester Hours: 3**

**Total: 15 Hours**

## PLANS OF STUDY

Students must also choose **one** of the following options:

### Thesis Option Requirements

Core course requirements            15 Hours

Five elective courses                15 Hours

Master's thesis                        6 Hours total required

SOC 5955 - Master's Thesis. **Semester Hours: 1 to 4**

**Thesis Option Total: 36 Hours**

### Nonthesis Option Requirements

Core course requirements            15 Hours

Five elective courses	15 Hours
Internship	3 Hours
Master's project	3 Hours
SOC 5964 - Master's Report. <b>Semester Hours:</b> 1 to 4	

## **Nonthesis Option Total: 36 Hours**

## **Elective Credit Requirements (15 semester hours for both options)**

Students can take an unlimited number of sociology graduate seminars (i.e., 5000-level, stacked or not) to fulfill their 15 elective semester hours, or a combination of the following:

Independent study: maximum 6 semester hours

Courses in other departments: maximum 6 semester hours

Internship: maximum 3 semester hours

For further information about the Department of Sociology or the MA program, visit the Sociology Web Site.

## **Spanish MA**

- ▶ Graduate School Rules apply to this program

The UC Denver modern languages faculty offers a Spanish master's degree program that is an alternative to the exclusively literary studies that traditionally lead to doctoral programs. By integrating language, literature and cultural studies with ancillary work in other disciplines, the degree provides a broader expertise that will lead to or enhance careers in teaching, government, social services, business and international trade. Students will tailor the program to their specific interests and needs by developing a topical focus and including courses from outside the Department of Modern Languages, through which they may develop a secondary emphasis that can be incorporated in a thesis project.

## **Requirements for Admission**

In addition to the general admission requirements of the Graduate School, the Spanish MA program requires:

an undergraduate GPA of at least 2.5, with a GPA of at least 3.0 in Spanish courses

a bachelor's degree in Spanish is not required, although all candidates must demonstrate Spanish oral and written proficiency at the advanced level, as defined by the American Council on the Teaching of Foreign Languages

two copies of all college transcripts

three letters of recommendation

a statement of the applicant's purpose in pursuing the degree, in Spanish; any gaps, weaknesses or special circumstances affecting an applicant's academic record should be addressed in the statement of purpose portion of the application

a TOEFL score higher than 550 for students whose previous academic degree was completed in a non-English-speaking country

In special circumstances, the department may modify its admission standards.

## Program Requirements

Candidates in Spanish must satisfy the general requirements of the Graduate School as outlined in this catalog and will be required to complete 33 hours of course work distributed with respect to one of the following two options:

### Thesis option (course work + thesis):

SPAN 5000 - Introduction to Graduate Studies in Spanish. **Semester Hours: 3**

Literature/culture and linguistics, including at least 6 hours in literature/culture and 6 hours in linguistics: **15 semester hours**

Courses outside the Department of Modern Languages, as approved by advisor: **6 semester hours**

Elective, as approved by advisor: **3 semester hours**

Thesis preparation and writing: **6 semester hours**

### Thesis Option Total: 33 Hours

### Nonthesis option (course work):

SPAN 5000 - Introduction to Graduate Studies in Spanish. **Semester Hours: 3**

Literature/culture and linguistics, including at least 6 hours in literature/culture and 6 hours in linguistics: **18 semester hours**

Courses outside the Department of Modern Languages, as approved by advisor: **6 semester hours**

Electives as approved by advisor (may include another course outside the Department of Modern Languages): **6 semester hours**

## **Nonthesis Option Total: 33 Hours**

### *Notes:*

No more than one undergraduate course (3 semester hours) may be applied toward the MA degree and then only in an ancillary field outside the Department of Modern Languages.

Students choosing the nonthesis option may elect to take three courses (9 semester hours) outside the department.

## **Financial Aid**

The department offers a limited number of teaching assistantships for graduate students on a semester-by-semester basis. Appointment is competitive and is typically based on a student's academic credentials. Contact the department for details. For information on grants, federal work-study programs, scholarships and loans, contact the Office of Financial Aid (303-556-2886).

For further information concerning the master's degree in Spanish at UC Denver, direct inquiries to the graduate advisor.

# **Special Education MA**

## **Special Education**

**Office:** Lawrence Street Center, 701

**Telephone:** 303-315-6300

**Fax:** 303-315-6311

**E-mail:** [education@ucdenver.edu](mailto:education@ucdenver.edu)

**Web site:** [www.ucdenver.edu/education](http://www.ucdenver.edu/education)

## **Special Education Program Overview**

The special education program within the initial professional teacher education division offers a special education generalist license and a special education endorsement as well as a master of arts degree in special education. All special education program options foster the development of critical reflection, inquiry about teaching and learning, as well as the breadth

and depth in content knowledge necessary to work effectively in elementary and secondary classrooms. The program faculty promote the ability of teacher candidates to meet the needs of an increasingly diverse population of K–12 learners, as well as to participate productively in and lead school renewal.

The faculty in the program in special education value collaborative relationships between general and special educators, so we offer our teacher candidates the option of pursuing a dual endorsement in both general and special education to offer our teacher candidates the option of pursuing a dual endorsement in both general and special education.

## **Special Education Program Distinctions**

### **Special Education Licensing Pathways**

To be licensed as a special education generalist for grades ages 5-21, a teacher candidate must hold a bachelor's degree from a four-year accepted institution of higher education, have completed the plan of study from one of the program options for the preparation of special education generalist, have passed the approved elementary content and special education assessments and have demonstrated all required state and national standards.

Program options for the special education generalist include: 1) initial licensure as a special education generalist; 2) dual licensure in either elementary or secondary education and as a special education generalist; and, 3) for those who already hold a Colorado teaching license, an added endorsement, which is also fully online. There is also an option to count these courses towards a masters in special education which will require an additional 9 semester hours of course work.

The time needed to complete the various special education generalist program options varies based on the needs of teacher candidates. In addition to traditional on-campus offerings, a wide selection of courses are available in online formats. During the academic year, core special education courses are scheduled in late afternoons, evenings and on Saturdays to avoid conflict with teaching responsibilities.

## **Professional Development Schools**

While in the licensure portion of the program, teacher candidates work in a partner school one to four days per week, depending on the internship. University courses are closely interrelated with the four internship experiences in which teacher candidates gradually assume responsibility for teaching. Special education teacher candidates engage in a series of four internships from the beginning of the program to the end of the program. Dual teacher candidates engage in five internships that result in a general education license at the elementary or secondary level and then complete a fifth internship and additional course work; this can be done during an additional full time semester or can be worked out flexibly as the student assumes their first teaching position to complete their special education license. The partner schools are located in several Denver metropolitan districts with most serving large populations of low-income and/or minority students, as well as a sizeable number of students for whom English is a second

language and students with special needs. Each partner school is supported by a site professor from the university one day per week and by a master teacher, called a site coordinator.

## **Assessment**

In 2000, Senate Bill 154 required all Colorado teacher education institutions to become performance based. PBA stands for performance based assessment. PBAs are created that correspond to many of the teacher education courses and concurrent practice in the series of internships. In doing so, knowledge can be evaluated as a result of coursework and performance in schools simultaneously. As teacher candidates progress through the program, they will be introduced to Performance Based Assessments (PBAs) and will be guided and supported in both course work and internships. Students seeking dual licensure are responsible for four additional PBAs associated with their second endorsement in special education.

The PBAs are:

1. Literacy Instruction & Assessment (elementary and secondary versions)
2. Mathematics Instruction & Assessment (elementary)
3. Subject Matter Content (secondary)
4. Student Profile
5. Classroom Management
6. Student Academic Performance Sample (SAPS)
7. Internship Performance Rubric (used at the end of each internship)

The four additional PBAs that all teacher candidates in the special education program are expected to proficiently complete include:

1. Assessment
2. Collaboration & Positive Behavior Supports
3. Literacy Instruction for Students with Identified Special Needs
4. The Individualized Education Program (I.E.P.) Process

Passing the PLACE or PRAXIS II Content examinations prior to the final internship is also required before a candidate is eligible for a provisional teaching license in Colorado.

## **Programs of Study**

Due to the complex nature of state mandated influences of teacher preparation courses for the 2009-2010 term, please refer to the most current version of Special Education Handbook for academic requirements for this program.

## **Requirements for Admission**

The program conducts rolling admissions each semester. Summer and fall admission deadlines are January 15, February 15 and March 15. Spring admission deadlines are August 15, September 15 and October 15.

## **Teacher Education Information Sessions**

All prospective teacher candidates are strongly encouraged to attend an information session before applying to the program. Information sessions are held twice a month lasting approximately 60-90 minutes. Advisors will be available to provide prospective students transcript reviews and pre-admission advising. To more effectively facilitate this process, please bring copies of all transcripts with you. A calendar of upcoming information sessions can be viewed on the Downtown Campus Web site. Go to [www.ucdenver.edu/education](http://www.ucdenver.edu/education) or call the school's Student Services Center at 303-315-6300.

## **Teacher Education Program Requirements**

Applicants to the IPTE program must hold at least a bachelor's degree with a minimum undergraduate cumulative GPA of 2.75 for admission.

Graduate candidates with a GPA less than 2.75 are required to take the GRE, with a combined score of 1000 on the verbal and quantitative sections; or the Miller Analogies Test, with an average score of 400–600, before consideration for admittance.

All elementary education candidates must have a liberal arts major or equivalent content courses that provide a broad background of knowledge. \*

All secondary education candidates must have a major or major equivalent of at least 30 semester hours in their desired teaching field. \*

\*This is determined through transcript evaluations at information sessions.

# **Urban and Regional Planning MURP**

## **Prerequisites**

Students are expected to have achieved a basic level of computer literacy prior to enrollment, and should be familiar with PC or Apple operating systems. Acquiring some prior familiarity with digital visualization techniques is recommended for students who do not have a background in graphic communication. A higher level of proficiency is desirable for those seeking to emphasize the design elements of professional practice, most in evidence in our urban place-making concentration. Some assistance in attaining these skills may be provided in advance of the fall semester. Applicants are annually welcomed from virtually every field of prior study.

## **Program Requirements**

The master of urban and regional planning is the college's accredited degree for students intending to pursue careers in planning and in related fields across a wide spectrum of employment niches both within and outside government.

With no advanced standing, candidates for the MURP degree must complete a minimum of 51 semester hours of graduate work, including all core courses (27 semester hours), a concentration (15 semester hours minimum) and additional electives (9 semester hours). Concentrations currently include: land use and environmental planning, economic and community development planning and urban placemaking. Students may also devise their own individual concentrations with an advisor's approval.

Entering students who have engaged in the study or practice of planning elsewhere may petition the faculty prior or during their initial semester to determine whether any credit will be awarded or degree requirements relaxed as a result of these prior activities. A maximum of 9 semester hours of course work can be applied for advanced standing when such work was pursued at other institutions and meets prescribed level, content and quality thresholds. Graduates of the college's own BEnvd program are eligible for up to 15 semester hours of advanced standing.

## **New Entrants: Primers, Advising, Transfer Credit and the Plan of Study**

The college and each of its departments provides an orientation prior to the start of fall classes. The MURP program will, as it is able, be offering certain noncredit primer courses in advance of each fall semester's onset. These would address such matters as rudimentary design skills, digital visualization and geographic information systems (GIS). Each entering student will be assigned an advisor, identified from the ranks of the regular continuing faculty during the initial days of the fall semester and the initial days of the spring semester for spring entrants. Each student is to meet with his/her assigned advisor in the first two weeks of the semester upon the onset of study. Each is to secure from his/her advisor a plan of study form. The student, with the assistance of the advisor is to begin to pencil in core course selections, indicating in which semesters these would be taken. The student is to retain this form during his/her time of study, augmenting it as the plan of course selections unfolds in ensuing semesters. The faculty advisor is to note on this plan of study all approved waivers, noting whether or not a "waiver" is to be accompanied by the award of transfer credit. A waiver without credit simply releases the student from taking a particular core class, thereby freeing him/her to take other classes in its place. The plan of study, once completed, is to be submitted to the college office for inclusion in the student's official student file after the onset of the last semester of study. This plan will be used by the department chair, along with other information, to certify the student for eventual graduation. Students may opt to switch advisors as their study plans clarify. Some will necessarily wish to switch to a faculty member—often the faculty coordinator for the concentration the student has chosen if it is one of our three official concentrations—who is especially conversant with the student's particular interests.

## **Advanced Standing**

Entering students who earned the college's bachelor of environmental design (BEnvd) degree offered on the CU Boulder campus, within five years prior to enrollment, and who have maintained a GPA of at least 3.0, will be admitted to the MURP with advanced standing. Those who graduated still earlier may receive advanced standing at the discretion of the department chair, in consultation with the program faculty.

These students can earn the MURP degree after completing a minimum of 42 semester hours, which will include the core courses (less any waived due to prior study), an approved concentration and additional electives required to meet the overall credit requirement of 42.

Students holding the college's BEnvd degree who also have completed, in this study, the undergraduate planning option with a GPA of at least 3.0 (and with a grade of at least 3.0 in ENVD 4320, Planning Studio III) will, in addition, receive a waiver with credit for URP 6630, Planning Studio I. These students will earn the MURP degree upon completion of a minimum of 36 semester hours, including 21 semester hours of core courses and an additional 15 semester hours in an approved concentration.

## Core Courses

URP 5501 - Planning Issues and Processes. **Semester Hours: 3**

URP 5510 - Planning Methods I. **Semester Hours: 3**

URP 5511 - Planning Methods II. **Semester Hours: 3**

URP 5520 - Urban Spatial Analysis. **Semester Hours: 3**

URP 5530 - Planning Law. **Semester Hours: 3**

URP 6630 - Planning Studio I. **Semester Hours: 6**

URP 6631 - Planning Studio II. **Semester Hours: 6**

### Total: 27 Hours

A thesis option (URP 6950, Thesis Research and Programming, and URP 6951, Thesis) is available primarily for students who are interested in pursuing more advanced academic training in planning or related fields. Thesis work will substitute for Studio II.

## Areas of Concentration

Concentrations—whether official designated or self-devised — enable students to explore in depth an area of special interest. Concentrations are to be composed of 15 semester hours of study. Nine additional semester hours of electives beyond the concentration in the standard 51-semester hour program may be used to deepen study within the concentration or to branch out

into other areas of interest. The program supports three official concentrations: (1) land use and environmental planning, (2) urban place making, and (3) economic and community development planning. A set of foundation courses is identified in each concentration, plus additional supporting electives. If the student opts to devise his/her own concentration this must be pursued under the guidance of a faculty member. Each student so inclined is to prepare a one-page concentration statement that, upon an advisor's approval, is to be retained in the student's official university file.

**Land Use and Environmental Planning** emphasizes regulation of land uses and land development processes; management of transportation, infrastructure and other major public investments; and management of urban ecology, environmental quality and natural resources on both private and public lands. This concentration prepares students for plan-making and policy administration in urban neighborhoods, cities and counties, regions, open spaces and resource management areas. The curriculum focuses on practices and innovations in land use regulation; analytical methods including transportation modeling, land market evaluation, environmental impact analysis and use of decision support systems; administration of public policies and plans; management of negotiation and collaborative processes among diverse interest groups; and the politics of planning. Graduates take jobs in local, state and federal government, nonprofit organizations, consulting firms and the development industry.

**Urban Place Making** emphasizes the interrelations between physical design, urban morphology, land-use regulations and other forces such as market trends and regional policies shaping the urban environment and their impacts on quality of life. Curriculum focuses on providing the students with a special kind of expertise that combines design thinking and land-use planning within the dynamic context of city hall politics. The goal is to produce planners, working in the public or the private sector, who can effectively guide the physical form of urban development to serve the needs and desires of an increasingly diverse public while negotiating the realities and constraints of the real estate market and economic development goals of cities and communities. Graduates take jobs in local governments, nonprofit community organizations, consulting firms and the development industry.

**Economic and Community Development Planning** harnesses both the public and private sectors to fashion local economies able to support the essential needs of resident populations. The field of economic development features efforts to nurture, attract and retain firms that are suited to the fiscal, economic and environmental requirements, capacities and constraints of urban districts (e.g. neighborhoods, downtowns, industrial districts and mixed-use spaces such as TODs and the like), entire municipalities both small and large and multi-local regions. Economic development also concerns the cultivation of both human and social capital as it seeks to encourage an appropriately skilled resident workforce able to find work in both local and regional labor markets.

The field of community development features development from within. It encompasses the many means for engaging local residents and institutions, fostering democratic participation,

formulating developmental plans that address residents' most urgent needs and drawing together all parties whose involvement is essential for success. Our program stands apart in its determination to (1) join together these two distinct fields, (2) situate the economy within its essential "built," social and environmental rubrics and (3) encourage a sufficiently broad, hence robust, conceptualization of the economy and its spatial and temporal development. This joint enterprise travels a continuum from smaller-scale project-based activities through strategic planning at the multi-local regional scale that has utility across the booms and busts of the regional business cycle.

Urban and community economic development specialists find work in localities, sub-state regions and state offices, as well as in quasi-public and private firms and institutions. They work with local residents, neighborhood and community organizations, community development corporations, various other nongovernmental organizations, consulting firms and, of course, in public agencies. For most, although hardly all such graduates, the primary career destination will be the local public sector. Those having this objective in mind should be aware that the bulk of such jobs will marry an appreciation of the rudiments of community economic development to some related physical planning specialty. Others seeking positions explicitly tied to the tasks of economic development are advised to consider opportunities at the municipal, state and federal levels—often set apart from offices devoted primarily to physical planning—with local and regional chambers of commerce, in the private development community and in strategic institutional and corporate planning and development.

## Course Sequence

Applicants may be admitted for both the fall and spring semesters. The schedule below posits a fall onset. If study is commenced in the spring the student may not encounter Planning Methods I until the following fall, so Planning Methods would be deferred to the third semester of study since we now encourage students to take these in the numeric sequence. Planning Issues and Processes is currently offered only in the fall and is the usual "door of entry" to the program. It is possible however that we will move to offer sections of this course during both semesters. Students may take more than 12 semester hours of study and so may progress faster than the template below would indicate. Generally taking more than 15 hours is ill-advised. Under some circumstances—and on a space-available basis—Studio I may be taken during the first semester of study. Both Studio I and II are offered every semester, and additional sections will be added as demand warrants to preserve an acceptable class size. We offer numerous courses beyond the core, and also designate additional options in other departments, elsewhere within our college and across the campus.

## First Year

### Fall

URP 5501 - Planning Issues and Processes. **Semester Hours:** 3

URP 5510 - Planning Methods I. **Semester Hours:** 3

URP 5530 - Planning Law. **Semester Hours: 3**

Elective course (3 semester hours)

**Total: 12 Hours**

## **Spring**

URP 5511 - Planning Methods II. **Semester Hours: 3**

URP 5520 - Urban Spatial Analysis. **Semester Hours: 3**

URP 6630 - Planning Studio I. **Semester Hours: 6 \***

**Total: 12 Hours**

## **Second Year**

### **Fall**

Concentration Courses (9 semester hours)

Electives (6 semester hours)

**Total: 12 Hours**

### **Spring**

URP 6631 - Planning Studio II. **Semester Hours: 6 \***

Concentration Courses (6 semester hours)

**Total: 12 Hours**

\* Both studios are offered in the fall and spring semesters.

## **Dual Degree Options**

Students may enroll in dual degree programs with public administration (MURP+MPA), law (MURP+JD) and business (MURP+MBA). In addition, dual degree options are also available combining the MURP with landscape architecture (MLA) and architecture (MArch). A new dual degree combining planning and public health (MURP+MPH) is under development combining strengths on both the Downtown and Anschutz Medical Campuses of UC Denver. The dual degree with law combines study on UC Denver's Downtown Campus and in the CU Boulder

Law School. Interested students should consult the college Web site for additional information regarding these options. Overall, applicants to any dual option must apply to and gain separate admission to each degree program. Once admitted the student can graduate from neither until the work is completed for both degrees. Synergies enable a significant reduction in both the time and credit required to complete these pairings than would be needed if each were separately pursued. If the student should opt to drop either member of the dual set, he/she must then fulfill the stand-alone requirements of the remaining degree.

## **Independent Study and Internships**

MURP students may take up to 6 semester hours of independent study, after first assembling a plan of study with a member of the regular faculty. In addition, up to 3 semester hours of internship may be applied to the 51-semester-hour program. Independent study entails individual study and research under the personal direction of a regular faculty member. Such study may at times underpin subsequent thesis work, as previously described. It is assigned a letter grade on completion. Internships are a different matter. These entail a “contract” for up to three semester hours of study, that involves a regular faculty member, the student and an area employer. Students contemplating internship work should secure the appropriate “contract” template from the college office, prepare a synopsis of the intended work, secure a faculty mentor, gain his/her approval for the project and then secure the signatures of all three participants, providing a copy of this document to both the mentor and the employer. The employer will subsequently prepare an evaluation of the student’s performance—using the appropriate evaluation form also to be secured from the college office—when the work is completed and submit this to the faculty mentor who will then assess the overall effort, review all “deliverables” on which the student may have worked, and then finally, assign a mark. Internships are grades pass/fail.

## **Certificate Programs**

The college offers official certificate programs in design build, geospatial information science and historic preservation. Consult our Web site for details on each of these. The first is more attuned to the requirements of architectural students, whereas the latter two could suffice—with the approval of the department chair—as a basis for a concentration satisfying the MURP concentration requirement. Some students may wish to augment their 51 semester MURP with additional course work in order to complete any one of these certificate programs.

## **Urban Design MUD**

► Graduate School Rules apply to this program

**Program Information:** Jeremy Németh  
**Telephone:** 303-556-3688

The master of urban design (MUD) is an intensive, one-year, interdisciplinary postprofessional degree program intended for talented persons already holding a professional degree in architecture, landscape architecture or urban and regional planning (e.g. BArch, BLA, MArch, MLA, MURP/MUP or equivalents).

Urban design is an integrative activity focused on creating beautiful, vital, functional, environmentally sustainable and socially just public places. By contextualizing architecture while providing a means of implementation for planners and landscape architects, urban design occupies a realm supportive of these fields while simultaneously generating its own responses to the most pressing urban issues. Although urban designers often intervene on the neighborhood scale, the program fosters mastery of inclusive and participatory community design processes and the attendant means for effectively implementing physical plans at the metropolitan, neighborhood, district, corridor, street and block scale.

The MUD program focuses on creating sustainable urban infrastructure and interprets the city as a set of overlaid and integrated systems. The program views urban designers playing a vital role in the production of the built environment because of their dual responsibility to illustrate preferable design solutions and shape the regulatory patterns governing future development. The inherent interdisciplinarity of this approach brings students into frequent contact with professors, practitioners and experts in urban planning, architecture and landscape architecture, and encourages students to forge their own tailored degree by pursuing an independent study and a variety of electives in the college. Students relate their independent study projects to one of the college's fields of expertise, such as participatory design in distressed communities, postindustrial landscapes, "green streets," vernacular design or historic preservation.

Denver and the American West provide an exciting urban laboratory as we face a number of complex and difficult challenges (e.g. water scarcity, urban sprawl). Students undertake at least one studio in the Denver metropolitan region while remaining cognizant that similar systems and challenges exist in a variety of domestic and international contexts. As a capstone project during their final term, students enroll in an international studio course, preparing for this studio by taking a mandatory seminar in global design history and practice.

The MUD program is informed by innovations in practice. Tested techniques and methods are brought into classroom and studio settings to be evaluated, refined and disseminated in ways that prepare graduates for highly innovative work as critical, reflective urban designers employed in both the public and private sectors. In addition, each spring semester brings a visiting urban design fellow to the college. This practitioner-in-residence is selected from a highly competitive pool of designers from around the world. The selected practitioner teaches an advanced urban design studio and supervises independent study projects.

## **Prerequisites**

Students are required to hold a first professional degree in architecture, landscape architecture or urban and regional planning (e.g. BArch, BLA, MArch, MLA, MURP/MUP or equivalents).

## **Program Requirements**

The requirements for the postprofessional master of urban design (MUD) degree depend on your current standing and educational background. The basic study plan is a 36-semester-hour plan that includes two elective courses. Students obtaining a first professional degree in University of Colorado Denver College of Architecture and Planning may receive up to 12 semester hours of advanced standing.

## Core Requirements

U D 6610 - Infrastructure Studio. **Semester Hours:** 6

U D 6611 - Regulatory Studio. **Semester Hours:** 6

U D 6612 - Urban Synthesis Studio. **Semester Hours:** 6

U D 6640 - History of the City. **Semester Hours:** 3

U D 6641 - Design Process/Practice. **Semester Hours:** 3

U D 6642 - Design Policy/Regulation. **Semester Hours:** 3

U D 6840 - Independent Study. **Semester Hours:** 1 to 3

or

U D 6930 - Urban Design Internship. **Semester Hours:** 3

**Total: 30 hours**

## Course Sequence

### Fall

U D 6610 - Infrastructure Studio. **Semester Hours:** 6

U D 6640 - History of the City. **Semester Hours:** 3

U D 6641 - Design Process/Practice. **Semester Hours:** 3

### Spring

U D 6611 - Regulatory Studio. **Semester Hours:** 6

U D 6642 - Design Policy/Regulation. **Semester Hours:** 3

U D 6840 - Independent Study. **Semester Hours:** 1 to 3

or

U D 6930 - Urban Design Internship. **Semester Hours:** 3

## **Summer**

U D 6612 - Urban Synthesis Studio. **Semester Hours:** 6

## **Dual Degree Programs**

# **Business Administration/Business MBA/MS**

The Business School also offers MBA/MS dual degree programs for each function of business. The program consists of a minimum of 66 semester hours of graduate work and leads to both an MBA degree and an MS degree, which must be completed within seven years and one semester. See MS program pages for a list of functional areas. Contact a graduate academic advisor for details, 303-556-5900.

# **Business Administration/International Management MBA/MIM**

This unique combined degree is offered in cooperation with the American Graduate School of International Management (the Thunderbird School) located in Glendale, Arizona, a suburb of Phoenix. Thunderbird has established eight dual programs with universities in the United States. The student applies independently to both schools and, if admitted, earns the MBA from UC Denver and a master of international management degree from Thunderbird. The student begins the program at UC Denver and, after completing 36 semester hours (12 courses) required for the MBA, transfers to the Thunderbird campus and takes a minimum of 30 semester hours (10 courses) for the MIM. When all dual degree requirements are finished, the student is awarded a diploma from each school. For more information about admission to the MBA on the Downtown Campus, refer to the appropriate section of this chapter. For specifics about the dual MIM application process, call Thunderbird's associate dean of admissions, Stephen R. Beaver, 1-800-848-9084, or visit [www.tbird.edu](http://www.tbird.edu).

# **Business Administration/Medicine MBA/MD**

The MBA/MD is for medical students at the University of Colorado Denver School of Medicine who wish to pursue a career in administrative medicine or who seek additional training in administration or business. The program is designed to be completed in five years, at which time both the MD and MBA degrees would be awarded. Candidates for the MBA/MD complete 36 semester hours of course work in the business school and all requirements for the MD.

## **Business Administration/Urban and Regional Planning MBA/MURP**

This dual degree enables students to obtain both the master of urban and regional planning offered by the College of Architecture and Planning and the master of business administration offered by the Business School upon completion of 78 semester hours. The dual degree program is composed of the core curricula in each program plus a set of electives jointly approved by the student's advisors.

## **Business/Business MS/MS**

Students may concurrently pursue dual MS degrees in any two fields of business. The program consists of a minimum of 51 semester hours of core course work, which must be completed within a period of seven years. In addition, candidates for the dual degree must satisfy all the common body of knowledge and background requirements prescribed for each degree. Waivers may be approved for some of the CBK or background upon transcript evidence of equivalent previous undergraduate or graduate course work. For more information contact a graduate staff advisor, 303-556-5900.

## **Chemistry BS/MS**

While students are completing a BS degree in chemistry, they may also complete some of the requirements for an MS degree in chemistry under the following guidelines:

The student must apply and be accepted for participation in the BS/MS program prior to completion of the BS degree and be advised by both the undergraduate and graduate advisors.

Up to 9 semester hours of graduate-level course work may be taken as an undergraduate and applied toward the MS degree. This course work may not be applied toward the BS degree or ACS certification requirements for the BS degree.

Up to 3 semester hours of independent study (research) may be applied toward the graduate degree if that research is expanded and continued for a portion of the master's thesis research. This requires approval of the student's graduate research advisor in

chemistry, the chemistry graduate program director and the CLAS associate dean for graduate studies.

The chemistry department will waive the requirement for qualifying examinations in each area of chemistry for which the student has completed the undergraduate sequence of courses and laboratories at the Downtown Campus with grades of *B* or better for each course.

The student must apply for and be admitted to the graduate program in chemistry beginning the semester immediately following completion of the BS degree in chemistry at the Downtown Campus.

This program allows undergraduate students who have begun their research as undergraduates to complete up to 12 semester hours (with approval of the graduate dean) toward the 30 semester hours required for a Plan I MS degree in chemistry while they are still completing their BS degree. This makes it possible for students to complete an MS degree in chemistry in only one year beyond the BS degree in chemistry. Students entering the program through the BS/MS program option must fulfill all of the requirements of the Plan I or Plan II graduate programs.

## Economics/Finance MA/MS

For students interested in combining the quantitative skills of an economics degree with the specific applications of a business degree, we offer an MA economics/MS finance dual degree. This 42-semester-hour program is offered jointly with the Business School. It is a "dual" degree, meaning that students who complete the program earn two master's degrees: MA in economics and MS in finance. Students must be admitted separately to both the MA program in economics and MS program in finance; they may apply to both programs at the same time or apply to the economics program first, and then to the finance program at the end of their first semester, or vice versa. Both programs must be completed in the same semester to take advantage of the dual degree program. Further information about this program can be obtained from either the Department of Economics or the Business School. [Click here for admissions information for economics.](#)

The dual degree program is intended to create highly-skilled research professionals with considerable econometric skill as well as familiarity with their chosen financial institutions. Given the similarity in course work within the two programs, there can be considerable time savings for the student. Essentially, the program allows students to complete the two programs that separately would require 60 hours of course work with 42 hours of combined course work.

### Degree Requirements

#### Core Courses

ECON 5073 - Microeconomic Theory. **Semester Hours:** 3

ECON 5083 - Macroeconomic Theory. **Semester Hours: 3**

ECON 5803 - Mathematical Economics. **Semester Hours: 3**

ECON 5813 - Econometrics I. **Semester Hours: 3**

ECON 5823 - Econometrics II. **Semester Hours: 3**

ECON 6073 - Research Seminar. **Semester Hours: 3**

BUSN 6640 - Financial Management. **Semester Hours: 3**

FNCE 6300 - Macroeconomics and Financial Markets. **Semester Hours: 3**

FNCE 6330 - Investment Management Analysis. **Semester Hours: 3**

**Total: 27 Hours**

## **Electives**

Four 6000-level finance elective courses: **12 semester hours**

One 5000-level or above economics elective course: **3 semester hours**

**Total: 15 Hours**

**Dual Degree Total: 42 Hours**

## **Finance/Economics MS/MA**

Students may concurrently pursue an MA in economics offered by the College of Liberal Arts and Sciences and the MS in finance offered by the Business School. Students must complete 27 semester hours of a combination core, 15 semester hours of combination electives and 3 semester hours of a 5000- or 6000-level economics elective.

## **Public Administration MPA/JD**

The School of Public Affairs and the University of Colorado at Boulder School of Law jointly sponsor a dual degree program leading to the simultaneous granting of the master of public administration (MPA) and juris doctor (JD) degrees. The program may be of particular interest to students who wish to practice law within the public sector, obtain a senior administrative post, represent public-sector clients, represent private-sector clients in transactions with government agencies and institutions and/or develop scholarly expertise in the relationship between law and public administration.

Interested persons must separately apply to and be admitted by both SPA and the School of Law. Upon admission, students may begin full-time study at either SPA or the School of Law; however, law study must be initiated no later than the beginning of the second year of enrollment in the program, and the first year of law study must be taken in its entirety and exclusive of nonlaw course work.

Through the choice of electives, students may develop a limited substantive specialization within the study of law and public administration. The dual degree program is structured to allow for 12 semester hours from the law school to be accepted as electives in the 36-semester-hour MPA program, and 12 semester hours from SPA to be accepted into the law school's 89-semester-hour JD program. Students are thus simultaneously awarded both degrees with a cumulative total of 101 semester hours; the program therefore allows students to complete all dual degree requirements in approximately four years of full-time study. Students without prior public-sector work experience will be required to complete an internship in an appropriate governmental institution or closely related nonprofit organization.

# **Public Affairs/Urban and Regional Planning MPA/MURP**

## **Background and Purpose**

Public administration and urban and regional planning have many aspects in common. To provide students with an excellent education through understanding of both professions, the School of Public Affairs and the College of Architecture and Planning have developed a dual degree program. Students can obtain both master of public administration (MPA) and master of urban and regional planning (MURP) degrees with a minimum of 63 semester hours, as compared to a total of 87 semester hours to complete both degrees independently.

To be eligible for the dual MPA/MURP degree program, students must be admitted to each of the two schools under their respective admission procedures and standards and indicate an intention to pursue the dual degree. Students will take all the core courses and the advanced seminar in public policy and management required for an MPA, plus the core and concentration requirements necessary for the MURP.

Students in each school must apply to the other school before completing 18 hours in their respective programs. Upon admission to both schools, students will be assigned an advisor in each school to work out a specific degree plan.

## **Core and Elective Requirements**

### **Core Courses (42 semester hours)**

#### **MURP**

URP 5501 - Planning Issues and Processes. **Semester Hours: 3**

URP 5511 - Planning Methods II. **Semester Hours: 3**

URP 5520 - Urban Spatial Analysis. **Semester Hours: 3**

URP 5530 - Planning Law. **Semester Hours: 3**

URP 6630 - Planning Studio I. **Semester Hours: 6**

URP 6631 - Planning Studio II. **Semester Hours: 6**

**Total: 18 Hours**

## **MPA**

P AD 5001 - Introduction to Public Administration and Public Service. **Semester Hours: 3**

P AD 5002 - Organizational Management and Change. **Semester Hours: 3**

P AD 5004 - Economics and Public Finance. **Semester Hours: 3**

P AD 5005 - The Policy Process and Democracy. **Semester Hours: 3**

P AD 5006 - Leadership and Professional Ethics. **Semester Hours: 3**

**Total: 15 Hours**

### **Take one of two**

P AD 5003 - Research and Analytic Methods. **Semester Hours: 3**

URP 5510 - Planning Methods I. **Semester Hours: 3**

**Total: 3 Hours**

## **Additional Course Work (21 semester hours)**

### **MURP**

12 hours if URP 5510 elected, or 15 hours if P AD 5003 elected. Courses are to be selected with MURP advisor's approval.

URP 5510 - Planning Methods I. **Semester Hours: 3**

P AD 5003 - Research and Analytic Methods. **Semester Hours: 3**

**Total: 12-15 Hours**

## **MPA**

6 hours if P AD 5003 elected, or 9 hours if URP 5510 elected.

P AD 5003 - Research and Analytic Methods. **Semester Hours: 3**

URP 5510 - Planning Methods I. **Semester Hours: 3**

**Total: 6-9 Hours**

## **Practicum**

P AD 5361 - Advanced Seminar in Public Policy and Management. **Semester Hours: 3** (3 hours required)

**Total: 3 Hours (required)**

## **Electives**

Take one of the following or another option with MPA advisor's approval (3 hours):

P AD 5250 - Intergovernmental Management. **Semester Hours: 3**

P AD 5410 - Administrative Law. **Semester Hours: 3**

P AD 5440 - Negotiation and Conflict Resolution. **Semester Hours: 3**

P AD 5502 - Public Financial Management and Policy. **Semester Hours: 3**

P AD 5503 - Governmental Budgeting. **Semester Hours: 3**

P AD 5540 - Organization Development. **Semester Hours: 3**

P AD 5625 - Local Government Management. **Semester Hours: 3**

P AD 5626 - Local Government Politics and Policy. **Semester Hours: 3**

P AD 5631 - Seminar in Environmental Politics and Policy. **Semester Hours: 3**

P AD 5632 - Seminar in Environmental Management. **Semester Hours: 3**

**Total: 3 Hours**

# **Public Affairs BA/MPA**

The College of Liberal Arts and Sciences and the School of Public Affairs, offer students the opportunity to complete both a bachelor's degree and master's degree in five years rather than

the usual six years. The program combines undergraduate general education and major studies with a specialized curriculum in public affairs and strives to develop intellectual and professional skills in a coordinated manner. The five year BA/MPA program decreases the time and number of semester hours required to earn both degrees by allowing students to count graduate level courses in the School of Public Affairs toward the bachelor's degree requirements. The program is designed to give students an opportunity to prepare for professional positions and advancement with federal, state or local governments, nonprofits or private sector firms concerned or involved with public affairs.

## **Admissions Requirements and Recommendations**

Interested students should contact their CLAS advisor as early as possible to ensure proper planning for the five year degree.

Interested students should contact the MPA Director as early as possible for advising (Dr. Mary Guy, 303-315-2007 or mary.guy@ucdenver.edu).

Students may apply to the program during the semester in which they will successfully complete 90 semester hours.

To apply, students must have a 3.5 or higher GPA in CLAS.

Students who wish to apply should have most of their general education and major requirements completed by the time they have earned 90 semester hours.

Students must complete all the required application materials for the School of Public Affairs:

- The UC Denver graduate application, parts 1 and 2

- A declaration of program form

- A resume highlighting work and volunteer experience, extra-curricular activities and any special skills, achievements and awards

- Scores from the GRE, GMAT or LSAT (GRE preferred)

## **Program Requirements**

Students must fulfill all the requirements for graduation for CLAS:

- Total of 120 hours (includes hours in public affairs)

- 30 hours in the core curriculum

- 30-48 hours to satisfy major requirements

- Writing proficiency (1 – 7 hours)

Mathematics proficiency (0 – 3 hours)

Level III foreign language (0 – 13 hours)

It is highly recommended that students complete a course in American government, statistics and economics before applying to the MPA program

Students must maintain a 3.5 GPA in CLAS course work.

Students may complete a maximum of 18 semester hours of SPA course work while classified as an undergraduate student.

Students must fulfill all the requirements for graduation from SPA:

Total of 36–39 semester hours in public affairs

Six core courses (PAD 5001 – PAD 5006)

Five elective courses at the graduate level (5000 and 6000 level courses)

Nine of the 15 elective semester hours must be PAD courses

An internship (3 hours) is required from those who do not have significant work experience in the field

Successful completion of the advanced seminar (capstone) course taken in a semester AFTER all core courses are completed. A thesis option is available. Interested students should contact their SPA faculty advisor.

Students must maintain a 3.0 or higher GPA in public affairs course work.

## **Program Options**

BA/MPA students may choose from any CLAS major.

BA/MPA students may choose to do a general MPA or select a MPA concentration in local government, nonprofit management, environmental policy, emergency management and homeland security or domestic violence.

## **Degree Confirmation**

Students are eligible to receive a bachelor's degree once they have successfully completed 120 semester hours and all CLAS requirements. The BA/MPA will be conferred once the student has completed all requirements of the master of public administration degree, including at least 36 hours of graduate level course work.

## **Doctoral Programs**

# Applied Mathematics, PhD

► Graduate School Rules apply to this program.

## Program Requirements

The department of mathematical and statistical sciences also offers a PhD in applied mathematics. The degree is designed to give candidates a contemporary, comprehensive education in applied mathematics and to provide research opportunities in the special fields of discrete mathematics, optimization, operations research, applied probability, computer science, computational mathematics, applied statistics and the mathematics of science and engineering.

There are six phases of the PhD program. A candidate must fulfill course requirements, pass the preliminary examinations, establish a PhD committee, meet the academic residency requirement, pass the comprehensive examination and write and defend a dissertation.

Students must complete 12 to 42 semester hours of nonthesis course work at the graduate level (12 hours if admitted with a master's degree in mathematics; 42 hours if admitted without a master's degree; number of hours to be determined by the graduate committee if admitted with a master's degree in another field). In addition, 30 hours of dissertation credit must be taken. The following courses are required as part of the formal course work: four PhD-level (7000 or 8000) courses (3 hours each), math clinic and three readings courses (1 semester hour each). Students must also satisfy a **breadth requirement** by completing a total of six graduate math courses from among several areas of mathematics, with no more than three of these courses from any one area. Courses used for a master's degree may be used to satisfy the breadth requirement. A 3.25 GPA must be maintained throughout all course work.

The preliminary examinations are designed to determine that students who intend to pursue the PhD program are qualified to do so. These four-hour written examinations are in the areas of applied analysis and applied linear algebra. Students must pass these exams within two years of entering the program with an MS in mathematics or within three years otherwise.

Six semesters of residence are required, as specified in the rules of the Graduate School. All students are strongly advised to spend at least one year doing full-time course work or research with no outside employment.

Application for candidacy is made after completion of the preliminary examinations and after at least three semesters of residency. The application must be submitted at least two weeks before taking the comprehensive examination. The comprehensive examination is designed to determine mastery of graduate-level mathematics and the ability to embark on dissertation research. It consists of a six-hour written examination and an oral

follow-up examination. Within six months after passing the comprehensive examination, the candidate must present a dissertation proposal to the dissertation committee.

Each student must write and defend a dissertation containing original contributions and evidence of significant scholarship. The dissertation defense is public and must be given before an examining committee approved by the Graduate School.

For more detailed information about the applied mathematics PhD, go to Requirements for the PhD Degree on the Math Graduate Handbook Web page.

## Civil Engineering PhD

► Graduate School Rules apply to this program

The PhD degree in civil engineering is offered through a coordinated program with University of Colorado-Boulder.

Prospective PhD students should contact the Department of Civil Engineering on the Downtown Campus to inquire about application requirements and to obtain the “Rules and Policies for the Coordinated PhD Program.”

Requests for applications for graduate study in civil engineering should be addressed to UC Denver Department of Civil Engineering, Campus Box 113, P.O. Box 173364, Denver, CO 80217-3364.

## Clinical Health Psychology PhD

► Graduate School Rules apply to this program

### Objectives and Requirements

A primary focus of clinical health psychology is the development of effective disease prevention interventions for populations at high risk for medical problems. A second focus of clinical health psychology is the development of strategies to help individuals who are already ill to manage their disease, increase their ability to collaborate with medical professionals and improve their coping skills. Students in this program will be trained to work within the community to use psychological tools and techniques to promote health, prevent and treat illness and improve the health care system. In addition to course work, students acquire expertise in research by completing a second-year project and doctoral dissertation, and demonstrate competence in clinical assessment and intervention through several applied practicum experiences, a clinical competency project and a pre-doctoral internship. Students can complete the program in five years and have up to eight years to complete the program according to Graduate School Rules. See the department Web site for complete information on the PhD in clinical health psychology.

# Computer Science and Information Systems PhD

► Graduate School Rules apply to this program

**Program co-directors:** Gita Alaghband (CSE) and Mike Mannino (Business School)

**Web site:** [www.csisphd.cudenver.edu](http://www.csisphd.cudenver.edu)

The Department of Computer Science and Engineering (CSE) and the Business School offer a joint doctor of philosophy degree program in computer science and information systems (CSIS). The program targets students with a master's-level education in either computer science or information systems who seek research training that combines CS and IS along with strong industry interaction. The joint PhD program provides training for academic positions, industrial research positions and senior consulting positions. The specific goals of the program complement these general goals:

- create a pool of graduates with CSIS research training who are qualified for academic and nonacademic careers

- meet student demand for advanced training in CSIS with accommodations for full-time and part-time students

- promote interdisciplinary research between CSE and the Business School

- enhance technology transfer between CSIS academic units and Front Range technology businesses through joint research, student internships, faculty externships and committee participation

## Program Components

### Plan of Study

A list of course work and other requirements for the degree should be prepared with the advisor and then submitted to the co-directors for approval. The successful completion of all work indicated on the plan of study is an important prerequisite for the conferring of the degree. A plan of study should be submitted for approval by the end of the first semester of the program. The current plan of study should be updated before the beginning of the second year of the program and submitted for re-approval by the co-directors.

### First and Second Papers

Students prepare papers during their second and third years. For part-time students, the timing might be longer in which case a prior approval by the advisor is required. The papers should be of high quality to ensure publication in conference proceedings or journals. The advisor serves as a mentor to help the student complete these papers, and each paper is submitted for approval to the advisor. An industry representative may also be used as an evaluator.

## **Comprehensive Exam**

After completing the required course work, each student will take a written comprehensive exam that requires integration of computer science and information systems knowledge. The program co-directors will solicit questions from faculty, schedule the examination and coordinate with faculty to grade the exam.

## **Dissertation Proposal**

Each student should prepare a proposal that will be evaluated by the doctoral committee. A proposal should be ready for review at least one semester before the expected completion date of the degree. The proposal is submitted for review and approval by the doctoral committee. An oral presentation of the dissertation proposal before the doctoral committee is required for approval. An approved proposal is then submitted to the co-directors of the program for final approval.

## **Dissertation Completion**

Once the dissertation proposal is approved, each student prepares and submits a dissertation. The dissertation is defended before the doctoral committee in a public meeting. Final approval for the dissertation is given by a vote of the dissertation committee after the public defense.

## **Graduation**

Upon completion of all degree requirements including the dissertation defense, the student receives the degree of doctor of philosophy. Students applying through CSE receive the PhD from the College of Engineering and Applied Science, while students applying through information systems receive the PhD from the Business School.

# **CSIS-Business PhD**

## **Program Components**

### **Plan of Study**

A list of course work and other requirements for the degree should be prepared with the advisor and submitted to the program co-directors for approval. The successful completion of all work indicated on the plan of study is an important prerequisite for the conferring of the degree. A plan of study should be submitted for approval by the end of the first semester of the program. The current plan of study should be updated before the beginning of the second year of the program and submitted for re-approval to the co-directors.

## **Preliminary Exam**

According to Graduate School rules, students are required to demonstrate their basic knowledge and preparation toward more advanced doctoral level work. For more information visit the CSIS program Web site.

## **Comprehensive Exam**

Students will submit a paper to fulfill the graduate school's comprehensive exam requirement. The paper should describe an area of research including literature review, problem definition and possible methodologies/models to study a significant problem in computer science or information systems. The paper will be evaluated by a committee of three faculty members. An oral presentation of the paper will be open to the entire CSIS faculty. The committee may adopt additional guidelines to evaluate the paper and presentation. According to graduate school rules, the comprehensive exam must be completed by the end of the fourth year in the program. In addition to these requirements, the comprehensive exam must meet the other graduate school requirements.

## **Dissertation Proposal**

As the first phase of the dissertation, each student should prepare a proposal that will be evaluated by the doctoral committee. A proposal should be ready for review at least one semester before the expected completion date of the degree. The proposal is submitted for review and approval by the doctoral committee. An oral presentation of the dissertation proposal before the doctoral committee is required for approval. An approved proposal is then submitted to the co-directors of the program for final approval.

## **University-Level Instructional Training**

During the program, each student will obtain training for university level instruction. This requirement can be fulfilled by working with a faculty member as a teaching assistant, attending university-level teacher training or teaching a university-level class. Students who plan a university career will be encouraged to teach one or more courses and participate in training. When teaching or working as a teaching assistant, a student will be compensated according to standard university salaries.

## **Dissertation Completion**

Following completion of the approval of the dissertation proposal, each student prepares and then submits a dissertation. The dissertation is defended before the doctoral committee in a

public meeting. Final approval for the dissertation is given by a vote of the dissertation committee after the public defense of the dissertation.

## Graduation

Upon completion of all degree requirements, including the dissertation defense, the student receives the degree of doctor of philosophy. Students applying through the CSE receive the PhD from the College of Engineering and Applied Sciences, while students applying through the information systems program receive the PhD from the Business School.

# Design and Planning PhD

► Graduate School Rules apply to this program

**Program Director:** Kevin Krizek

**Telephone:** 303-556-3282

The PhD in design and planning from University of Colorado Denver trains scholars for careers in higher education, research and high-level policy positions. It is a research-oriented doctoral degree with a flexible, interdisciplinary focus. Students actively draw from the rich intellectual resources of the University of Colorado campuses in both Denver and Boulder for classes, personalized instruction, teaching opportunities and research appointments. Graduates of the program work in universities, government, nonprofits and the private sector, both in the U.S. and around the world.

Planning and design form a well-established and expanding field of knowledge and practice regarding the relationships of natural, behavioral, technological, political, economic and cultural factors to the organization of physical space, and their combined influence on the quality of life in general. Housed within the college, the departments of architecture, landscape architecture, and planning and design share the idea that the complex problems of the built environment are best addressed through collaboration among the various design and planning disciplines. As a result of this collaboration, the departments jointly offer the advanced research degree, a PhD in design and planning.

## Areas of Specialization

The PhD program serves as the intellectual driver of the College of Architecture and Planning; its mission is to provide a scientific foundation for planning and design. Unique and distinguishing characteristics include the physical environment as the domain of interest, the interdisciplinary and integrative orientation of study and the applied nature of prescriptions. Being broad in its offerings, available study covers issues ranging from highly technical urban modeling to the history of architecture. Students in the program are encouraged to embrace tenets embodied in one of the following areas of specialization. Each broad specialization area is represented by its own core curricula specific to the domains of expertise and faculty

interests; in exceptional circumstances, advanced study on a related topic (e.g., historic preservation, green buildings) is available to bridge the two specialty areas.

## **Sustainable and Healthy Environments (SHE)**

Studies in SHE are concerned with the design making by public agencies to guide the pattern and timing of land development that advance goals of sustainable and healthy environments. Subfields include land use planning, growth management, transportation, urban design, housing and community development, environmental planning and management of urban, rural and natural areas. Primary work in this area focuses on land use controls, design review processes and the development of models and tools to understand and support decision processes and design practices.

## **History of Architecture, Landscape and Urbanism (HALU)**

Studies in HALU include the history and theory of architecture, landscape and urbanism considered within socioeconomic and political contexts, intellectual history and cultural studies, as well as questions concerning the evolution of technology, technique and materiality. Interdisciplinary and cross-cultural collaboration is encouraged. In this manner, the disparate range of ideologies and methodologies within the discipline itself are introduced. It is critical for the contemporary scholar and teacher to be aware of the tradition of strategies and perspectives in order to operate in an intellectually responsible manner in the present. A background in a professional design field is desirable for all applicants.

As part of studies in either specialty area, students work on diverse topics, advancing the intellectual environment of the college by participating in a common colloquia, organizing workshops, presenting at conferences and writing publications.

## **Admission Requirements**

As a candidate for admission to the PhD program, you must meet the requirements of the Office of Vice-Chancellor of Academic and Student Affairs of UC Denver. These include but are not limited to:

- Matters of provisional admission
- Transfer credit restrictions
- Residency requirements
- Eligibility of courses for graduate-level credit
- Foreign language requirements
- Examination schedules

## **Residency**

To be accepted, you will have to meet the academic residency requirement, which requires six semesters of scholarly work beyond the attainment of an acceptable bachelor's degree.

Two semesters of residence credit may be allowed for a master's degree from another institution of approved standing.

At least four semesters of resident credit, two of which must be consecutive in one academic year, must be earned from this university.

## **Specific Requirements**

The specific admission requirements for the PhD program in design and Pplanning are as follows:

### **1. Degree**

Minimally, to be a successful applicant, you must have a bachelor's degree. However, it is strongly advised that students entering the program will have completed both a bachelor's and a master's degree. Field specialization and background are open. However, you will preferably have completed a professional (master's or bachelor's) program in planning or a design-related field, such as:

- Architecture

- Landscape Architecture

- Architectural Engineering

- Urban Design

In combination with a degree in an area, such as:

- Geography

- Urban Economics

- Environmental Law

- Urban Sociology

- Real Estate

- Management Science

- Computer Science

- Public Administration

- Environmental Psychology

## 2. Knowledge from Prior Course Work

The applicability of your prior course work will be decided by the program committee upon review of your transcript and additional materials. If you do not have the requisite educational background, grade point average or GRE scores, you may be admitted on a conditional or provisional basis and additional course work may be required in accordance with Graduate School Rules.

*A. Design and Planning:* You can satisfy this requirement by virtue of having completed either a professional or a pre-professional degree program in these areas.

*B. Undergraduate Work:* You must have completed 12 semester hours of undergraduate work in one of the following areas:

Social and Behavioral Sciences  
Environmental and Natural Sciences  
Engineering  
Humanities

*C. Prerequisites:* You must also have completed one of the following prerequisites with a grade of "B-" or above (the choice depends on your area of specialization):

**Statistics.** Including probability theory, parametric and nonparametric methods, and acquaintance with basic multivariate techniques. A minimum of 3 hours.

**Mathematics.** Including differential equations, finite mathematics, algorithms, data structures or other appropriate courses. A minimum of 3.

**Language.** Ability to read at least one foreign language relevant to the area of specialization.

**Computer Applications.** Background in computer aided Design (CAD) or Geographic Information Systems (GIS). A minimum of 3 hours.

## 3. Demonstrated Academic Achievement

Academic achievement as evidenced by an undergraduate grade point average of 3.0 (on a 4.0 scale) or better, and a graduate grade point average of 3.5 or better.

A 575 TOEFL (Test of English as a Foreign Language) score is required if you are a foreign applicant whose native language is not English.

## Curriculum

Degree requirements are set both by the Graduate School at the University of Colorado Denver and the PhD program within the college. Degree requirements are divided into two parts: pre-candidacy and candidacy/dissertation research. The former involves course work, qualifying examinations and a dissertation prospectus. Candidacy is certification that all requirements have been met except the dissertation. The doctor of philosophy (PhD) degree in design and planning is granted upon the successful completion and defense of the dissertation.

Students meet these requirements through course work and exams over a two year period. During this time, a student's cumulative grade point average may not fall below a B without academic discipline or probation.

## **Degree Completion**

Students in the PhD program in design and planning have up to eight years to complete all requirements for the degree. It is possible to take a leave of absence (referred to as a 'time out,' however, such circumstances should be pursued in tandem with your advisor and/or your committee). A leave of absence form, obtained from PhD program administrative coordinator, must be completed to ensure your place in the program.

## **Three Components**

The PhD curriculum consists of three components:

Core curriculum

Additional course work

Dissertation

### **1. Core Curriculum (12 semester hours)**

Students in the program are encouraged to embrace tenets embodied in one of the following areas of specialization. Each broad specialization area is represented by its own core curriculum that is specific to the domains of expertise and faculty interests. The core curriculum includes 12 semester hours of course work and consists of a series of theory and methods and application courses, which all students must complete during their first two years of residence, plus an additional three hours of programwide colloquia.

#### **The core curriculum for the specialization in SHE includes:**

DSPL 7011 - Research Design: the Logic of Inquiry. **Semester Hours: 3**

DSPL 7013 - Environment and Behavior. **Semester Hours: 3**

DSPL 7012 - Theories of Planning, Government Intervention and Implementation: Means and Ends. **Semester Hours: 3**

#### **The core curriculum for the specialization in HALU includes:**

DSPL 7686 - Special Topics. Historiography: History of the Scholarly Discipline. **Semester Hours: 3**

DSPL 7686 - Special Topics. History of Theory: History of the Ideas Informing Practice. **Semester Hours: 3**

DSPL 7686 - Special Topics. Pro-Seminar: Advanced Seminar on Faculty Research Interests.  
**Semester Hours: 3**

Advanced study on related topics (e.g., historic preservation, green buildings) is available to bridge the two specialty areas, in which case a core curriculum would consist of one of the above tracks complemented by select offerings from the other track. Such circumstances are addressed in close consultation with your initial advisors and/or your committee.

All students are also required to complete three sessions of the colloquium (DSPL 7014 - Colloquium in Design) during their first two years in the program (1 semester hour, pass/fail credits only). You also have the option of taking more than the three required credits. The colloquium includes presentations by speakers (internal to the program, external to the program/university, students), workshops on research/scholarship skills, and perhaps even more social-type activities.

The year-long colloquium has three primary objectives:

It exposes students to various approaches to research related to design and planning.

It enables students to formulate and test out researchable topics among faculty and student peers.

Finally, it serves as a bridge between the two specializations offered within the program, HALU and SHE.

## **2. Additional Course Work (total 34 semester hours)**

In addition to the core curriculum, each student must take at least 12 semester hours of course work in classes broadly conceptualized as “methods” indicative to your field of research. Students must also have 12 semester hours of course work in their minor field of study and will typically take 10 semester hours of support electives. Courses outside the core curriculum may be chosen from outside the college on either the Denver or Boulder campus. Up to 18 semester hours of graduate-level course work can be transferred into the program to qualify for advanced standing.

## **3. Dissertation (30 semester hours)**

It is most important that you continue to work closely with your advisor while you are doing your dissertation research. Meet at least once a month to discuss your progress and be sure to communicate with your other committee members as well. It is a continual process that should be a joint effort to assure that your committee will be well informed and prepared at your defense.

## **Required Semester Hours**

**The required semester hours are as follows:**

Core Curriculum

12 semester hours

Specialization	12 semester hours
Minor	12 semester hours
Electives	10 semester hours
Dissertation	30 semester hours
Total	76 semester hours

**The average course load is 15 semester hours per academic year, especially for the first two years.**

## **Suggested Timing of the Program**

(for full-time students without advanced standing):

### **Year One**

Develop your degree plan

Complete any prerequisite courses

Enroll in 11 semester hours of the required core curriculum and additional courses in your specialty area

Finish the preliminary examination

### **Year Two**

Enroll in one semester of Colloquium

Continue or begin to take electives in your minor and specialty areas as described in your degree plan

Begin literature review papers

Prepare for your comprehensive exam

### **Years Three and Beyond**

Complete your literature review papers

Prepare a dissertation proposal

Take the comprehensive exam

Establish your dissertation committee

The remainder of the third and fourth years you will spend researching and writing the dissertation, under the supervision of the dissertation committee.

## Educational Studies and Research PhD

► Graduate School Rules apply to this program

**Office:**

Lawrence Street Center, 701

**Telephone:**

303-315-6300

**Fax:**

303-315-6311

**E-mail:**

education@ucdenver.edu

**Web site:**

[www.ucdenver.edu/education/doctorate](http://www.ucdenver.edu/education/doctorate)

At catalog publication time, the doctor of philosophy (PhD) in educational studies and research was in development and under review for approval at the university system level. The program is designed for those interested in pursuing a career as a researcher or faculty member in a university or other research-based organization. Please find updated information and details at the above Web site.

## Health and Behavioral Sciences PhD

► Graduate School Rules apply to this program

### Requirements for Admission

A master's or equivalent graduate degree is required for admission to the PhD program. In addition, we encourage prior graduate training in the areas noted below. Students applying without prerequisites may be admitted, but will be required to complete appropriate courses before being permitted to complete the core curriculum. The program currently works with two master's-level programs to provide articulated master's-PhD training, as described below.

In addition to the general admission requirements of the Graduate School, the specific admission requirements for the PhD in health and behavioral sciences are as follows:

Knowledge from prior course work or vocational experience at the equivalent of college senior or graduate level in each of the following areas.

*Social or behavioral sciences (15 semester hours minimum):* knowledge of essential facts and concepts concerning the relationship among individuals and society, social organization, individual psychology and the relationship among culture, belief and behavior. This could be satisfied by course work in psychology, sociology and anthropology.

*Human biology or physiology (6 semester hours minimum):* familiarity with the functioning of the human body in health and disease states, including an understanding of cellular and organ system processes; an appreciation of evolutionary theory and the mechanisms by which evolution operates on both cellular and population levels; and an understanding of the interplay between the evolution of disease and host response. This could be satisfied by course work in human biology, physiology, pathophysiology or biological anthropology.

*Statistics (3 semester hours minimum):* prior course work and current familiarity with statistics including probability theory, parametric and nonparametric methods and acquaintance with basic multivariate techniques.

*Epidemiology (3 semester hours minimum):* prior course work at the advanced undergraduate or graduate level with the basic concepts and methods of epidemiology including measures of risk, mortality, distribution of disease, role of bias and confounders and study design.

Demonstrated academic excellence as evidenced by an undergraduate GPA of 3.25 (out of a possible 4.0 points) or better, a graduate GPA of 3.5 or better, and scores in the top 30th percentile (averaged) of the GRE. Admission to the program is highly competitive; minimum GPAs and GRE scores for acceptance in any given year may be higher than the minimum levels indicated here.

The applicability of a student's prior course work will be decided by the program executive committee after reviewing the student's transcript and additional materials. If the student does not have the requisite educational background or GPA, the student may be admitted on a conditional or provisional basis and additional course work required in accordance with Graduate School Rules.

Prospective students should not be dissuaded from applying to the program if they do not meet all of the requirements for admission. In some cases, employment experience may be counted toward meeting a requirement. In other cases, students may be admitted conditionally upon their completion of a list of prerequisite courses that will be established at the time of admission. Students should be sure to address this issue in completing the graduate application by specifying the academic and vocational experience they possess that meets, in part or full, the admission requirements described above.

## **MASTER'S LEVEL PREPARATION FOR THE DOCTORAL PROGRAM IN HEALTH AND BEHAVIORAL SCIENCES**

The program does not currently offer master's-level training in HBSC. Instead, we urge interested applicants to pursue relevant master's degree training in one of the social, behavioral or health sciences disciplines. In addition, we work closely with two master's programs at UC Denver. These are the concentrations in medical anthropology within the anthropology MA program offered by the anthropology department and the master of public health offered by the

Colorado School of Public Health. Contact the respective programs for more information on these degree options and our program for how their requirements articulate with those for the health and behavioral sciences PhD.

## TO APPLY FOR ADMISSION

At the UC Denver Downtown Campus, all graduate applications are now submitted electronically. To begin the application process, go to the online admissions Web site: [https://hydra.cusys.edu/admapp/cgi-bin/sisadm.cgi?sys\\_template=mtaplgn&sys\\_logon=1](https://hydra.cusys.edu/admapp/cgi-bin/sisadm.cgi?sys_template=mtaplgn&sys_logon=1). If you have any difficulties, call the program assistant at 303-556-4300. The program admits students only for the fall semester, which typically begins in mid- to late August. The deadline for the receipt of all application materials is **February 15** for admission the following August.

Applicants should invest considerable thought and effort in preparing their application. For instance, in the essay (Part II, question six) applicants should provide information on: (a) their academic training and any employment related to public health or health care; (b) their experiences with inter- and multidisciplinary perspectives, and (c) how they envision using their doctoral degree to improve the health status of human populations and individuals. Students should also indicate the kinds of research *foci* that interest them the most.

In addition to the required recommendation form, letters of recommendation are required from at least three individuals in a position to judge the applicant's ability to complete the program. Recommenders may be employers, colleagues or professors; however, the applicant should be sure that the letters address the quality of and aptitude for academic work as well as personal characteristics and qualities.

## Financial Aid

There are four kinds of financial aid available: graduate student stipends/fellowships; tuition assistance; research assistantship positions funded by grants to specific program faculty; and the regular package of financial aid (primarily loans) available through the financial aid office.

Newly admitted, out-of-state and students demonstrating outstanding scholastic achievement receive priority when assigning departmental sources of funding. Students interested in research assistantships should contact the individual faculty member with whom they wish to work regarding potential assistantship positions.

All other aid should be requested through the UC Denver Financial Aid Office, North Classroom, 1030, Campus Box 125, P.O. Box 173364, Denver, CO 80217-3364. Telephone: 303-556-2886.

## Program Requirements

There are three dimensions to the required curriculum:

A core curriculum that focuses on problem-oriented, interdisciplinary approaches to theory and method

Elective course work intended to provide the student with a solid base from which to launch the dissertation research

Dissertation research and writing

The core curriculum is subject to change. What appears below is intended to give students a general idea of the extent, shape and content of the core curriculum. Students should check with the program office for up-to-date information on specific course requirements and scheduling.

## The Core Curriculum

The core curriculum should be completed by students by the end of their second year of full-time study. It consists of the following series of courses which, together, constitute 26 semester hours:

### I. Health and Behavioral Sciences Colloquium

Each fall, the HBSC program will organize a series of presentations by scholars working in the health and behavioral sciences. The presentations provide students with the most current science and theory in the field. Required of all first- and second-year students, who must take at least two times.

HBSC 7001 - Colloquium Series in the Health and Behavioral Sciences. **Semester Hours: 1**

**Total: 2 Hours**

### II. Theoretical Perspectives in the Health and Behavioral Sciences

This series is designed to give students a thorough background in how the principles of the social and behavioral sciences have been applied to health issues. Topics include: the interplay between structure and agency in creating and maintaining health; social epidemiology; critical theory and social determinants of health; issues affecting Western biomedicine and public health systems; diffusion of healthy behavioral change among populations; social construction of health and illness; health policy and bioethics; social networks; and stress.

HBSC 7011 - Theoretical Perspectives in Health and Behavioral Science I. **Semester Hours: 3**

HBSC 7021 - Theoretical Perspectives in Health and Behavioral Science II. **Semester Hours: 3**

HBSC 7071 - Social and Behavioral Determinants of Health and Disease. **Semester Hours: 3**

**Total: 9 Hours**

### **III. Human Ecology and Environmental Adaptation**

This course will emphasize the biological/physiological dimensions of human health and disease.

HBSC 7031 - Human Ecology and Environmental Adaptation. **Semester Hours: 3**

**Total: 3 Hours**

### **IV. Research Design and Methods in the Health and Behavioral Sciences**

Two HBSC core research design and methods courses, plus one additional advanced methods course of student's choosing. This series covers the philosophy of science and the structure of scientific inquiry, procedures for hypothesis-testing, quantitative and qualitative methodological strategies commonly employed in the field, epidemiology and program evaluation. Students must further develop specialized methodological skills by completing an independent study (HBSC 6840) or taking one additional course in advanced epidemiology, advanced biostatistics, health economics, survey research design or qualitative methods and data analysis. This requirement will be tailored specifically to the student's particular interests by his/her advisor.

HBSC 7041 - Research Design and Methods in the Health and Behavioral Sciences I.  
**Semester Hours: 3**

HBSC 7051 - Qualitative Research Design and Methods. **Semester Hours: 3**

One elective course in advanced methods: **3 semester hours**

**Total: 9 Hours**

### **V. Applications of the Health and Behavioral Sciences**

This course offers students the opportunity to focus on individual research interests with guidance from faculty and input from peers.

HBSC 7111 - Applications of the Health and Behavioral Sciences. **Semester Hours: 3**

**Total: 3 Hours**

**TOTAL CORE: 26 Hours**

### **Elective Courses**

Elective course work together constitutes 26 semester hours, of which a minimum of 6 hours can be drawn from the large number of offerings in the health and behavioral sciences at UC Denver. A full listing of elective courses is available in the program office and online on the HBSC Web site. Students will be expected to fulfill the necessary prerequisites for taking these

courses, and final authority as to whether a student may enroll in the course will rest with the department in which the course is offered.

**TOTAL ELECTIVES: 26 Hours**

## **Doctoral Dissertation Research**

The doctoral dissertation research topic is chosen by the student. The student is expected to define a research question in health and behavioral science, identify the research strategy to be used for answering the question, conduct the research required and document the project in the form of a doctoral dissertation. The student will be guided in this process by a doctoral dissertation advisor and the additional members who comprise the student's doctoral dissertation committee (see below). A minimum of 30 semester hours of dissertation work is required. Students must register for a minimum of 5 dissertation credits each semester of their dissertation work. Students may not take more than a year's leave of absence or fail to enroll for semester hours more than three semesters before they are dropped from the program.

## **Advisors**

Upon admission to the program, each student will be assigned a first-year advisor. The student or the faculty will then choose the faculty advisor who will guide the student through the core and elective course work. The faculty advisor may or may not be the chair of the student's dissertation committee. The student selects his or her chair and three additional committee members who oversee the student's comprehensive examination and dissertation research.

## **Formal Review**

A formal review of each student's first-year progress will be undertaken at the end of the first year of study. A student may not take any additional courses in the program until this review is completed. Students who are deemed not to be making satisfactory progress will be informed in writing as to the nature and final result of the review before the end of June in the first year of study.

## **The Dissertation Prospectus and the Comprehensive Examination**

Before a student advances to candidacy, she/he must complete a dissertation prospectus and defend it successfully in the context of an oral comprehensive examination. The dissertation prospectus is a complete description of the question or hypothesis that the student wishes to research for the dissertation project, the research design and study techniques and an assessment of the proposed project's contribution to the field. It will include a comprehensive review of the relevant literature. If the student chooses to undertake research in a particular ethnic or cultural community, she/he must also demonstrate sufficient understanding of that setting including adequate knowledge of the language. This prospectus must be approved by the student's advisor prior to scheduling the comprehensive examination.

The comprehensive examination will be an oral format based in part on, but not restricted to, the material presented in the dissertation prospectus. This exam *must* take place before the student's advancement to candidacy and will typically occur by the end of the third year of study. A committee comprising the chair and three faculty members will supervise the completion of the dissertation prospectus. This committee will conduct the oral examination and will recommend to the executive committee by a majority vote whether or not the student should be advanced to candidacy.

## **The Doctoral Dissertation and Final Exam**

After advancement to candidacy, the student in consultation with his or her advisor will appoint a dissertation committee comprising the chair and three faculty members. The chair and composition of the committee will be subject to approval by the program executive committee. The chair and two other members must have been present at the student's comprehensive examination and will be responsible for overseeing the research and writing of the doctoral dissertation. The committee will review drafts of the dissertation and, when the dissertation is completed to its satisfaction, will conduct the final exam, which will be based on the doctoral dissertation and related materials. The final examination will be open to the public.

**Dissertation Total: 30 Hours minimum**

## **Leadership for Educational Equity EdD**

► Graduate School Rules apply to this program

**Office:** Lawrence Street Center, 701

**Telephone:** 303-315-6300

**Fax:** 303-315-6311

**E-mail:** [education@ucdenver.edu](mailto:education@ucdenver.edu)

**Web site:** [www.ucdenver.edu/education/doctorate](http://www.ucdenver.edu/education/doctorate)

At catalog publication time, the doctor of education (EdD) in leadership for educational equity was in development and under review for approval. The program is primarily designed for the professional educator with an interest in being a leader in P-12 schools or community-based educational organizations. Please find updated information and details at the above Web site.

## **Public Affairs PhD**

► Graduate School Rules apply to this program

Program Director: Peter deLeon, PhD

### **Faculty**

**Professors:**

Kathleen Beatty, PhD, Washington State University  
Lloyd Burton, PhD, University of California, Berkley  
Peter deLeon, PhD, Pardee RAND Graduate School  
Robert Gage, PhD, Indiana University  
Mary Guy, PhD, University of South Carolina  
Richard Stillman, PhD, Syracuse University  
Paul Teske, PhD, Princeton University

**Associate Professors:**

Linda deLeon, PhD, University of California, Los Angeles  
Angela Gover, PhD, University of Maryland  
Jody Fitzpatrick, PhD, University of Texas, Austin  
Allan Wallis, PhD, City University Graduate Center  
Christine Martell, PhD, Indiana University

**Assistant Professors:**

George Busenberg, PhD, University of North Carolina at Chapel Hill  
Danielle M. Varda, PhD, University of Colorado Denver  
Christopher M. Weible, PhD, University of California-Davis

**Wirth Chair:**

Sen. Gary Hart (Ret.), JD, Yale University

**Research Professor:**

Stephen Block, PhD, University of Colorado

**Clinical Professor**

Malcolm Goggin, PhD, Stanford University

**Research Associate:**

Robert Reichardt, PhD, Pardee RAND Graduate School

**Lecturers:**

Todd Bryan, MPA, Harvard University

Floyd Ciruli, JD, Georgetown University

Wellington Webb, MA, University of Northern Colorado

**Professors Emeritus:**

John Buechner, PhD, University of Michigan

Dale Neugarten, PhD, University of Southern California

The School of Public Affairs offers a program of advanced graduate study leading to the doctor of philosophy in public affairs. The program, based on the Downtown Campus, permits elective work to be taken on any campus of the university if it is part of the approved program of study or degree plan.

The doctoral program was developed to meet the need for people with mastery in the scholarly theory, concepts and research skills of public administration, public policy and public management, and who are able to use such skills in careers of research, teaching and analysis of public-sector challenges. The PhD is designed to prepare students for leadership responsibilities in academia, research and public policy analysis. Accordingly, the PhD stresses the development of theoretical, conceptual and methodological knowledge in public administration, policy and management.

**Participants**

The doctoral program is primarily designed to serve (1) people who desire to further the field of public policy and public and nonprofit management through teaching and research; (2) scholar-practitioners working in government, private-sector organizations concerned with government and nonprofit organizations; and (3) policy analysts in government, private-sector organizations concerned with government and nonprofit organizations.

**Time Required for PhD Degree**

The PhD program requires an intense commitment. Most courses and seminars are offered during the late afternoon, in the evenings or on an intensive basis. (Some electives are offered online, but core courses are not.) Anyone starting the PhD program with a master's degree in public administration can expect to take at least three but no more than eight years to complete all of the requirements for the PhD.

Students are required to enroll for a minimum of 6 semester hours of course work each fall and spring semester. All requirements for the PhD degree should be completed within eight years of admittance. Any student entering the program with no prior graduate work in public administration, public policy or management should expect additional course requirements.

## **PhD Admission Requirements**

Admission to the program is based on the personal and professional qualifications of the applicant. It is desirable that an applicant have a master's degree in public administration or a closely related field before undertaking doctoral work. Applicants should have a 3.5 GPA or above in master-level course work, as well as a combined score of 1,000 or better on the quantitative and verbal sections of the GRE. Successful applicants will also show the potential for productive careers of scholarship, research and analysis.

Meeting the minimum thresholds listed above does not assure admission. In unusual cases, students who fail to meet the thresholds may be admitted if high academic skills are demonstrated in other ways.

## **PhD Application Process**

Applicants must submit the following items to the SPA office before they can be formally considered for admission. The application deadline is February 1; admitted students will begin in the fall semester.

- application forms

- official transcripts (two copies) from all degree granting institutions

- GRE scores (no more than three years old)

- a resume or vita

- three letters of recommendation from colleagues and previous professors, focusing on the potential for deriving benefit from the PhD program

- a 500–1,000 word statement of educational and career goals, focusing on research interests

In addition, students may also submit samples of research reports or publications. All application materials will be retained by SPA and will not be returned. A personal meeting with the PhD director or other faculty member is recommended.

## **Financial Assistance**

For excellent candidates, SPA will fund a small number of doctoral research assistantships each year based on financial availability. Students selected will receive a full-tuition waiver as well as a stipend of \$15,000 for the academic year. Our goal is to provide such funding for students for at least three years.

## **Degree Requirements**

### **Course Work**

A total of 36 semester hours of course work is required past a master's degree in public administration or a related degree. In some cases, additional prerequisite courses may be required to assure adequate preparation for doctoral studies. All PhD students are required to take a minimum of 6 semester hours of course work in both the fall and spring semesters, until their course work requirements are met, if they wish to maintain their full-time student status.

**During their first year of study, all PhD students are required to take the following four doctoral seminars:**

P AD 8010 - Historical and Comparative Foundations of Public Administration. **Semester Hours: 3**

P AD 8020 - Seminar in Public Management. **Semester Hours: 3**

P AD 8030 - Seminar in Public Policy. **Semester Hours: 3**

P AD 8040 - Critical Issues in Public Affairs. **Semester Hours: 3**

**Total: 12 Hours**

**During the next year, doctoral students are required to take**

P AD 8040 - Critical Issues in Public Affairs. **Semester Hours: 3**

P AD 8070 - Advanced Seminar in Research Methods. **Semester Hours: 3**

P AD 8060 - Seminar on Conduct of Empirical Inquiry. **Semester Hours: 3**

**Total: 6 Hours**

Prerequisites for P AD 8070 include P AD 7330, Intermediate Statistical Analysis, P AD 8010, 8020, 8030, 8040 and 8060. These prerequisites may be waived with the permission of the doctoral director.

In addition, all PhD students must complete a second methodology course (as well as four elective courses) relevant to the student's dissertation plans.

## **Comprehensive Exam and Dissertation**

In addition to course work, PhD students must pass a comprehensive exam no later than the beginning of their third year of study. Students are also required to complete and defend, before a faculty committee, a dissertation that makes a significant contribution to the literature and theory of public administration, management or policy.

Students are advanced to candidacy for the PhD once they have completed all required course work and examinations, have successfully presented their research colloquium and have been certified for candidacy by his/her doctoral committee. After students are formally advanced to candidacy, they must register for a total of 30 hours of dissertation research credit to complete the PhD. Each fall and spring semester, students are expected to register for 5 semester hours of dissertation research; if unable to register for at least 5 semester hours, students must request a leave of absence from the PhD program until able to complete the minimum dissertation requirement. Students may take up to two semesters' leave of absence before they are disenrolled from the program. Students then would need to reapply to the program.

Further details on the program can be found in the *Handbook for the Doctor of Philosophy in Public Affairs Program*, available from the SPA office on online at <http://spa.ucdenver.edu>.

## **Licensure**

# **Administrator License - Executive Leadership Program**

## **Administrative Leadership and Policy Studies**

## **Requirements for Principal Licensure, the MA and EdS degrees, and Executive Leadership Administrator Licensure Program**

**Office:** Lawrence Street Center, 701

**Telephone:** 303-315-6300

**Fax:** 303-315-6311

**E-mail:** [education@ucdenver.edu](mailto:education@ucdenver.edu)

**Web site:** [www.ucdenver.edu/education/alps](http://www.ucdenver.edu/education/alps)

### **Principal Licensure**

#### **Master of Arts Degree**

#### **Education Specialist Degree**

## Executive Leadership Administrator Licensure Program

### Faculty

For information about faculty in this area, visit [www.ucdenver.edu/education/alps](http://www.ucdenver.edu/education/alps).

The primary responsibility of the administrative leadership and policy studies (ALPS) faculty is to prepare leaders for public education in Colorado and the nation. Currently, the principal license is required for people seeking building-level administrative positions in Colorado.

### Principal Licensure Program

ALPS offers course work that leads to the initial license for principal. Having earned an initial license, those who have obtained a master's degree and who go on to complete a district sponsored induction program may then be awarded a professional license by the Colorado Department of Education.

ALPS's 32 semester-hour principal licensure program is project-based, requiring students to present evidence of meeting both state and national standards through performance based assessments. A 400-hour clinical-practice experience is integrated throughout the four-semester program.

Students develop a portfolio during the principal licensure program. Portfolios not finalized by the end of the fourth semester must be completed within the two subsequent semesters (not including summer).

**Note:** Those already holding a principal license and master's degree should see the Executive Leadership Program (below) for pursuing administrator licensure.

### Denver Metro-Area Cohorts

Denver metro-area cohorts are delivered in **four 8-semester-hour courses** over four consecutive semesters. Cohorts start at one or more locations each semester and involve a combination of regular in-person meetings (up to 15 times per semester) and online work.

EDUC 5751 - Principal/Administrator Licensing I. Semester Hours: 5 to 9

EDUC 5752 - Principal Administrator Licensing II. Semester Hours: 5 to 9

EDUC 5753 - Principal/Administrator Licensing III. Semester Hours: 5 to 9

EDUC 5754 - Principal or Administrator Licensing IV. Semester Hours: 5 to 9

**Total: 32 Hours**

### Distance-Learning Cohorts

Distance-learning cohorts start each summer in June with a weeklong boot camp in Denver, meet over several intensive weekends during the subsequent fall and spring semesters and end

with a weekend the following summer. Online work is completed in between the in-person sessions. Distance-learning cohorts are delivered in **three 9-semester-hour courses and one 5-semester-hour course:**

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EDUC 5753 - Principal/Administrator Licensing III. Semester Hours: 5 to 9

EDUC 5754 - Principal or Administrator Licensing IV. Semester Hours: 5 to 9

**Total: 32 Hours**

## **MA Program**

The MA is designed for those who do not already hold a graduate degree. Usually master's students will complete 9 semester hours beyond the 32 required in the licensure program, for a total of 41 semester hours of course work after the bachelor's degree.

For the MA degree, students must select at least one course in each of the following three areas:

### **Section A: Educational Research**

REM 5100 - Basic Statistics. Semester Hours: 3

REM 5200 - Introduction to Research Methods. Semester Hours: 3

REM 5300 - Introduction to Measurement. Semester Hours: 3

### **Section B: Educational Foundations/Multicultural Education**

FNDS 5050 - Critical Issues in American Education. Semester Hours: 3

FNDS 5500 - Contemporary Philosophies of Education. Semester Hours: 3

FNDS 5410 - History and Philosophy of Modern Education. Semester Hours: 3

LLC 5140 - Multicultural Education. Semester Hours: 3

LLC 5150 - Culture of the Classroom. Semester Hours: 3

LLC 5160 - Foundations of Bilingual Education. Semester Hours: 3

### **Section C: Educational Psychology/Special Education**

EDUC 5400 - Special Education Seminar for Principals. Semester Hours: 3

EPSY 5100 - Advanced Child Growth and Development. Semester Hours: 3

EPSY 5110 - Human Learning. Semester Hours: 3

EPSY 5140 - Advanced Adolescent Growth and Development. Semester Hours: 3

EPSY 5160 - Behavior Disorders in Exceptional Children. Semester Hours: 3

EPSY 5200 - Social Psychology of Learning. Semester Hours: 3

SPED 5140 - Advanced Assessment in Special Education. Semester Hours: 3

SPED 5180 - Curriculum Planning for Students with Special Needs. Semester Hours: 3

SPED 5400 - Advanced Seminar in Special Education. Semester Hours: 3

SPED 5600 - Special Education for School Professionals. Semester Hours: 3

Candidates must also successfully complete a comprehensive exam paper, reflecting on how the three MA classes will help them in the role of principal or administrator.

## **EdS Program**

The EdS degree program affords the opportunity for advanced graduate study and is available to those who already hold a master's degree. Generally for the specialist degree students will complete 9 semester hours that constitute an area of focus, in addition to the 32 required in the licensure program. Candidates must also successfully complete a comprehensive exam paper, reflecting on how the three EdS classes will help them in the role of principal or administrator.

## **Administrator Licensure - Executive Leadership Program**

Designed for the professional educator who, already holding a principal license and master's degree, wishes to obtain an initial administrator license in Colorado and prepare for a career as a superintendent or other district leader. This one-year, 12-semester-hour certificate program combines weekend meetings with online work and hands-on clinical practice—usually completed in participants' home districts. Learn more at [www.ucdenver.edu/education/elp](http://www.ucdenver.edu/education/elp).

## **Additional Program Information**

Individuals interested in any of these programs are encouraged to contact ALPS faculty. Conferences prior to application are encouraged and welcomed. Following admission, students are expected to maintain frequent contact with assigned advisors to plan, develop and complete their programs of study.

# **Early Childhood Special Education Specialist Licensure**

## **Early Childhood Education**

**Office:** Lawrence Street Center, 701

**Telephone:** 303-315-6300

**Fax:** 303-315-6311

**E-mail:** [education@ucdenver.edu](mailto:education@ucdenver.edu)

**Web site:** [www.ucdenver.edu/education](http://www.ucdenver.edu/education)

## **Faculty**

More information about faculty in this division is available online at [www.ucdenver.edu/education](http://www.ucdenver.edu/education).

# Early Childhood Education Program

The early childhood education (ECE) program leads to a master's degree in early childhood education (early childhood accomplished teacher focus) and/or licensure in early childhood special education (early childhood special education specialist). The program prepares leaders who will enrich the life experience of young children (birth to 8) and their families through a variety of professional roles.

ECE Program students may select from three program options:

- MA in early childhood education

- ECSE specialist license (initial or added endorsement)

- MA plus ECSE specialist license (initial or added endorsement)

The ECE program is interdisciplinary in focus, drawing on university resources and the clinical expertise of various community professionals. There is a strong emphasis on fieldwork and practicum experiences in both regular and special education concentrations. Field experiences are a part of each course and provide an opportunity for each student to gain knowledge, abilities and dispositions while interacting with children, families, program staff and community agencies. Practicum experiences are designed to allow students to apply knowledge and practice skills in a closely supervised environment.

The early childhood accomplished teacher focus and the early childhood special education focus share course content in:

- literacy development and disorders

- child growth and development, differences and disorders

- learning approaches with young children

- measurement and evaluation

- basic statistics/research methods

- multicultural education

- research and current issues

- early childhood curriculum and program development for inclusive classrooms

- working collaboratively with parents and families

- program administration/leadership

The early childhood special education program provides specialized preparation in:

- screening and assessment of young children

intervention strategies with infants and preschoolers

behavior management

working as a member of the transdisciplinary team

cognitive and socio-emotional development and disorders

treatment of children who have neurological impairment and chronic illness

challenging behaviors and autism

## **Program Requirements**

### **Semester Hour Requirements**

Master's degree in ECE: 40 semester hours

ECSE specialist license: 40 semester hours

Master's degree plus ECSE specialist license: 49 semester hours

Master's degree plus ECSE specialist added endorsement: 40 semester hours

ECSE specialist added endorsement: 25 semester hours

## **Fieldwork and Practicum Requirements**

The master's degree in early childhood education includes a total of 425 hours of required fieldwork/practica. Approximately 200 hours of fieldwork are associated with course assignments; 225 hours of intense, culminating practica occur toward the end of the second year of study. Students completing the MA program take a written comprehensive exam (take home) during the final semester of their program (concurrently with courses at the end of the program sequence).

For the master's degree in early childhood education plus the ECSE specialist initial license, a total of 800 hours of fieldwork/practica is required. Approximately 290 hours of fieldwork are associated with course assignments; 510 hours of intense, culminating practica occur toward the end of the second year of study. Students seeking an added endorsement in ECSE specialist also complete 510 hours of practicum experiences.

Nine semester hours can be transferred for the master's degree; 15 semester hours can be transferred for the ECSE specialist license. These credits include courses taken through continuing education, from other institutions or as a nondegree student at the University of Colorado Denver before the term officially admitted.

## **Plans of Study**

The following table delineates course work and program completion requirements for the MA degree and ECSE specialist license through various program options.

<b>ECE Program Options Plans of Study</b>	MA in ECE	ECSE Specialist License	MA in ECE and ECSE Specialist License	ECSE Specialist Endorsement for those holding Elementary or ECE License	MA in ECE and ECSE Specialist Endorsement for those holding Elementary or ECE License	ECSE Specialist Endorsement for those holding Special Education License	MA in ECE and ECSE Specialist Endorsement for those holding Special Education license
<b>Course</b>							
EPSY 5100 - Advanced Child Growth and Development.	Required	Required	Required				
REM 5100 - Basic Statistics.	Required		Required		Required		Required
ECE 5000 - The Early Childhood Profession.	Required	Required	Required	Required	Required	Required	Required
ECE 6100 - Medical and Physiological Aspects of Developmental Disabilities.	Required	Required	Required	Required	Required	Required	Required
ECE 5020 - Approaches to Young Children's Learning.	Required	Required	Required		Required **	Required *	Required **
ECE 5070 - Cognitive, Social, Emotional Development and Disorders in Young		Required	Required	Required	Required	Required *	Required *

Children. <b>or</b> ECE 5202 - Stress, Violence, and Behavior Challenges in Young Children's Lives.							
ECE 5080 - Language and Literacy in Young Children.	Require d	Require d	Required	Required	Required	Required *	Required*
ECE 5010 - Curriculum and Program Development in Early Childhood Education.	Require d	Require d	Required	Required *	Required *	Required	Required
ECE 5060 - Working with Parents and Families.	Require d	Require d	Required		Required **		Required **
ECE 5040 - Administrative Seminar.	Require d	Require d	Required		Required **		Required **
ECE 5202 - Stress, Violence, and Behavior Challenges in Young Children's Lives.	Require d				Required **		Required **
ECE 6690 - Seminar: Research and Current Issues in Early	Require d		Required		Required		Required

Childhood Education.							
ECE 5140 - Measurement and Evaluation in Early Childhood Education.	Required		Required		Required		Required
ECE 6010 - Literacy and Mathematics K-2.	Required	Required	Required	Required*	Required*		
ECE 5200 - Screening and Assessment of Young Children.		Required	Required	Required	Required	Required	Required
ECE 6200 - Early Intervention Strategies.		Required	Required	Required	Required	Required	Required
ECE 6911 - Practicum in Early Childhood Education.	Required						
ECE 6910 - Practicum in Infancy.		Required	Required	Required	Required	Required	Required
ECE 6912 - Practicum: Early Childhood Special Education. Preschool Practicum		Required	Required	Required	Required	Required	Required

ECE 6914 - Primary Practicum in Early Childhood Special Education.		Required	Required	Required	Required	Required	Required
<b>Total Semester Hours</b>	<b>40</b>	<b>40</b>	<b>49</b>	<b>25</b>	<b>40</b>	<b>25</b>	<b>40</b>
<b>Comprehensive Exam</b>	Required		Required		Required		Required
<b>PLACE Exam #27</b>		Required	Required	Required	Required	Required	Required
				* choose one	* choose one	* choose two	* choose two
					** choose two		** choose two

# Elementary/Secondary Education Licensure

## Teacher Education Program

Lawrence Street Center, 701  
Campus Box 106  
P.O. Box 173364  
Denver, CO 80217-3364  
**Telephone:** 303-315-6300  
**Fax:** 303-315-6311  
**E-mail:** [education@ucdenver.edu](mailto:education@ucdenver.edu)  
**Web site:** [www.ucdenver.edu/education/ipte](http://www.ucdenver.edu/education/ipte)

Graduate Programs  
Undergraduate Program  
Admissions Requirements

# Teacher Education Licensure Program Overview

The teacher education program is both an undergraduate and graduate level program for general education licensure. (Special education is currently only an option at the graduate level, but undergraduates who want to obtain a special education license are encouraged to consider pursuing their endorsement plus an MA in special education.) The expectations for performance are identical for both undergraduates and graduates because the expectations for newly licensed teachers in the state of Colorado are exactly the same. Undergraduates and graduates work side by side in coursework and internships. There are very slight differences including the course registration numbers (UGs register for 4000 level; Grads register for 5000 level) and undergraduates take 1-2 licensure courses and one internship prior to admission in the program. The teacher education program fosters critically reflective inquiry about teaching and learning and the development of collaborative skills necessary to work effectively with other adults on schooling issues. The program strives to meet the needs of an increasingly diverse population of students, and to productively participate in and lead school renewal by applying democratic principles in educational settings.

## Education Pathways

The graduate teacher education program at UC Denver is designed for individuals with a minimum of a bachelor's degree who seek a master's degree along with an initial Colorado provisional teacher's license in the following areas:

**Elementary Education (K–6)** (40 semester hours)

**Secondary Education (7–12)** (37 semester hours)

English

mathematics

science (general science, biology, earth science, physics, chemistry)

social studies

foreign language (Spanish, French)

**Special Education Generalist (Ages 5–21)** (58 semester hours)

**Dual General Education/Special Education** (60-63 semester hours)

## Program Distinctions

## Program Structure

The program admits teacher candidates in two cohort groups, one in the summer/fall and one in the spring. The initial professional teacher education program includes a 12- or 18-month licensure plan. Students will be taking course work at the university and field-based work in one of UC Denver's partner schools. By enrolling in several courses together, elementary and secondary teacher candidates consider how students develop as learners over the entire K–12 school span. This collaborative approach applies to students in the general and special education program as well. This ensures that all elementary and secondary classroom teachers are well-prepared to work with students with special needs and that all special educators have a solid foundation in general education in curriculum and instruction.

## **Professional Development Schools**

While in the licensure portion of the program, teacher candidates work in a partner school one to four days per week, depending on the internship. University courses are closely interrelated with the four internship experiences in which teacher candidates gradually assume responsibility for teaching. Elementary teacher candidates generally spend an entire academic year in a single partner elementary school, whereas secondary teacher candidates spend their four internships in one of the partner middle schools *and* one of the partner high schools. The partner schools are located in several Denver metropolitan districts with most serving large populations of low-income and/or minority students, as well as a sizeable number of students for whom English is a second language and students with special needs. Each partner school is supported by a site professor from the university one day per week and by a master teacher, called a site coordinator.

## **Assessment**

In 2000, Senate Bill 154 required all Colorado teacher education institutions to become performance based. PBA stands for performance based assessment. PBAs are created that correspond to many of the teacher education courses and concurrent practice in the series of internships. In doing so, knowledge can be evaluated as a result of coursework and performance in schools simultaneously. As teacher candidates progress through the program, they will be introduced to Performance Based Assessments (PBAs) and will be guided and supported in both coursework and internships. Students seeking dual licensure are responsible for four additional PBAs associated with their second endorsement in Special Education.

The PBAs are:

1. Literacy Instruction & Assessment (elementary and secondary versions)
2. Mathematics Instruction & Assessment (elementary)
3. Subject Matter Content (secondary)
4. Student Profile
5. Classroom Management
6. Student Academic Performance Sample (SAPS)

## 7. Internship Performance Rubric (used at the end of each internship)

Passing the PLACE or PRAXIS II content examination prior to the final internship is also required before a candidate is eligible for a provisional teaching license in Colorado.

## Programs of Study

Due to the complex nature of state mandated influences of teacher preparation courses, please see current programs of study in the following link to the teacher education handbook.

## Master's Degree Options

The teacher education program design supports the concept of teacher education as an ongoing developmental process linking preservice, induction and ongoing professional growth experiences. Upon completion of the licensure portion of the program, beginning teachers continue working toward their master's degree (an additional 18-21 semester hours) in the areas of special education, educational psychology, content in English or history in collaboration with the Department of College or Liberal Arts and Sciences, or curriculum and instruction during their first or second year of teaching. This ensures that UC Denver's new teachers are provided with continuing support from the university while in their first few years of teaching.

## Undergraduate Teacher Licensure

### Undergraduate Teacher Education Program

The undergraduate teacher education program at UC Denver is a joint effort between the College of Liberal Arts and Sciences and the School of Education & Human Development. Students earn a bachelor's degree through the College of Liberal Arts and Sciences and a teaching license through the School of Education & Human Development.

This undergraduate program is dedicated to quality teacher education. To that end, our admission standards are rigorous and there are a number of program "gates" that teacher candidates go through to complete licensure.

UC Denver has selective admission standards for entering freshmen, including a 93 institutional index that includes students who are typically in the top third of their class or have a 3.4 GPA or score above a 23 on the ACT or 1100 on the SAT. Students transferring from community colleges must have a minimum of a 2.5 GPA.

*Please note: The admission into the School of Education & Human Development teacher education program is a separate process from admission to the university. Summer and fall admission deadlines are January 15, February 15 and March 15. Spring admission deadlines are August 15, September 15 and October 15.*

## Undergraduate Teacher Education Pathways

Undergraduate teacher candidates can earn a BA and a Colorado provisional teacher's license in the following areas:

BA—Individually Structured Major Elementary Education Licensure

BA—English Literature Secondary English Licensure

BS—Mathematics Secondary Mathematics Licensure

BA—History Secondary Social Science Licensure

BA—Political Science Secondary Social Science Licensure

BA—Spanish Secondary Spanish Licensure

BA—French Secondary French Licensure

## **Program Distinctions**

### **Program Structure**

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6. Student Academic Performance Sample (SAPS)
7. Internship Performance Rubric (used at the end of each internship)

Passing the PLACE or PRAXIS II Content examination prior to the final internship is also required before a candidate is eligible for a provisional teaching license in Colorado.

## **Undergraduate Advising**

Undergraduate teacher candidates will have a team of individuals who work with them throughout the completion of their bachelor's degree and teacher licensure. The following are the members of the advising team:

### **College of Liberal Arts and Science (CLAS) Education Advisor**

The CLAS advisor will assist you upon entry to the university through graduation. The CLAS advisor will monitor your progress through the core curriculum, pre-IPTE curriculum, eligibility requirements for the IPTE program and transfer credits. The CLAS advisor will also approve individually structured major-elementary education contracts for elementary education teacher candidates.

### **Faculty Advisor**

A faculty advisor designated within the academic department works with undergraduate teacher education students pursuing secondary licensure regarding specific requirements within academic major (i.e., English, history, mathematics, Spanish, French, and political science). See the CLAS advisor for specific names and contact information.

## **School of Education and Human Development Advisor**

An advisor in the School of Education and Human Development's Student Services Center (Lawrence St. Center Bldg., 701; 303-315-6300) is able to help with questions about prerequisite completion, taking the PRAXIS II/PLACE exam and other general questions.

## **IPTE Undergraduate Academic Planning Sheets**

Developed in collaboration with the academic departments and IPTE program faculty, advisors will work with the teacher candidates on an academic planning sheet. There is little flexibility in the program course requirements as these requirements meet and exceed the Colorado Department of Education's teacher education professional and content standards.

## **IPTE Undergraduate Community College Articulation**

UC Denver honors the community college articulation agreement to transfer the 60 designated semester hours from the community college to anyone admitted to the teacher licensure program. If the teacher candidate is a transfer student, he/she should work with his/her CLAS advisor early and often to ensure that all courses are transferred properly.

## **Programs of Study**

Due to the complex nature of state mandated influences of teacher preparation courses, for the 2009-2010 term, please refer to the most current version of the teacher education program handbook for academic requirements for this program.

## **Requirements for Admission**

The program conducts rolling admissions each semester. Summer and fall admission deadlines are January 15, February 15 and March 15. Spring admission deadlines are August 15, September 15 and October 15.

## **Teacher Education Information Sessions**

All prospective teacher candidates are strongly encouraged to attend an information session before applying to the program. Information sessions are held twice a month lasting approximately 60-90 minutes. Advisors will be available to provide prospective students transcript reviews and pre-admission advising. To more effectively facilitate this process, please bring copies of all transcripts with you. A calendar of upcoming information sessions can be viewed on the Downtown Campus Web site. Go to [www.ucdenver.edu/education/ipte](http://www.ucdenver.edu/education/ipte) or call the school's Student Services Center at 303-315-6300.

## **Teacher Education Program Requirements**

Applicants to the IPTE program must hold at least a bachelor's degree with a minimum undergraduate cumulative GPA of 2.75 for admission.

Graduate candidates with a GPA less than 2.75 are required to take the GRE, with a combined score of 1000 on the verbal and quantitative sections; or the Miller Analogies Test, with an average score of 400–600, before consideration for admittance.

All elementary education candidates must have a liberal arts major or equivalent content courses that provide a broad background of knowledge. \*

All secondary education candidates must have a major or major equivalent of at least 30 semester hours in their desired teaching field. \*

Undergraduate candidates must have an individually structured elementary emphasis.

\*This is determined through transcript evaluations at information sessions.

# Principal Licensure

## Administrative Leadership and Policy Studies

### Requirements for Principal Licensure, the MA and EdS degrees, and Executive Leadership Administrator Licensure Program

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**Principal Licensure**

**Master of Arts Degree**

**Education Specialist Degree**

**Executive Leadership Administrator Licensure Program**

## Faculty

For information about faculty in this area, visit [www.ucdenver.edu/education/alps](http://www.ucdenver.edu/education/alps).

The primary responsibility of the administrative leadership and policy studies (ALPS) faculty is to prepare leaders for public education in Colorado and the nation. Currently, the principal license is required for people seeking building-level administrative positions in Colorado.

## Principal Licensure Program

ALPS offers course work that leads to the initial license for principal. Having earned an initial license, those who have obtained a master's degree and who go on to complete a district sponsored induction program may then be awarded a professional license by the Colorado Department of Education.

ALPS's 32 semester-hour principal licensure program is project-based, requiring students to present evidence of meeting both state and national standards through performance based assessments. A 400-hour clinical-practice experience is integrated throughout the four-semester program.

Students develop a portfolio during the principal licensure program. Portfolios not finalized by the end of the fourth semester must be completed within the two subsequent semesters (not including summer).

**Note:** Those already holding a principal license and master's degree should see the Executive Leadership Program (below) for pursuing administrator licensure.

## Denver Metro-Area Cohorts

Denver metro-area cohorts are delivered in **four 8-semester-hour courses** over four consecutive semesters. Cohorts start at one or more locations each semester and involve a combination of regular in-person meetings (up to 15 times per semester) and online work.

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EDUC 5754 - Principal or Administrator Licensing IV. Semester Hours: 5 to 9

**Total: 32 Hours**

## Distance-Learning Cohorts

Distance-learning cohorts start each summer in June with a weeklong boot camp in Denver, meet over several intensive weekends during the subsequent fall and spring semesters and end with a weekend the following summer. Online work is completed in between the in-person sessions. Distance-learning cohorts are delivered in **three 9-semester-hour courses and one 5-semester-hour course:**

EDUC 5751 - Principal/Administrator Licensing I. Semester Hours: 5 to 9

EDUC 5752 - Principal Administrator Licensing II. Semester Hours: 5 to 9

EDUC 5753 - Principal/Administrator Licensing III. Semester Hours: 5 to 9

EDUC 5754 - Principal or Administrator Licensing IV. Semester Hours: 5 to 9  
**Total: 32 Hours**

## **MA Program**

The MA is designed for those who do not already hold a graduate degree. Usually master's students will complete 9 semester hours beyond the 32 required in the licensure program, for a total of 41 semester hours of course work after the bachelor's degree.

For the MA degree, students must select at least one course in each of the following three areas:

### **Section A: Educational Research**

REM 5100 - Basic Statistics. Semester Hours: 3  
REM 5200 - Introduction to Research Methods. Semester Hours: 3  
REM 5300 - Introduction to Measurement. Semester Hours: 3

### **Section B: Educational Foundations/Multicultural Education**

FNDS 5050 - Critical Issues in American Education. Semester Hours: 3  
FNDS 5500 - Contemporary Philosophies of Education. Semester Hours: 3  
FNDS 5410 - History and Philosophy of Modern Education. Semester Hours: 3  
LLC 5140 - Multicultural Education. Semester Hours: 3  
LLC 5150 - Culture of the Classroom. Semester Hours: 3  
LLC 5160 - Foundations of Bilingual Education. Semester Hours: 3

### **Section C: Educational Psychology/Special Education**

EDUC 5400 - Special Education Seminar for Principals. Semester Hours: 3  
EPSY 5100 - Advanced Child Growth and Development. Semester Hours: 3  
EPSY 5110 - Human Learning. Semester Hours: 3  
EPSY 5140 - Advanced Adolescent Growth and Development. Semester Hours: 3  
EPSY 5160 - Behavior Disorders in Exceptional Children. Semester Hours: 3  
EPSY 5200 - Social Psychology of Learning. Semester Hours: 3  
SPED 5140 - Advanced Assessment in Special Education. Semester Hours: 3  
SPED 5180 - Curriculum Planning for Students with Special Needs. Semester Hours: 3  
SPED 5400 - Advanced Seminar in Special Education. Semester Hours: 3  
SPED 5600 - Special Education for School Professionals. Semester Hours: 3

Candidates must also successfully complete a comprehensive exam paper, reflecting on how the three MA classes will help them in the role of principal or administrator.

## **EdS Program**

The EdS degree program affords the opportunity for advanced graduate study and is available to those who already hold a master's degree. Generally for the specialist degree students will complete 9 semester hours that constitute an area of focus, in addition to the 32 required in the licensure program. Candidates must also successfully complete a comprehensive exam paper, reflecting on how the three EdS classes will help them in the role of principal or administrator.

## **Administrator Licensure - Executive Leadership Program**

Designed for the professional educator who, already holding a principal license and master's degree, wishes to obtain an initial administrator license in Colorado and prepare for a career as a superintendent or other district leader. This one-year, 12-semester-hour certificate program combines weekend meetings with online work and hands-on clinical practice—usually completed in participants' home districts. Learn more at [www.ucdenver.edu/education/elp](http://www.ucdenver.edu/education/elp).

## **Additional Program Information**

Individuals interested in any of these programs are encouraged to contact ALPS faculty. Conferences prior to application are encouraged and welcomed. Following admission, students are expected to maintain frequent contact with assigned advisors to plan, develop and complete their programs of study.

# **Special Education**

**Office:** Lawrence Street Center, 701

**Telephone:** 303-315-6300

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**E-mail:** [education@ucdenver.edu](mailto:education@ucdenver.edu)

**Web site:** [www.ucdenver.edu/education](http://www.ucdenver.edu/education)

## **Special Education Program Overview**

The special education program within the initial professional teacher education division offers a special education generalist license and a special education endorsement as well as a master of arts degree in special education. All special education program options foster the development of critical reflection, inquiry about teaching and learning, as well as the breadth and depth in content knowledge necessary to work effectively in elementary and secondary classrooms. The program faculty promote the ability of teacher candidates to meet the needs of an increasingly diverse population of K–12 learners, as well as to participate productively in and lead school renewal.

The faculty in the program in special education value collaborative relationships between general and special educators, so we offer our teacher candidates the option of pursuing a dual endorsement in both general and special education to offer our teacher candidates the option of pursuing a dual endorsement in both general and special education.

# **Special Education Program Distinctions**

## **Special Education Licensing Pathways**

To be licensed as a special education generalist for grades ages 5-21, a teacher candidate must hold a bachelor's degree from a four-year accepted institution of higher education, have completed the plan of study from one of the program options for the preparation of special education generalist, have passed the approved elementary content and special education assessments and have demonstrated all required state and national standards.

Program options for the special education generalist include: 1) initial licensure as a special education generalist; 2) dual licensure in either elementary or secondary education and as a special education generalist; and, 3) for those who already hold a Colorado teaching license, an added endorsement, which is also fully online. There is also an option to count these courses towards a masters in special education which will require an additional 9 semester hours of course work.

The time needed to complete the various special education generalist program options varies based on the needs of teacher candidates. In addition to traditional on-campus offerings, a wide selection of courses are available in online formats. During the academic year, core special education courses are scheduled in late afternoons, evenings and on Saturdays to avoid conflict with teaching responsibilities.

## **Professional Development Schools**

While in the licensure portion of the program, teacher candidates work in a partner school one to four days per week, depending on the internship. University courses are closely interrelated with the four internship experiences in which teacher candidates gradually assume responsibility for teaching. Special education teacher candidates engage in a series of four internships from the beginning of the program to the end of the program. Dual teacher candidates engage in five internships that result in a general education license at the elementary or secondary level and then complete a fifth internship and additional course work; this can be done during an additional full time semester or can be worked out flexibly as the student assumes their first teaching position to complete their special education license. The partner schools are located in several Denver metropolitan districts with most serving large populations of low-income and/or minority students, as well as a sizeable number of students for whom English is a second language and students with special needs. Each partner school is supported by a site professor from the university one day per week and by a master teacher, called a site coordinator.

## **Assessment**

In 2000, Senate Bill 154 required all Colorado teacher education institutions to become performance based. PBA stands for performance based assessment. PBAs are created that correspond to many of the teacher education courses and concurrent practice in the series of internships. In doing so, knowledge can be evaluated as a result of coursework and performance in schools simultaneously. As teacher candidates progress through the program,

they will be introduced to Performance Based Assessments (PBAs) and will be guided and supported in both course work and internships. Students seeking dual licensure are responsible for four additional PBAs associated with their second endorsement in special education.

The PBAs are:

1. Literacy Instruction & Assessment (elementary and secondary versions)
2. Mathematics Instruction & Assessment (elementary)
3. Subject Matter Content (secondary)
4. Student Profile
5. Classroom Management
6. Student Academic Performance Sample (SAPS)
7. Internship Performance Rubric (used at the end of each internship)

The four additional PBAs that all teacher candidates in the special education program are expected to proficiently complete include:

1. Assessment
2. Collaboration & Positive Behavior Supports
3. Literacy Instruction for Students with Identified Special Needs
4. The Individualized Education Program (I.E.P.) Process

Passing the PLACE or PRAXIS II Content examinations prior to the final internship is also required before a candidate is eligible for a provisional teaching license in Colorado.

## **Programs of Study**

Due to the complex nature of state mandated influences of teacher preparation courses for the 2009-2010 term, please refer to the most current version of Special Education Handbook for academic requirements for this program.

## **Requirements for Admission**

The program conducts rolling admissions each semester. Summer and fall admission deadlines are January 15, February 15 and March 15. Spring admission deadlines are August 15, September 15 and October 15.

## **Teacher Education Information Sessions**

All prospective teacher candidates are strongly encouraged to attend an information session before applying to the program. Information sessions are held twice a month lasting approximately 60-90 minutes. Advisors will be available to provide prospective students transcript reviews and pre-admission advising. To more effectively facilitate this

process, please bring copies of all transcripts with you. A calendar of upcoming information sessions can be viewed on the Downtown Campus Web site. Go to [www.ucdenver.edu/education](http://www.ucdenver.edu/education) or call the school's Student Services Center at 303-315-6300.

## **Teacher Education Program Requirements**

Applicants to the IPTE program must hold at least a bachelor's degree with a minimum undergraduate cumulative GPA of 2.75 for admission.

Graduate candidates with a GPA less than 2.75 are required to take the GRE, with a combined score of 1000 on the verbal and quantitative sections; or the Miller Analogies Test, with an average score of 400–600, before consideration for admittance.

All elementary education candidates must have a liberal arts major or equivalent content courses that provide a broad background of knowledge. \*

All secondary education candidates must have a major or major equivalent of at least 30 semester hours in their desired teaching field. \*

\*This is determined through transcript evaluations at information sessions.

# **Undergraduate Teacher Licensure**

## **Undergraduate Teacher Education Program**

The undergraduate teacher education program at UC Denver is a joint effort between the College of Liberal Arts and Sciences and the School of Education & Human Development. Students earn a bachelor's degree through the College of Liberal Arts and Sciences and a teaching license through the School of Education & Human Development.

This undergraduate program is dedicated to quality teacher education. To that end, our admission standards are rigorous and there are a number of program "gates" that teacher candidates go through to complete licensure.

UC Denver has selective admission standards for entering freshmen, including a 93 institutional index that includes students who are typically in the top third of their class or have a 3.4 GPA or score above a 23 on the ACT or 1100 on the SAT. Students transferring from community colleges must have a minimum of a 2.5 GPA.

*Please note: The admission into the School of Education & Human Development teacher education program is a separate process from admission to the university. Summer and fall admission deadlines are January 15, February 15 and March 15. Spring admission deadlines are August 15, September 15 and October 15.*

# Undergraduate Teacher Education Pathways

Undergraduate teacher candidates can earn a BA and a Colorado provisional teacher's license in the following areas:

BA—Individually Structured Major Elementary Education Licensure

BA—English Literature Secondary English Licensure

BS—Mathematics Secondary Mathematics Licensure

BA—History Secondary Social Science Licensure

BA—Political Science Secondary Social Science Licensure

BA—Spanish Secondary Spanish Licensure

BA—French Secondary French Licensure

## Program Distinctions

### Program Structure

The School of Education & Human Development teacher education program admits teacher candidates in two cohort groups: one in the summer/fall and one in the spring. The initial professional teacher education program includes a 12- or 18-month licensure plan. Students will be taking course work at the university and field-based work in one of UC Denver's partner schools. By enrolling in several courses together, elementary and secondary teacher candidates consider how students develop as learners over the entire K–12 school span. This collaborative approach applies to students in the general and special education program as well. This ensures that all elementary and secondary classroom teachers are well-prepared to work with students with special needs and that all special educators have a solid foundation in general education in curriculum and instruction.

### Professional Development Schools

While in the licensure portion of the program, teacher candidates work in a partner school one to four days per week, depending on the internship. University courses are closely interrelated with the four internship experiences in which teacher candidates gradually assume responsibility for teaching. Elementary teacher candidates generally spend an entire academic year in a single partner elementary school, whereas secondary teacher candidates spend their four internships in one of the partner middle schools *and* one of the partner high schools. The partner schools are located in several Denver metropolitan districts with most serving large populations of low-income and/or minority students, as well as a sizeable number of students for whom English is a second language and students with special needs. Each partner school is supported by a site professor from the university one day per week and by a master teacher, called a site coordinator.

## **Assessment**

In 2000, Senate Bill 154 required all Colorado teacher education institutions to become performance based. PBA stands for performance based assessment. PBAs are created that correspond to many of the teacher education courses and concurrent practice in the series of internships. In doing so, knowledge can be evaluated as a result of coursework and performance in schools simultaneously. As teacher candidates progress through the program, they will be introduced to Performance Based Assessments (PBAs) and will be guided and supported in both coursework and internships. Students seeking dual licensure are responsible for four additional PBAs associated with their second endorsement in Special Education.

The PBAs are:

1. Literacy Instruction & Assessment (elementary and secondary versions)
2. Mathematics Instruction & Assessment (elementary)
3. Subject Matter Content (secondary)
4. Student Profile
5. Classroom Management
6. Student Academic Performance Sample (SAPS)
7. Internship Performance Rubric (used at the end of each internship)

Passing the PLACE or PRAXIS II Content examination prior to the final internship is also required before a candidate is eligible for a provisional teaching license in Colorado.

## **Undergraduate Advising**

Undergraduate teacher candidates will have a team of individuals who work with them throughout the completion of their bachelor's degree and teacher licensure. The following are the members of the advising team:

### **College of Liberal Arts and Science (CLAS) Education Advisor**

The CLAS advisor will assist you upon entry to the university through graduation. The CLAS advisor will monitor your progress through the core curriculum, pre-IPTE curriculum, eligibility requirements for the IPTE program and transfer credits. The CLAS advisor will also approve individually structured major-elementary education contracts for elementary education teacher candidates.

### **Faculty Advisor**

A faculty advisor designated within the academic department works with undergraduate teacher education students pursuing secondary licensure regarding specific requirements within

academic major (i.e., English, history, mathematics, Spanish, French, and political science). See the CLAS advisor for specific names and contact information.

## **School of Education and Human Development Advisor**

An advisor in the School of Education and Human Development's Student Services Center (Lawrence St. Center Bldg., 701; 303-315-6300) is able to help with questions about prerequisite completion, taking the PRAXIS II/PLACE exam and other general questions.

## **IPTE Undergraduate Academic Planning Sheets**

Developed in collaboration with the academic departments and IPTE program faculty, advisors will work with the teacher candidates on an academic planning sheet. There is little flexibility in the program course requirements as these requirements meet and exceed the Colorado Department of Education's teacher education professional and content standards.

## **IPTE Undergraduate Community College Articulation**

UC Denver honors the community college articulation agreement to transfer the 60 designated semester hours from the community college to anyone admitted to the teacher licensure program. If the teacher candidate is a transfer student, he/she should work with his/her CLAS advisor early and often to ensure that all courses are transferred properly.

## **Programs of Study**

Due to the complex nature of state mandated influences of teacher preparation courses, for the 2009-2010 term, please refer to the most current version of the teacher education program handbook for academic requirements for this program.

## **Endorsement Programs**

# **Early Childhood Special Education Specialist Endorsement**

## **Early Childhood Education**

**Office:** Lawrence Street Center, 701

**Telephone:** 303-315-6300

**Fax:** 303-315-6311

**E-mail:** [education@ucdenver.edu](mailto:education@ucdenver.edu)

**Web site:** [www.ucdenver.edu/education](http://www.ucdenver.edu/education)

## Faculty

More information about faculty in this division is available online at [www.ucdenver.edu/education](http://www.ucdenver.edu/education).

## Early Childhood Education Program

The early childhood education (ECE) program leads to a master's degree in early childhood education (early childhood accomplished teacher focus) and/or licensure in early childhood special education (early childhood special education specialist). The program prepares leaders who will enrich the life experience of young children (birth to 8) and their families through a variety of professional roles.

ECE Program students may select from three program options:

- MA in early childhood education

- ECSE specialist license (initial or added endorsement)

- MA plus ECSE specialist license (initial or added endorsement)

The ECE program is interdisciplinary in focus, drawing on university resources and the clinical expertise of various community professionals. There is a strong emphasis on fieldwork and practicum experiences in both regular and special education concentrations. Field experiences are a part of each course and provide an opportunity for each student to gain knowledge, abilities and dispositions while interacting with children, families, program staff and community agencies. Practicum experiences are designed to allow students to apply knowledge and practice skills in a closely supervised environment.

The early childhood accomplished teacher focus and the early childhood special education focus share course content in:

- literacy development and disorders

- child growth and development, differences and disorders

- learning approaches with young children

- measurement and evaluation

- basic statistics/research methods

- multicultural education

- research and current issues

- early childhood curriculum and program development for inclusive classrooms

- working collaboratively with parents and families

program administration/leadership

The early childhood special education program provides specialized preparation in:

screening and assessment of young children

intervention strategies with infants and preschoolers

behavior management

working as a member of the transdisciplinary team

cognitive and socio-emotional development and disorders

treatment of children who have neurological impairment and chronic illness

challenging behaviors and autism

## **Program Requirements**

### **Semester Hour Requirements**

Master's degree in ECE: 40 semester hours

ECSE specialist license: 40 semester hours

Master's degree plus ECSE specialist license: 49 semester hours

Master's degree plus ECSE specialist added endorsement: 40 semester hours

ECSE specialist added endorsement: 25 semester hours

## **Fieldwork and Practicum Requirements**

The master's degree in early childhood education includes a total of 425 hours of required fieldwork/practica. Approximately 200 hours of fieldwork are associated with course assignments; 225 hours of intense, culminating practica occur toward the end of the second year of study. Students completing the MA program take a written comprehensive exam (take home) during the final semester of their program (concurrently with courses at the end of the program sequence).

For the master's degree in early childhood education plus the ECSE specialist initial license, a total of 800 hours of fieldwork/practica is required. Approximately 290 hours of fieldwork are associated with course assignments; 510 hours of intense, culminating practica occur toward the end of the second year of study. Students seeking an added endorsement in ECSE specialist also complete 510 hours of practicum experiences.

Nine semester hours can be transferred for the master's degree; 15 semester hours can be transferred for the ECSE specialist license. These credits include courses taken through continuing education, from other institutions or as a nondegree student at the University of Colorado Denver before the term officially admitted.

## Plans of Study

The following table delineates course work and program completion requirements for the MA degree and ECSE specialist license through various program options.

<b>ECE Program Options Plans of Study</b>	<b>MA in ECE</b>	<b>ECSE Specialist License</b>	<b>MA in ECE and ECSE Specialist License</b>	<b>ECSE Specialist Endorsement for those holding Elementary or ECE License</b>	<b>MA in ECE and ECSE Specialist Endorsement for those holding Elementary or ECE License</b>	<b>ECSE Specialist Endorsement for those holding Special Education License</b>	<b>MA in ECE and ECSE Specialist Endorsement for those holding Special Education license</b>
<b>Course</b>							
EPSY 5100 - Advanced Child Growth and Development.	Required	Required	Required				
REM 5100 - Basic Statistics.	Required		Required		Required		Required
ECE 5000 - The Early Childhood Profession.	Required	Required	Required	Required	Required	Required	Required
ECE 6100 - Medical and Physiological Aspects of Developmental Disabilities.	Required	Required	Required	Required	Required	Required	Required
ECE 5020 - Approaches to Young Children's Learning.	Required	Required	Required		Required **	Required *	Required **

ECE 5070 - Cognitive, Social, Emotional Development and Disorders in Young Children. <b>or</b> ECE 5202 - Stress, Violence, and Behavior Challenges in Young Children's Lives.		Required	Required	Required	Required	Required *	Required *
ECE 5080 - Language and Literacy in Young Children.	Required	Required	Required	Required	Required	Required *	Required*
ECE 5010 - Curriculum and Program Development in Early Childhood Education.	Required	Required	Required	Required *	Required *	Required	Required
ECE 5060 - Working with Parents and Families.	Required	Required	Required		Required **		Required **
ECE 5040 - Administrative Seminar.	Required	Required	Required		Required **		Required **
ECE 5202 - Stress, Violence, and Behavior Challenges in Young	Required				Required **		Required **

Children's Lives.							
ECE 6690 - Seminar: Research and Current Issues in Early Childhood Education.	Required		Required		Required		Required
ECE 5140 - Measurement and Evaluation in Early Childhood Education.	Required		Required		Required		Required
ECE 6010 - Literacy and Mathematics K-2.	Required	Required	Required	Required*	Required*		
ECE 5200 - Screening and Assessment of Young Children.		Required	Required	Required	Required	Required	Required
ECE 6200 - Early Intervention Strategies.		Required	Required	Required	Required	Required	Required
ECE 6911 - Practicum in Early Childhood Education.	Required						
ECE 6910 - Practicum in Infancy.		Required	Required	Required	Required	Required	Required

ECE 6912 - Practicum: Early Childhood Special Education. Preschool Practicum		Require d	Required	Required	Required	Required	Required
ECE 6914 - Primary Practicum in Early Childhood Special Education.		Require d	Required	Required	Required	Required	Required
<b>Total Semester Hours</b>	<b>40</b>	<b>40</b>	<b>49</b>	<b>25</b>	<b>40</b>	<b>25</b>	<b>40</b>
<b>Comprehen sive Exam</b>	Require d		Required		Required		Required
<b>PLACE Exam #27</b>		Require d	Required	Required	Required	Required	Required
				* choose one	* choose one	* choose two	* choose two
					** choose two		** choose two

## Instructional Technology Endorsement

K–12 teachers may elect to complete a 24-semester-hour program leading to state endorsement in instructional technology at the teacher or specialist level. Teachers beginning their careers may complete the initial teacher licensing program, followed by 24 semester hours for teacher-level endorsement. More experienced teachers may complete 24 semester hours for the specialist-level endorsement.

### Comprehensive Examination for All ILT Students

The comprehensive exam consists of a professional portfolio where in students demonstrate program competencies through work products and related accomplishments. The portfolio is created throughout the student's program and submitted for faculty review the final semester. For more information, see the ILT Web site.

For complete details about ILT programs, endorsement requirements and certificates, see the ILT Web site.

To stay current with the needs of a changing industry, faculty in the information and learning technologies program may choose to change curriculum requirements at semester for incoming students to the program. For the 2009-2010 term, please refer to the most current version of the handbook for academic requirements for this program. ILT Instruct Tech Endsmt Hndbk Feb 09, IPTE Info and Learning Tech Hndbk Feb 09

# **Linguistically Diverse Education Endorsement**

## **Linguistically Diverse Education**

### **Requirements for LDE Program**

#### **(Degree/Endorsement or Certificates - TESOL, CIEL, CRUE)**

**Office:** Lawrence Street Center, 701

**Telephone:** 303-315-6300

**Fax:** 303-315-6311

**E-mail:** [education@ucdenver.edu](mailto:education@ucdenver.edu)

**Web site:** [www.ucdenver.edu/education/lde](http://www.ucdenver.edu/education/lde)

## **Faculty**

Information about faculty in this program is available at [www.ucdenver.edu/education/lde](http://www.ucdenver.edu/education/lde). The faculty of linguistically diverse education (LDE) believe that effective teaching requires an awareness of and the ability to respond to individual differences. LDE faculty also emphasize the importance of teachers as scholars and reflective practitioners. In particular, teachers must understand how linguistic and cultural diversity affect their teaching. Two themes run throughout all program offerings. The first concerns the importance of recognizing a variety of literacies—“home” literacies, school literacy, “mainstream” literacy, first and second language literacies—and to develop teaching practices that utilize an understanding of the complexity of literacy development across language contexts. The second theme involves the meaningful use of language and literacy to improve the quality of one's life. As an approach to teaching, this theme

emphasizes the creation of diverse, rich environments in which learners experience oral and written language as part of authentic tasks, and where concern for the cultural and linguistic heritage of the students is evident.

## Program Options

The LDE program offers options leading to the following:

- a master of arts in curriculum and instruction
- the Colorado Endorsement for Linguistically Diverse Education
- a Teaching English to Speakers of Other Languages (TESOL) certificate
- a Content Instruction for English Learners (CIEL) certificate
- a Culturally Responsive Urban Education (CRUE) certificate

The program is intended for:

- novice teachers who have completed their Colorado teaching credentials in UC Denver's graduate teacher education licensure program and are enrolled in the MA in curriculum and instruction with an emphasis in LDE (see 27 semester-hour option)
- veteran elementary and secondary teachers returning to graduate studies for the master's degree (36 semester hours)
- veteran elementary and secondary teachers returning to acquire Colorado endorsement credentials (24 semester hours)
- individuals interested in teaching English abroad (TESOL: 15 semester hours)
- veteran elementary and secondary teachers returning to graduate studies for a certificate to aid them in helping their English language learners succeed (CIEL: 9 semester hours)
- elementary and secondary teachers who desire preparation in better meeting the needs of culturally diverse learners (CRUE: 9 semester hours)
- individuals interested in teaching adults (MA: 36 semester hours)

The MA is a field-based professional development program involving university faculty and practicing LDE instructors in public school and intensive English settings. Courses, laboratories and practica emphasize scholarly approaches to complex problems of practice and feature interactive, collaborative and practical approaches to working with English language learners.

We advocate a sociocultural approach to issues of language and learning, acknowledging the legitimacy of linguistic and cultural differences and recognizing that academic settings represent important socializing forces in students' lives. Because of this, we emphasize the "whole learner" in our teaching and in teacher education and teacher development, understanding that individuals do not merely add a language to their repertoire of communication but make

fundamental identity adjustments as they progress in their studies. For this reason, all our course work, laboratories and practica experiences are field-based, putting our program participants in contact with veteran teachers and English language learners. We draw heavily on recent scholarship in collaborative approaches to school-university partnerships and systemic school change in developing classroom methods and materials, curricula and teacher development experiences.

The MA program also provides a foundation in teaching English in a variety of contexts in the United States and abroad. Teachers who work in LDE programs or in other content areas (such as art, language arts, math, music, science, social studies or technology), but who wish to integrate LDE principles and strategies into their instruction for their English language learners, will find the MA program relevant to their interests and goals.

Course work includes language teaching methodology, language acquisition, linguistic analysis of English, multicultural foundations, assessment, literacy and other areas. This program has been developed as an advanced course of study for practicing teachers or individuals with some teaching experience.

Applicants who are new to teaching, and who wish to teach in U.S. K–12 public school settings, should inquire about the teacher education licensure program. Applicants who are new to teaching, but who do not need a teaching license (certification) because they do not wish to teach in U.S. public schools, may consider the TESOL certificate to gain initial teaching experiences before applying for the MA.

## Program Requirements and Courses

To complete the LDE program and earn a master’s degree and/or endorsement, or to earn a TESOL certificate, students must complete the appropriate course work as outlined in the table below.

<b>Requirements for LDE Program (Degree/Endorsement or TESOL Certificate)</b>					
<b>Course</b>	<b>MA without CDE Endorsement in LDE</b>	<b>MA and CDE Endorsement in LDE</b>	<b>CDE Endorsement in LDE Only</b>	<b>MA and CDE Endorsement in LDE (when added to UC Denver's graduate teacher education licensure program)</b>	<b>TESOL Certificate</b>

LLC 5910 - Foundations of Language, Literacy and Culture.	Required	Required	Required	Required	
<i>One course from culture options:</i> LLC 5140 - Multicultural Education. LLC 5150 - Culture of the Classroom. LLC 5160 - Historical and Legal Foundations of Bilingual Education.	Select One	Select One	Select One	Select One	
LLC 5070 - Linguistic Analysis of English: Implications for Teaching.	Required	Required	Required	Required	Required
LLC 5030 - Language/Literacy Acquisition Part I.	Required	Required	Required	Required	Required
LLC 5820 - Techniques in Teaching English as a Second Language.	Required	Required	Required	Required	Required
LLC 5050 - Linguistic and Cultural Issues in Linking Assessment and Instruction.	Required	Required	Required	Required	Required
<i>One course from field-based teaching options:</i> LLC 5020 - Workshop in Literacy and Language Teaching. LLC 5825 - Methods and Materials of Language Teaching.	5826 preferred	Elem: 5825 preferred  Sec: 5826 preferred	Elem: 5825 preferred  Sec: 5826 preferred	Elem: 5825 preferred  Sec: 5826 preferred	5826

LLC 5826 - Language Teaching Lab. LLC 5730 - Language and Literacy Across the Curriculum. LLC 5770 - Effective Literacy Instruction for Second Language Learners.					
LLC 5035 - Language and Literacy: Acquisition, Processes, and Cognition, Part II.	Required	Required			
LLC 6912 - Seminar and Practicum in Literacy and Language, ESL and Bilingual Education.	Required	Required	Required	Required	
<i>One course from          research and          evaluation          methodology:</i> REM 5050 - Assessment for Teachers. REM 5080 - Research for Teachers.	Select One	Select One		Select One	
<i>One course from          educational          psychology:</i> EPSY 5110 - Human Learning. EPSY 5220 - Adult Learning and Education.	Select One	Select One			

Graduate-level University of Colorado elective	Select One	Select One			
Cumulative online portfolio	Required	Required	Required	Required	
LDE PLACE Exam		Required	Required	Required	
Total Semester Hours	36	36	24	27	15

## CRUE or CIEL Certificate Requirements

Those considering the CRUE certificate will find course requirements at [www.cruecenter.org/certificate.php](http://www.cruecenter.org/certificate.php). Students interested in the CIEL certificate must complete the following:

LLC 5030 – Language and Literacy Acquisition I. Semester Hours: 3

-OR-

LLC 5070 – Linguistic Analysis of English. Semester Hours: 3

LLC 5050 – Linguistic and Cultural Issues in Linking Assessment and Instruction. Semester Hours: 3

-OR-

LLC 5820 – Techniques in Teaching ESL. Semester Hours: 3

-OR-

LLC 5825 – Methods and Materials of Language Teaching. Semester Hours: 3

-OR-

LLC 5826 – Language Teaching Laboratory. Semester Hours: 3

LLC 6912 - Seminar and Practicum in Literacy and Language, ESL and Bilingual Education  
Semester Hours: 3

**Total: 9 Hours**

## Cumulative Portfolio of Performance Based Assessments (PBAS)

The portfolio is required for the CDE endorsement, counts as the comprehensive exam for the master's degree and permits you to document your development over the course of your program. Portfolios are reviewed by LDE faculty members. At least two faculty members must

agree that the portfolio is acceptable in order to pass. The portfolio process is reviewed in every class as each of the PBAs is completed in the classes, helping students to update their portfolios throughout the program. For more portfolio guidelines, visit the Web site at [www.ucdenver.edu/education/lde](http://www.ucdenver.edu/education/lde).

## **PLACE Exam for Linguistically Diverse Education Endorsement**

To add the endorsement to their teaching license, students must pass the PLACE (Program for Licensing Assessments for Colorado Educators) exam for linguistically diverse education, secure and submit the appropriate paperwork from the Colorado Department of Education, and pay fees required for the PLACE and for the endorsement paperwork. Information about PLACE is online at [www.place.nesinc.com](http://www.place.nesinc.com).

## **Course Scheduling**

During the fall and spring semesters, most university courses are offered in the late afternoon and evening and meet for three hours once a week over a 16-week semester. Some alternative course schedules are available, such as meeting on five Friday-evening/all-day Saturday combinations. In the summer semester, three-to eight-week sessions are offered, and courses may be in the morning, afternoon or evening. A current schedule of courses is available online at <http://courses.cudenver.edu>.

## **Planning**

For practicing full-time teachers, we recommend taking one course each fall and spring semester and up to two courses each summer. Students may simultaneously complete requirements for the MA and the endorsement for linguistically diverse education. Support for course planning is available in LDE advising sessions—usually held once in fall and once in spring. These sessions help students build their programs around course sequences and availability (some courses are offered only once per year).

## **Active Status in the Graduate School**

Students must complete their programs within seven years, maintaining a GPA of 3.0. Students typically take four courses each calendar year. Failure to enroll over three contiguous semesters will result in a requirement to resubmit part I of the application for admission and a letter of intent.

# **Reading Teaching Endorsement**

## **Literacy, Language and Culturally Responsive Teaching**

# **MA Requirements for the Reading and Writing Option and Secondary English Education Option, plus Reading Teacher Endorsement and Certificate Programs**

**Office:** Lawrence Street Center, 701

**Telephone:** 303-315-6300

**Fax:** 303-315-6311

**E-mail:** [education@ucdenver.edu](mailto:education@ucdenver.edu)

**Web sites:** [www.ucdenver.edu/education/literacy](http://www.ucdenver.edu/education/literacy) and [www.ucdenver.edu/education/englished](http://www.ucdenver.edu/education/englished)

## **Reading and Writing**

### **Secondary English**

### **Early and Adolescent Literacy Certificates**

## **Faculty**

Information about faculty in this program is available online at [www.ucdenver.edu/education/literacy](http://www.ucdenver.edu/education/literacy).

The faculty of literacy, language and culturally responsive teaching (L2CRT) believe that effective teaching requires an awareness of and the ability to respond to individual differences. L2CRT faculty also emphasize the importance of teachers as scholars and reflective practitioners. In particular, teachers must understand how linguistic and cultural diversity affect their teaching. Two themes run throughout all program offerings. The first concerns the importance of recognizing a variety of literacies—“home” literacies, school literacy, “mainstream” literacy, first and second language literacies—and to develop teaching practices that utilize an understanding of the complexity of literacy development across language contexts. The second theme involves the meaningful use of language and literacy to improve the quality of one’s life. As an approach to teaching, this theme emphasizes the creation of diverse, rich environments in which learners experience oral and written language as part of authentic tasks, and where concern for the cultural and linguistic heritage of the students is evident.

## **Reading and Writing Option and Reading Teacher Endorsement**

This master’s program is designed for K-6 and 7-12 teachers. Those interested in elementary reading and writing should communicate with Professors Espinoza, Nathenson-Mejia or Taylor.

Those interested in secondary and adult reading and writing should communicate with Professor Shanklin (see Web site for faculty contact information).

Reading is a credentialed program meeting the Colorado Department of Education requirements for reading teacher endorsement. Therefore, students who obtain a master’s degree emphasizing reading education from UC Denver are certified to hold positions in public and private schools as special developmental and remedial reading teachers in K–6 or 7–12. This program is also valuable for elementary and secondary teachers who wish to enhance reading and writing instruction in their classrooms.

By placing emphasis on the reading, writing and oral and visual language development of culturally, linguistically and academically diverse student populations, this master’s program is at the forefront of the field. Language is approached from a socio-psycholinguistic perspective that emphasizes the learner’s construction of meaning rather than the learning of isolated skills. Importance is placed on using theory, inquiry and personal reflection to inform classroom practice. The program prepares teachers to become decision makers capable of developing learner-centered curricula where each student’s reading and writing abilities are assessed to address developmental or special needs.

## Curriculum

Course offerings lead to an MA degree in curriculum and instruction with an emphasis in reading and writing, as well as a reading teacher endorsement, at one of two levels: K–6 or 7–12.

Those who have completed UC Denver’s graduate teacher education licensure program must earn an additional 27 semester hours to obtain the MA and endorsement. Those who completed licensure through other means must earn an additional 36 semester hours to obtain the MA and endorsement.

Teachers may add a reading teacher endorsement to an already-earned master’s degree in education by taking those courses listed under the chosen endorsement level. (In the state of Colorado, the reading teacher endorsement cannot simply be added to a bachelor’s degree.) Electives and core courses are not required. Two additional courses must be taken in other areas specified by the Colorado Department of Education. In many cases, previous master’s degree courses will satisfy this requirement.

<b>Requirements for Reading and Writing Program (Degree/Endorsement Options)</b>						
	<b>ELEMENTARY (K-6)</b>			<b>SECONDARY (7-12)</b>		
<b>Course</b>	<b>MA &amp; CDE Endorsement</b>	<b>MA &amp; CDE Endorsement (when</b>	<b>CDE Endorsement Only</b>	<b>MA &amp; CDE Endorsement</b>	<b>MA &amp; CDE Endorsement (when added</b>	<b>CDE Endorsement Only</b>

		<i>added to UC Denver's graduate teacher education licensure program)</i>			<i>to UC Denver's graduate teacher education licensure program)</i>	
LLC 5020 - Workshop in Literacy and Language Teaching.	Required		Required	Required	Required	Required
LLC 5810 - Workshop in Language Acquisition and Development .	Required	Required	Required	Required	Required	Required
LLC 5910 - Foundations of Language, Literacy and Culture.	Required	Required	Required	Required	Required	Required
LLC 5710 - Primary Literacy: Pre-3rd Grade.	Required	Required	Required			
LLC 5720 - Writing: Process, Development , and Teaching Grades 3-12.	Required	Required	Required	Required	Required	Required
LLC 5730 - Language and Literacy Across the Curriculum.	Required		Required	Required		Required
Children's literature	Select one	Select one	Select one			

course, per advisor approval						
LLC 5740 - Adolescent Literature.				Required	Required <i>(waived if taken as part of English Licensure)</i>	Required
LLC 6910 - Seminar and Practicum in Literacy and Language, K-6.	Required	Required	Required			
LLC 6911 - Seminar and Practicum in Literacy and Language, 7-12+.				Required	Required	Required
LLC 5055 - Linking Assessment and Instruction in Language and Literacy, Part I.	Required	Required	Required	Required	Required	Required
LLC 6915 - Seminar and Practicum in Literacy Professional Development .	Required	Required		Required	Required	Required
Core course in Research and Evaluation Methodology (REM) - see list below	Select one	5080		Select one	5080	
Interdisciplinary core	Select one			Select one		

course - see list below						
Graduate-level School of Education and Human Development elective				Select one		
Portfolio	Required	Required		Required	Required	
PLACE Exam	Required	Required	Required	Required	Required	Required
Total Semester Hours	36	27	27	36	27	27

## Secondary English Education Option

The master's program in secondary English education is designed to enhance the preparation of middle and high school English/language arts teachers. Students complete course work in language development, assessment and field experiences. With the help of their advisor, they also select specific courses from the English Department or within the School of Education and Human Development that provide a well-rounded repertoire of knowledge and skills to fulfill the needs of an English educator. Special consideration is given to working with diverse ethnic populations. Students interested in English education should see Professor Shanklin (see Web site for faculty contact information).

## Program Requirements

To earn a master of arts degree in curriculum and instruction with an emphasis in secondary English education, students must complete the following:

- 30 graduate semester hours in English education

- 6 graduate semester hours of core courses

- performance-based assessments that culminate in a portfolio finalized in the last semester of the program as fulfillment of the MA comprehensive exam requirement

Each student's course plan is developed in conjunction with his/her advisor. Please review [www.ucdenver.edu/education/englished](http://www.ucdenver.edu/education/englished) for recommended course sequence.

LLC 5055 – Linking Assessment and Instruction in Language and Literacy. Part I. Semester Hours: 3

LLC 5740 – Adolescent Literature. Semester Hours: 3

LLC 5760 – Theory and Methods of English Education. Semester Hours: 3

-OR-

LLC 5835 – Special Topics: Advanced Theories and Methods of English Education. Semester Hours: 3

LLC 5810 – Workshop in Language Acquisition and Development. Semester Hours: 3

LLC 5910 – Foundations of Language, Literacy and Culture. Semester Hours: 3

LLC 6911. Seminar and Practicum in Literacy and Language, Grades 7-12+. Semester Hours: 3  
Research and Evaluation Methodology core course (see list below).

Interdisciplinary core course (see list below).

Four electives, per advisor approval, from the English department and/or the School of Education & Human Development. The following are recommended:

LLC 5720 – Writing: Process, Development and Teaching, Grades 3-12. Semester Hours: 3

-OR-

ENGL 5110 – Denver Writing Project. Semester Hours: 3

Courses in working with English language learners and in instructional technology may also be helpful. For a technology course, please contact the professor about prerequisite knowledge.

**Total: 36 semester hours**

Program Requirements--When Added to UC Denver's Graduate Teacher Education Licensure Program

MA in curriculum and instruction with emphasis in secondary content leadership (English), when added to UC Denver's graduate teacher education licensure program:

18 graduate semester hours

performance-based assessments that culminate in a portfolio finalized in the last semester of the program as fulfillment of the MA comprehensive exam requirement

Each student's course plan is developed in conjunction with his/her advisor. Please review [www.ucdenver.edu/education/englished](http://www.ucdenver.edu/education/englished) for recommended course sequence.

FNDS 5050 – Critical Issues in American Education. Semester Hours: 3

-OR-

IPTE 5080 – Principals and Practice of Change. Semester Hours: 3

-OR-

SPED 5300 – Collaborating in Schools and Communities. Semester Hours: 3

REM 5080 – Research for Teachers. Semester Hours: 3

Four electives, per advisor approval, from the English Department and/or the School of Education and Human Development. The following are recommended:

LLC 5720 – Writing: Process, Development and Teaching, Grades 3-12. Semester Hours: 3

-OR-

ENGL 5110 – Denver Writing Project. Semester Hours: 3

Courses in working with English language learners and in instructional technology may also be helpful. For a technology course, please contact the professor about prerequisite knowledge.

**Total: 18 semester hours**

## **Core Courses**

### **Research and Evaluation Methodology**

REM 5000 - Orientation to Research and Measurement in Education. Semester Hours: 3

REM 5050 - Assessment for Teachers. Semester Hours: 3

REM 5080 - Research for Teachers. Semester Hours: 3

REM 5100 - Basic Statistics. Semester Hours: 3

REM 5200 - Introduction to Research Methods. Semester Hours: 3

REM 5300 - Introduction to Measurement. Semester Hours: 3

### **Interdisciplinary**

EPSY 5100 - Advanced Child Growth and Development Semester Hours: 3

EPSY 5140 - Advanced Adolescent Growth and Development. Semester Hours: 3

EPSY 5220 - Adult Learning and Education. Semester Hours: 3

EPSY 6200 - Human Development Over the Life Span. Semester Hours: 3

FNDS 5050 - Critical Issues in American Education. Semester Hours: 3

FNDS 5420 - History and Philosophy of Education: Twentieth Century America. Semester Hours: 3

LLC 5140 - Multicultural Education. Semester Hours: 3

LLC 5150 - Culture of the Classroom. Semester Hours: 3

LLC 5160 - Historical and Legal Foundations of Bilingual Education. Semester Hours: 3

LLC 5820 - Techniques in Teaching English as a Second Language. Semester Hours: 3

### **Cumulative Portfolio**

The MA portfolio counts as the comprehensive exam for the master's degree. The portfolio is an accumulation of the performance based assessments completed during program courses and reflects on the student's development over the course of the degree program. Reading and writing students must include confirmation of Reading Teacher PLACE exam registration in their portfolios. Information about the PLACE is online at [www.place.nesinc.com](http://www.place.nesinc.com).

### **Course Scheduling**

During the fall and spring semesters, most university courses are offered in the late afternoon and evening and meet for three hours once a week over a 16-week semester. Some alternative course schedules are available, such as meeting on five Friday-evening/all-day Saturday combinations. In the summer semester, three- to eight-week sessions are offered, and courses may be in the morning, afternoon or evening. A current schedule of courses is available online at <http://courses.cudenver.edu>.

### **Planning**

For practicing full-time teachers, we recommend taking one course each fall and spring semester, and up to two courses each summer. Plan carefully because courses are intended to build upon each other, and some courses are only offered once a year.

## **Active Status in the Graduate School**

Students must complete their programs within seven years, maintaining a GPA of 3.0. Students typically take four courses each calendar year. Failure to enroll over three contiguous semesters will result in a requirement to resubmit part I of the application for admission and a letter of intent.

## **Early and Adolescent Literacy Certificates**

The early literacy certificate and adolescent literacy certificate each include three graduate-level courses (for a total of 9 semester hours) and are conveniently offered entirely online. They are specifically designed to help licensed teachers develop the skills necessary to reach student readers. To find out more, please visit [www.ucdenver.edu/education](http://www.ucdenver.edu/education) or email [cpe@ucdenver.edu](mailto:cpe@ucdenver.edu).

To learn about how these certificate credits may apply toward one of the above programs in reading and writing, contact [education@ucdenver.edu](mailto:education@ucdenver.edu).

# **School Library Endorsement**

## **School Library and Instructional Leadership MA**

**Office:** Lawrence Street Center, 701

**Telephone:** 303-315-6300

**Fax:** 303-315-6311

**E-mail:** [education@ucdenver.edu](mailto:education@ucdenver.edu)

**Web site:** [www.ucdenver.edu/education/schoollibrary](http://www.ucdenver.edu/education/schoollibrary)

## **Faculty**

Information about SLIL faculty is available online at [www.ucdenver.edu/education/schoollibrary](http://www.ucdenver.edu/education/schoollibrary).

## **Program Overview**

The school library and instructional leadership program within the ILT master's degree program is a nationally recognized NCATE-AASL revised and approved school library media education program that leads to the Colorado Department of Education endorsement for school libraries. The program integrates information literacy standards through the use of collaborative planning,

as approved by the American Association of School Libraries. Technology and library resources are seen as tools to increase student achievement by integrating the information literacy standards with the content standards of the classroom teacher. The program adheres to the constructivist theory of resource-based learning and promotes an appreciation of children's and adolescent literature. The program believes that school librarians require education as a teacher as well as a librarian, as advocated by the American Library Association and the International Association of School Libraries. As a school librarian, you will provide collaborative instruction, information access and leadership through the management of your library program and the library resources. Courses are offered in a completely online program, an evening on-campus program, or a monthly Saturday cohort scheduled in communities across Colorado.

Once admitted, students begin a plan of study that typically takes about two years to complete. Consult the SLIL Web site for more information about specific plans of study, course offerings and expectations of cohort groups.

## **Admission Requirements**

Admission decisions are based on undergraduate and graduate grades, external letters of recommendation, writing samples and fit with the program as reflected in a letter of intent. In some cases, results of a test (GRE) are also required. Prospective students should consult the SLIL program Web site for complete admission procedures and requirements.

## **Professional Expectations**

All students in the SLIL program are expected to show a strong commitment to the program and to maintain high academic, professional and ethical standards. Inappropriate or unprofessional conduct is cause for discipline or dismissal from the program.

## **Technology Expectations**

The SLIL program uses computers and related technologies either as a focus or a tool for learning. Students are expected to obtain an e-mail account and check it frequently. In addition to on-campus facilities, SLIL students need convenient access to Internet-connected computers off campus, either at their place of work or at home. In addition to textbooks, software purchases may be required or recommended for specific classes.

## **Program Requirements**

School library students also have a choice between endorsement-only and full master's programs. The master's program requires a minimum of 36 graduate semester hours. Students complete a plan of study consisting of courses and professional field experience. To receive Colorado teacher endorsement, students are required to pass the PLACE test in school library. This is a Colorado Department of Education requirement.

### **An Example of Two-Year Plan for School Library Program**

Courses are offered only in certain semesters and courses should be taken in a particular sequence based on when you start the program. Advising is required prior to enrolling in a course, even as a non-degree student, in order to ensure the most effective course sequencing and availability of courses.

### Typical First Year

Fall	Spring	Summer
SL 5530 - Foundations of School Librarianship.* LLC 5790 - Children's Literature Through the Ages.***	SL 5020 - Collection Development.	SL 5110 - Integrating Instructional Technology Practices in School Libraries. (MA only) LLC 5740 - Adolescent Literature. ***

### Second Year

Fall	Spring	Summer
SL 5160 - Managing School Library Programs. REM 5080 - Research for Teachers. *** SL 5911 - School Library Field Experience-Elementary. **	SL 5030 - Information Literacy and Reference. SL 5912 - School Library Field Experience-Secondary. ** Elective (2 semester hours) (MA only)****	SL 5040 - Information Storage and Utilization. SL 6999 - Leadership and Practice in School Libraries. (MA Only)

\* SL 5530 Foundations in School Librarianship should be taken as the first course in your program.

\*\* 80 hours of field experience hours are required. Field experience may be completed over the course of a year; online seminar hours will be completed during the field experience timeframe. Field experiences are completed within a pre-approved school library. See Field Experience Policy for more information.

\*\*\* LLC 5740; LLC 5790; and REM 5080 are offered on-campus in other semesters as well.

\*\*\*\*Electives are usually attendance at Colorado Association of Libraries (CAL) conference in the fall; CASL in the spring; or TIE in the summer.

## Comprehensive Examination for All SLIL Students

The comprehensive exam consists of a professional portfolio where in students demonstrate program competencies through work products and related accomplishments. The portfolio is created throughout the student's program and submitted for faculty review the final semester. For more information, see the ILT Web site. For complete details about the SLIL program and endorsement requirements, see the ILT Web site at [www.ucdenver.edu/education/schoollibrary](http://www.ucdenver.edu/education/schoollibrary).

## **Undergraduate Certificate Programs**

# **Applied German Language Skills Undergraduate Certificate**

## **Certificate Description**

The undergraduate certificate in applied German language skills is designed for students of any discipline who wish to acquire and demonstrate to potential employers that they possess a fluid working knowledge of the German language and understanding of the cultures in which German is spoken. The completion of the requirements for this certificate can also serve as a means for nondegree-seeking professionals to develop a working competency in the German language and culture for use in such areas as international business, education, genealogy, transatlantic travel, academic research, translation and many other fields.

## **Admission Requirements**

All currently enrolled students at UC Denver (undergraduate or graduate) in good standing (including nondegree-seeking students) are eligible for admission into the program. Any student who already possesses an undergraduate degree is also qualified for admission into the program, but must apply to the university as a nondegree-seeking student. Students working toward a baccalaureate degree who are currently enrolled in a college-level institution other than UC Denver are also eligible for certification.

## **Certificate Requirements**

To obtain the certificate, students must complete the following three curriculum components:

24 semester hours of course work with UC Denver faculty (15 of which must be upper division)

Of these 24 hours, 6 hours of documented university-level course work (or the equivalent) in a German-speaking country

An internationally recognized German language proficiency exam

Students must obtain approval from UC Denver German faculty for all of the above and maintain a minimum 3.0 GPA in all course work applied to the certificate. Full details of this curriculum are outlined in documentation that students can obtain from the Department of Modern Languages Web site.

## **Transfer Credit**

A significant portion of the certificate program is based on language proficiency. Consequently, students who have developed language skills through course work at institutions outside of UC Denver, including study abroad, may apply a limited number of previously earned semester hours toward the program. Please make an appointment with an advisor in the department to discuss details. All transfer credits must be approved by UC Denver German faculty.

## **Application of Course Work**

The course work applied toward certification is meant as a proficiency requirement and not as a total semester hour amount. As a result, students who are working toward a degree may apply course work in German certification as credit toward other programs such as a minor, general education requirements or their major. Students are encouraged to inform their major advisor that they are working toward certification in German for help in coordinating their overall academic curriculum.

## **Further Information**

Students are encouraged to hold a personal conference with a departmental advisor before applying to the certificate program. Please check the program description on the Department of Modern Languages Web site or phone 303-556-4893.

# **Applied Statistics Undergraduate Certificate**

**Coordinator:** Stephanie Santorico:

**Telephone:** 303-556-2547

**E-mail:** [Stephanie.Santorico@ucdenver.edu](mailto:Stephanie.Santorico@ucdenver.edu)

**Web site:** [http://math.ucdenver.edu/statistics/ugrad\\_cert.shtml](http://math.ucdenver.edu/statistics/ugrad_cert.shtml)

## **Entrance Requirements**

All undergraduate students in good standing (including nondegree-seeking students) will be admitted to the program. For students in the College of Liberal Arts and Sciences, this requires a cumulative grade point average of 2.0. Some mathematical background (including calculus and linear algebra) is recommended.

To apply, see the Web site at: [http://math.ucdenver.edu/statistics/ugrad\\_cert.shtml](http://math.ucdenver.edu/statistics/ugrad_cert.shtml)

## **Curriculum**

There are three parts to the requirements:

## Required Courses

MATH 2830 - Introductory Statistics: MA1. **Semester Hours: 3**

### **Basic Methods (choose one):**

MATH 4820 - Statistics. **Semester Hours: 3**

MATH 4830 - Applied Statistics. **Semester Hours: 3**

### **Advanced Methods (choose one):**

MATH 4387 - Regression Analysis, Modeling and Time Series. **Semester Hours: 3**

MATH 4394 - Experimental Designs. **Semester Hours: 3**

## Elective (choose one):

MATH 4101 - Applied Statistics Using SAS and SPSS I. **Semester Hours: 3**

or any statistics course in the math department at the 4000 level or higher

ECON 4150 - Economic Forecasting. **Semester Hours: 3**

ECON 4811 - Introduction to Econometrics. **Semester Hours: 3**

GEOG 4770 - Applied Statistics for the Natural Sciences. **Semester Hours: 3**

GEOL 4770 - Applied Statistics for the Natural Sciences. **Semester Hours: 3**

SOC 5183 - Seminar: Quantitative Data Analysis. **Semester Hours: 3**

Equivalent course pre-approved by the certificate coordinator

## Project

An independent data analysis project with a report and presentation to demonstrate proficiency with data analysis techniques and a statistical computing software package. Enroll for one hour of MATH 4840 (Independent Study) or in an equivalent course pre-approved by the certificate coordinator.

## Grade Requirements

Students must maintain a 3.0 GPA in these courses with no credit given for courses with grades below *B-*.

## Residency Requirements

Since a certificate is a University of Colorado Denver certification of a student's specialized knowledge in an advanced subject area, all courses in the certificate program are expected to be taken in residency at the University of Colorado Denver.

## **Biotechnology Certificate**

To serve the needs of students who wish to obtain recognition for the acquisition of specialized skills in biology and to prepare students for graduate school, health careers and jobs in industry, the Department of Integrative Biology offers a certificate program in biotechnology. Upon completion of the required courses (21 to 22 semester hours), including independent study or internship, the student will be awarded a certificate and receive the biotechnology certificate on their transcript. The certificate may be completed in addition to an undergraduate or graduate degree or as a stand-alone certificate. A complete description of the biotechnology certificate can be found on the biology Web site: [www.cudenver.edu/biology/bioTechCert.html](http://www.cudenver.edu/biology/bioTechCert.html).

## **Cultural Diversity Studies Undergraduate Certificate**

The undergraduate certificate in cultural diversity studies is designed to appeal to undergraduate students with a background in any major. It will allow students to demonstrate to potential employers that they possess the multicultural skills and knowledge necessary to succeed in the workplace. Students will enroll in department courses that focus on the historical context in which race and culture have emerged in the United States.

This certificate is also targeted to nondegree-seeking professionals who seek to acquire multicultural knowledge and the skills necessary to ensure their success in professional environments. Students will be encouraged to think critically about race and race relations. Their expanded understandings of the implications of race and culture in work environments will ensure employers that they offer the highest quality employees opportunities in employment or advancement.

A certificate in cultural diversity studies offers students an enduring intellectual value based on classic articles, book excerpts and scholars who have shaped the study and understanding of race and ethnicity in contemporary society. Our courses provide the opportunity for students to encounter many of the greatest thinkers in race and ethnicity firsthand. Course curriculum includes carefully edited selections from the works of the most distinguished observers of race and ethnicity, past and present. Students will appreciate the broad range of coverage, the logic of course organization and the accessibility of material covered.

The undergraduate certificate in cultural diversity studies requires 12 semester hours (four courses).

### **Certificate Requirements**

## Required Course

ETST 2000 - Introduction to Ethnic Studies: SS3. **Semester Hours: 3**

**Total: 3 Hours**

## Electives

Choose three courses from any ethnic studies department courses, including the following:

ETST 2155 - African American History: HI1. **Semester Hours: 3**

ETST 2294 - Race and the Media. **Semester Hours: 3**

ETST 3254 - Race and Ethnicity in the Inner City. **Semester Hours: 3**

ETST 3297 - Social History of Asian Americans. **Semester Hours: 3**

ETST 3396 - History of the American Indian. **Semester Hours: 3**

ETST 3704 - Culture, Racism and Alienation. **Semester Hours: 3**

ETST 4558 - Chicano and Latino Politics. **Semester Hours: 3**

**Total: 9 Hours**

## Certificate Total: 12 Hours

There are crosslisted courses in a variety of departments, including history, political science and sociology. Any crosslisted course is acceptable. You must register for it under ETST numbers. A complete listing of department offerings and crosslisted courses can be obtained every semester from the ethnic studies department Web page or by calling our office at 303-556-2700 for a copy.

A minimum grade of *B-* must be earned in each of the four courses completed as part of the certificate. All credits for the certificate must be earned at the Downtown Campus.

Additional information about the undergraduate certificate in cultural diversity studies may be obtained from ethnic studies Director Donna Langston, Lawrence Street Center, 480, 303-556-2726, Donna.Langston@ucdenver.edu.

## Ethics Undergraduate Certificate

The certificate in ethics is designed for students currently enrolled in a degree program as well as nondegree students.

A total of 15 semester hours is required for an ethics certificate. Students are required to write a capstone paper in an area of ethics directly related to their career and/or field of study (PHIL 3840).

## Certificate Requirements

PHIL 1020 - Introduction to Ethics and Society: The Person and the Community: AH3.  
**Semester Hours: 3**

### Choose four:

PHIL 3002 - Ancient Greek Philosophy. **Semester Hours: 3**

PHIL 3150 - History of Ethics. **Semester Hours: 3**

PHIL 3200 - Social and Political Philosophy. **Semester Hours: 3**

PHIL 3250 - Business Ethics. **Semester Hours: 3**

PHIL 3500 - Ideology and Culture: Racism and Sexism. **Semester Hours: 3**

PHIL 3840 - Independent Study. **Semester Hours: 1 to 3**

PHIL 4150 - Twentieth Century Ethics. **Semester Hours: 3**

PHIL 4242 - Bioethics. **Semester Hours: 3**

### Certificate Total: 15 Hours

# Geographic Information Science Undergraduate Certificate

The intention of this certificate is to provide undergraduates with a mechanism for demonstrating capabilities in spatial techniques in the social and/or physical sciences. The focus of this certificate is on a broad array of geotechniques, including geographic information systems, remote sensing, cartography and statistics, which give students additional analytical skills to take into the workplace or on to graduate school. This certificate is designed for geography majors as well as nonmajors.

Upon successful completion of the certificate, students will be able to:

understand basic theoretical underpinnings of spatial analysis

apply geo-spatial technologies to real-world problems

have a basic knowledge of how to operate at least three types of software used for spatial analysis

## Curriculum

To obtain the certificate, students must complete four core courses, one elective, and a 1-hour independent study, totaling 16 hours. Although the four core courses may be taken in any order, it is advisable to begin with GEOG 3080, Introduction to Mapping and Map Analysis, since this course familiarizes students with many key concepts used in the other classes. All core courses are offered on a yearly basis. See department Web site for details ([www.cudenver.edu/ges](http://www.cudenver.edu/ges)).

# Mediation Undergraduate Certificate

Mediation is an area of knowledge and skills concerned with the communication processes involved in helping others solve their conflicts in mutually beneficial ways. The area of mediation through communication provides opportunities for the development of communication skills and knowledge by professionals in public, legal, political, governmental, corporate and not-for-profit contexts.

The undergraduate certificate in mediation is designed for communication majors and others outside the major who desire to enter the field of alternative dispute resolution with the skills, knowledge and abilities to aid others in the productive management or resolution of their conflicts. It is also useful for nondegree-seeking working professionals without bachelor's degrees who plan to enter or re-enter the workplace and want to acquire the knowledge and skills necessary to market themselves as mediation specialists.

## Certificate Requirements

The undergraduate certificate in mediation requires 12 semester hours (four courses).

## Core Courses

CMMU 4262 - Mediation. **Semester Hours: 3**

**Students must complete at least one of the following two courses (those who take both classes take one elective rather than two; those who take only one class must select two electives):**

CMMU 4255 - Negotiations and Bargaining. **Semester Hours: 3**

CMMU 4260 - Communication and Conflict. **Semester Hours: 3**

## Electives

CMMU 3271 - Communication and Diversity. **Semester Hours: 3**

CMMU 4015 - Communication and Civility. **Semester Hours: 3**

CMMU 4140 - Argumentation. **Semester Hours: 3**

CMMU 4151 - Group Communication. **Semester Hours: 3**

CMMU 4215 - Ethics in Communication. **Semester Hours: 3**

CMMU 4681 - Communication Issues in Trial Court Practices and Processes. **Semester Hours: 3**

## **Total: 12 Hours**

Students may be allowed to take courses other than those on this list to fulfill the requirements for the certificate, if those courses better fit their professional goals.

# **Public Relations Undergraduate Certificate**

Public relations is a management function that establishes and maintains mutually beneficial relationships between an organization and the publics on whom its success or failure depends. Virtually every kind of institution—for-profit and nonprofit alike—recognizes the need for dialogue with the groups of people who can and will influence its future. The undergraduate certificate in public relations is designed to provide students with the principles and theories that guide the work of public relations practitioners in a variety of contexts including private industry, government and nonprofit settings.

The undergraduate certificate in public relations is designed for undergraduate communication majors who wish to demonstrate to potential employers that they possess skills and knowledge in the area of public relations. It also is useful for nondegree-seeking working professionals without bachelor's degrees who plan to enter or re-enter the workplace and who want to acquire the knowledge and skills necessary to employ principles of public relations in their professional environments.

## **Certificate Requirements**

The undergraduate certificate in public relations requires 12 semester hours (four courses).

## **Core Courses**

CMMU 4635 - Principles of Public Relations. **Semester Hours: 3**

## **Additional Courses**

Choose three:

CMMU 3620 - Television Production. **Semester Hours: 3**

CMMU 3680 - Mass Communication Skills. **Semester Hours: 3**

CMMU 4140 - Argumentation. **Semester Hours: 3**

CMMU 4200 - Persuasion. **Semester Hours: 3**

CMMU 4240 - Organizational Communication. **Semester Hours: 3**

CMMU 4290 - Web Design. **Semester Hours: 3**

CMMU 4300 - Multimedia Authoring. **Semester Hours: 3**

CMMU 4665 - Principles of Advertising. **Semester Hours: 3**

CMMU 4682 - Political Communication. **Semester Hours: 3**

CMMU 4805 - Graphics. **Semester Hours: 3**

**Total: 12 Hours**

# **Technical and Professional Communication Undergraduate Certificate**

The undergraduate certificate in technical and professional communication is designed for several types of students:

working adults who are employed or who are seeking employment in the field of technical communication but who are not seeking an undergraduate degree

students who are majoring in communication and want to enhance their technical communication abilities

students pursuing a major other than communication who want to enhance their technical communication abilities

Students enrolled in this certificate receive state-of-the-art training in core professional skills, including technical writing, technical editing and graphic design. The certificate is especially helpful for those who plan to enter (or re-enter) the workplace and who want to acquire the knowledge and skills necessary to contribute to technical documentation projects.

## Certificate Requirements

The undergraduate certificate in technical and professional communication requires 12 semester hours (four courses).

## Required Core

CMMU 3120 - Technical Communication. **Semester Hours: 3**

## Electives

Choose three:

CMMU 4300 - Multimedia Authoring. **Semester Hours: 3**

CMMU 4410 - Science Writing. **Semester Hours: 3**

CMMU 4510 - Usability Testing. **Semester Hours: 3**

CMMU 4605 - Rhetorical Theory for Technical Communication. **Semester Hours: 3**

CMMU 4620 - Health Risk Communication. **Semester Hours: 3**

CMMU 4750 - Legal Reasoning and Writing. **Semester Hours: 3**

CMMU 4805 - Graphics. **Semester Hours: 3**

**Total: 12 Hours**

# Professional Writing Certificate

The certificate consists of 12 semester hours that may be completed in one or two semesters. Enrollment is open to undergraduates, graduates, working professionals and returning students, and the certificate has no prerequisites.

## Courses

**Three Required Courses (9 semester hours)**

ENGL 2070 - Grammar, Rhetoric and Style. **Semester Hours: 3**

-OR-

ENGL 2154 - Introduction to Creative Writing. **Semester Hours: 3**

ENGL 3154 - Technical Writing. **Semester Hours: 3**

-OR-

ENGL 3170 - Business Writing. **Semester Hours: 3**

ENGL 4701 - Multimedia in the Community. **Semester Hours: 3**

or at the graduate level:

ENGL 5701 - Multimedia in the Community. **Semester Hours: 3**

-OR-

ENGL 3084 - Advanced Composition. **Semester Hours: 3**

## **Elective Courses**

### **Three semester hours, chosen from the following courses:**

ENGL 3084 - Advanced Composition. **Semester Hours: 3** (if not taken as a required course)

ENGL 3154 - Technical Writing. **Semester Hours: 3** (if not taken as a required course)

ENGL 3170 - Business Writing. **Semester Hours: 3** (if not taken as a required course)

ENGL 3416 - Magazine Writing. **Semester Hours: 3**

ENGL 3939 - Internship/Cooperative Education. **Semester Hours: 1 to 3**

ENGL 4180 - Argumentation and Logic. **Semester Hours: 3**

ENGL 4190 - Special Topics in Rhetoric and Writing. **Semester Hours: 3** (with advisor approval)

ENGL 4280 - Proposal and Grant Writing. **Semester Hours: 3**

Other writing electives may be taken as offered, with advisor approval.

**Total: 12 Hours**

# Scientific Foundations of Technical Innovation Certificate

The goal of this certificate is to give students and working professionals an opportunity to broaden their technical knowledge while contributing to regional economic development. Two real-world projects—one for a client and one for the student’s own pursuits—are combined with a series of six short courses to provide both context and substance for gaining knowledge needed to create technical prototypes. The model is based on the method by which most physical science graduate students learn technical domains on a “just-in-time” basis. It is also a method by which many corporations quickly bring new project team members up to speed on project knowledge. Entry into the certificate program requires prior completion of two semesters of calculus-based physics and two semesters of calculus **or** permission of the certificate advisor.

## Undergraduate required courses

PHYS 4850 - Physics for Design and Innovation I. **Semester Hours: 3**

PHYS 4400-4499 - Topics in Scientific Instrumentation and Laboratory Methods. **Semester Hours: 1**

Choose six 1-semester-hour short courses out of a larger list of offered topics; the specific sequence must be approved by the certificate advisor

PHYS 4852 - Physics for Design and Innovation II. **Semester Hours: 3**

**Total: 12 Hours**

## Graduate required courses

Graduate versions of the courses (5000-level) require an undergraduate degree and additional work on technical analysis or connection to professional practice.

PHYS 5850 - Physics for Design and Innovation I. **Semester Hours: 3**

PHYS 5400-5499 - Topics in Scientific Instrumentation and Laboratory Methods. **Semester Hours: 1**

Choose six 1-semester-hour short courses out of a larger list of offered topics; the specific sequence must be approved by the certificate advisor.

PHYS 5852 - Physics for Design and Innovation II. **Semester Hours: 3**

**Total: 12 Hours**

## **Graduate Certificate Programs**

# **Applied Statistics Graduate Certificate**

**Coordinator:** Stephanie Santorico:

**Telephone:** 303-556-2547

**E-mail:** Stephanie.Santorico@ucdenver.edu

**Web site:** [http://math.ucdenver.edu/statistics/grad\\_cert.shtml](http://math.ucdenver.edu/statistics/grad_cert.shtml)

## **Entrance Requirements**

Students are expected to have a bachelor's degree and be admitted to the graduate school as either a degree-seeking or nondegree-seeking student. Students are expected to have completed an introductory statistics course (such as MATH 2830 or the equivalent) or an introductory course in probability. At least one semester of calculus and a course containing linear algebra are also recommended.

To apply, see the Department of Mathematics Web page at [http://math.ucdenver.edu/statistics/grad\\_cert.shtml](http://math.ucdenver.edu/statistics/grad_cert.shtml)

## **Curriculum**

There are three parts to the requirements:

## **Required Courses**

### **Basic methods (choose one):**

MATH 4830 - Applied Statistics. **Semester Hours: 3**

-OR-

MATH 4820 - Statistics. **Semester Hours: 3**

-OR-

MATH 5320 - Statistics. **Semester Hours: 3**

-AND/OR-

MATH 5387 - Regression Analysis, Modeling and Time Series. **Semester Hours: 3**

-AND/OR-

MATH 5394 - Experimental Designs. **Semester Hours: 3**

## **Elective (choose one):**

Any statistics course in the math department at the 5000 level or higher  
ECON 5150 - Economic Forecasting. **Semester Hours: 3**

ECON 5813 - Econometrics I. **Semester Hours: 3**

ECON 5823 - Econometrics II. **Semester Hours: 3**

ENVS 5600 - Applied Statistics for the Natural Sciences. **Semester Hours: 3**

GEOL 5770 - Applied Statistics for the Natural Sciences. **Semester Hours: 3**

PSY 5713 - Advanced Statistics. **Semester Hours: 3**

SOC 5183 - Seminar: Quantitative Data Analysis. **Semester Hours: 3**

Equivalent course pre-approved by the certificate coordinator

## **Project**

An independent data analysis project with a report and presentation to demonstrate proficiency with data analysis techniques and a statistical computing software package. Enroll for one hour of MATH 5840 (Independent Study) or in an equivalent course preapproved by the certificate coordinator.

## **Grade Requirements**

Students must maintain a 3.0 GPA in these courses with no credit given for courses with grades below *B-*.

## **Residency Requirements**

Since a certificate is a University of Colorado Denver certification of a student's specialized knowledge in an advanced subject area, all courses in the certificate program are expected to be taken in residency at the University of Colorado Denver.

# **Content Instruction for English Learners (CIEL) Graduate Certificate**

## **Linguistically Diverse Education**

# Requirements for LDE Program

## (Degree/Endorsement or Certificates - TESOL, CIEL, CRUE)

**Office:** Lawrence Street Center, 701

**Telephone:** 303-315-6300

**Fax:** 303-315-6311

**E-mail:** [education@ucdenver.edu](mailto:education@ucdenver.edu)

**Web site:** [www.ucdenver.edu/education/lde](http://www.ucdenver.edu/education/lde)

## Faculty

Information about faculty in this program is available at [www.ucdenver.edu/education/lde](http://www.ucdenver.edu/education/lde). The faculty of linguistically diverse education (LDE) believe that effective teaching requires an awareness of and the ability to respond to individual differences. LDE faculty also emphasize the importance of teachers as scholars and reflective practitioners. In particular, teachers must understand how linguistic and cultural diversity affect their teaching. Two themes run throughout all program offerings. The first concerns the importance of recognizing a variety of literacies—“home” literacies, school literacy, “mainstream” literacy, first and second language literacies—and to develop teaching practices that utilize an understanding of the complexity of literacy development across language contexts. The second theme involves the meaningful use of language and literacy to improve the quality of one’s life. As an approach to teaching, this theme emphasizes the creation of diverse, rich environments in which learners experience oral and written language as part of authentic tasks, and where concern for the cultural and linguistic heritage of the students is evident.

## Program Options

The LDE program offers options leading to the following:

- a master of arts in curriculum and instruction
- the Colorado Endorsement for Linguistically Diverse Education
- a Teaching English to Speakers of Other Languages (TESOL) certificate
- a Content Instruction for English Learners (CIEL) certificate
- a Culturally Responsive Urban Education (CRUE) certificate

The program is intended for:

novice teachers who have completed their Colorado teaching credentials in UC Denver's graduate teacher education licensure program and are enrolled in the MA in curriculum and instruction with an emphasis in LDE (see 27 semester-hour option)

veteran elementary and secondary teachers returning to graduate studies for the master's degree (36 semester hours)

veteran elementary and secondary teachers returning to acquire Colorado endorsement credentials (24 semester hours)

individuals interested in teaching English abroad (TESOL: 15 semester hours)

veteran elementary and secondary teachers returning to graduate studies for a certificate to aid them in helping their English language learners succeed (CIEL: 9 semester hours)

elementary and secondary teachers who desire preparation in better meeting the needs of culturally diverse learners (CRUE: 9 semester hours)

individuals interested in teaching adults (MA: 36 semester hours)

The MA is a field-based professional development program involving university faculty and practicing LDE instructors in public school and intensive English settings. Courses, laboratories and practica emphasize scholarly approaches to complex problems of practice and feature interactive, collaborative and practical approaches to working with English language learners.

We advocate a sociocultural approach to issues of language and learning, acknowledging the legitimacy of linguistic and cultural differences and recognizing that academic settings represent important socializing forces in students' lives. Because of this, we emphasize the "whole learner" in our teaching and in teacher education and teacher development, understanding that individuals do not merely add a language to their repertoire of communication but make fundamental identity adjustments as they progress in their studies. For this reason, all our course work, laboratories and practica experiences are field-based, putting our program participants in contact with veteran teachers and English language learners. We draw heavily on recent scholarship in collaborative approaches to school-university partnerships and systemic school change in developing classroom methods and materials, curricula and teacher development experiences.

The MA program also provides a foundation in teaching English in a variety of contexts in the United States and abroad. Teachers who work in LDE programs or in other content areas (such as art, language arts, math, music, science, social studies or technology), but who wish to integrate LDE principles and strategies into their instruction for their English language learners, will find the MA program relevant to their interests and goals.

Course work includes language teaching methodology, language acquisition, linguistic analysis of English, multicultural foundations, assessment, literacy and other areas. This program has been developed as an advanced course of study for practicing teachers or individuals with some teaching experience.

Applicants who are new to teaching, and who wish to teach in U.S. K–12 public school settings, should inquire about the teacher education licensure program. Applicants who are new to

teaching, but who do not need a teaching license (certification) because they do not wish to teach in U.S. public schools, may consider the TESOL certificate to gain initial teaching experiences before applying for the MA.

## Program Requirements and Courses

To complete the LDE program and earn a master's degree and/or endorsement, or to earn a TESOL certificate, students must complete the appropriate course work as outlined in the table below.

<b>Requirements for LDE Program (Degree/Endorsement or TESOL Certificate)</b>					
<b>Course</b>	<b>MA without CDE Endorsement in LDE</b>	<b>MA and CDE Endorsement in LDE</b>	<b>CDE Endorsement in LDE Only</b>	<b>MA and CDE Endorsement in LDE (when added to UC Denver's graduate teacher education licensure program)</b>	<b>TESOL Certificate</b>
LLC 5910 - Foundations of Language, Literacy and Culture.	Required	Required	Required	Required	
<i>One course from culture options:</i> LLC 5140 - Multicultural Education. LLC 5150 - Culture of the Classroom. LLC 5160 - Historical and Legal Foundations of Bilingual Education.	Select One	Select One	Select One	Select One	
LLC 5070 - Linguistic Analysis of English:	Required	Required	Required	Required	Required

Implications for Teaching.					
LLC 5030 - Language/Literacy Acquisition Part I.	Required	Required	Required	Required	Required
LLC 5820 - Techniques in Teaching English as a Second Language.	Required	Required	Required	Required	Required
LLC 5050 - Linguistic and Cultural Issues in Linking Assessment and Instruction.	Required	Required	Required	Required	Required
<i>One course from field-based teaching options:</i> LLC 5020 - Workshop in Literacy and Language Teaching. LLC 5825 - Methods and Materials of Language Teaching. LLC 5826 - Language Teaching Lab. LLC 5730 - Language and Literacy Across the Curriculum. LLC 5770 - Effective Literacy Instruction for Second Language Learners.	5826 preferred	Elem: 5825 preferred  Sec: 5826 preferred	Elem: 5825 preferred  Sec: 5826 preferred	Elem: 5825 preferred  Sec: 5826 preferred	5826
LLC 5035 - Language and Literacy: Acquisition, Processes, and Cognition, Part II.	Required	Required			

LLC 6912 - Seminar and Practicum in Literacy and Language, ESL and Bilingual Education.	Required	Required	Required	Required	
<i>One course from research and evaluation methodology:</i> REM 5050 - Assessment for Teachers. REM 5080 - Research for Teachers.	Select One	Select One		Select One	
<i>One course from educational psychology:</i> EPSY 5110 - Human Learning. EPSY 5220 - Adult Learning and Education.	Select One	Select One			
Graduate-level University of Colorado elective	Select One	Select One			
Cumulative online portfolio	Required	Required	Required	Required	
LDE PLACE Exam		Required	Required	Required	
Total Semester Hours	36	36	24	27	15

## CRUE or CIEL Certificate Requirements

Those considering the CRUE certificate will find course requirements at [www.cruecenter.org/certificate.php](http://www.cruecenter.org/certificate.php). Students interested in the CIEL certificate must complete the following:

LLC 5030 – Language and Literacy Acquisition I. Semester Hours: 3

-OR-

LLC 5070 – Linguistic Analysis of English. Semester Hours: 3

LLC 5050 – Linguistic and Cultural Issues in Linking Assessment and Instruction. Semester Hours: 3

-OR-

LLC 5820 – Techniques in Teaching ESL. Semester Hours: 3

-OR-

LLC 5825 – Methods and Materials of Language Teaching. Semester Hours: 3

-OR-

LLC 5826 – Language Teaching Laboratory. Semester Hours: 3

LLC 6912 - Seminar and Practicum in Literacy and Language, ESL and Bilingual Education  
Semester Hours: 3

**Total: 9 Hours**

## **Cumulative Portfolio of Performance Based Assessments (PBAS)**

The portfolio is required for the CDE endorsement, counts as the comprehensive exam for the master's degree and permits you to document your development over the course of your program. Portfolios are reviewed by LDE faculty members. At least two faculty members must agree that the portfolio is acceptable in order to pass. The portfolio process is reviewed in every class as each of the PBAs is completed in the classes, helping students to update their portfolios throughout the program. For more portfolio guidelines, visit the Web site at [www.ucdenver.edu/education/lde](http://www.ucdenver.edu/education/lde).

## **PLACE Exam for Linguistically Diverse Education Endorsement**

To add the endorsement to their teaching license, students must pass the PLACE (Program for Licensing Assessments for Colorado Educators) exam for linguistically diverse education, secure and submit the appropriate paperwork from the Colorado Department of Education, and pay fees required for the PLACE and for the endorsement paperwork. Information about PLACE is online at [www.place.nesinc.com](http://www.place.nesinc.com).

## **Course Scheduling**

During the fall and spring semesters, most university courses are offered in the late afternoon and evening and meet for three hours once a week over a 16-week semester. Some alternative

course schedules are available, such as meeting on five Friday-evening/all-day Saturday combinations. In the summer semester, three-to eight-week sessions are offered, and courses may be in the morning, afternoon or evening. A current schedule of courses is available online at <http://courses.ucdenver.edu>.

## **Planning**

For practicing full-time teachers, we recommend taking one course each fall and spring semester and up to two courses each summer. Students may simultaneously complete requirements for the MA and the endorsement for linguistically diverse education. Support for course planning is available in LDE advising sessions—usually held once in fall and once in spring. These sessions help students build their programs around course sequences and availability (some courses are offered only once per year).

## **Active Status in the Graduate School**

Students must complete their programs within seven years, maintaining a GPA of 3.0. Students typically take four courses each calendar year. Failure to enroll over three contiguous semesters will result in a requirement to resubmit part I of the application for admission and a letter of intent.

# **Culturally Responsive Urban Education (CRUE) Graduate Certificate**

## **Linguistically Diverse Education**

## **Requirements for LDE Program**

## **(Degree/Endorsement or Certificates - TESOL, CIEL, CRUE)**

**Office:** Lawrence Street Center, 701

**Telephone:** 303-315-6300

**Fax:** 303-315-6311

**E-mail:** [education@ucdenver.edu](mailto:education@ucdenver.edu)

**Web site:** [www.ucdenver.edu/education/lde](http://www.ucdenver.edu/education/lde)

## **Faculty**

Information about faculty in this program is available at [www.ucdenver.edu/education/lde](http://www.ucdenver.edu/education/lde). The faculty of linguistically diverse education (LDE) believe that effective teaching requires an awareness of and the ability to respond to individual differences. LDE faculty also emphasize the importance of teachers as scholars and reflective practitioners. In particular, teachers must understand how linguistic and cultural diversity affect their teaching. Two themes run throughout all program offerings. The first concerns the importance of recognizing a variety of literacies—“home” literacies, school literacy, “mainstream” literacy, first and second language literacies—and to develop teaching practices that utilize an understanding of the complexity of literacy development across language contexts. The second theme involves the meaningful use of language and literacy to improve the quality of one’s life. As an approach to teaching, this theme emphasizes the creation of diverse, rich environments in which learners experience oral and written language as part of authentic tasks, and where concern for the cultural and linguistic heritage of the students is evident.

## Program Options

The LDE program offers options leading to the following:

- a master of arts in curriculum and instruction
- the Colorado Endorsement for Linguistically Diverse Education
- a Teaching English to Speakers of Other Languages (TESOL) certificate
- a Content Instruction for English Learners (CIEL) certificate
- a Culturally Responsive Urban Education (CRUE) certificate

The program is intended for:

- novice teachers who have completed their Colorado teaching credentials in UC Denver’s graduate teacher education licensure program and are enrolled in the MA in curriculum and instruction with an emphasis in LDE (see 27 semester-hour option)
- veteran elementary and secondary teachers returning to graduate studies for the master’s degree (36 semester hours)
- veteran elementary and secondary teachers returning to acquire Colorado endorsement credentials (24 semester hours)
- individuals interested in teaching English abroad (TESOL: 15 semester hours)
- veteran elementary and secondary teachers returning to graduate studies for a certificate to aid them in helping their English language learners succeed (CIEL: 9 semester hours)
- elementary and secondary teachers who desire preparation in better meeting the needs of culturally diverse learners (CRUE: 9 semester hours)
- individuals interested in teaching adults (MA: 36 semester hours)

The MA is a field-based professional development program involving university faculty and practicing LDE instructors in public school and intensive English settings. Courses, laboratories and practica emphasize scholarly approaches to complex problems of practice and feature interactive, collaborative and practical approaches to working with English language learners.

We advocate a sociocultural approach to issues of language and learning, acknowledging the legitimacy of linguistic and cultural differences and recognizing that academic settings represent important socializing forces in students' lives. Because of this, we emphasize the "whole learner" in our teaching and in teacher education and teacher development, understanding that individuals do not merely add a language to their repertoire of communication but make fundamental identity adjustments as they progress in their studies. For this reason, all our course work, laboratories and practica experiences are field-based, putting our program participants in contact with veteran teachers and English language learners. We draw heavily on recent scholarship in collaborative approaches to school-university partnerships and systemic school change in developing classroom methods and materials, curricula and teacher development experiences.

The MA program also provides a foundation in teaching English in a variety of contexts in the United States and abroad. Teachers who work in LDE programs or in other content areas (such as art, language arts, math, music, science, social studies or technology), but who wish to integrate LDE principles and strategies into their instruction for their English language learners, will find the MA program relevant to their interests and goals.

Course work includes language teaching methodology, language acquisition, linguistic analysis of English, multicultural foundations, assessment, literacy and other areas. This program has been developed as an advanced course of study for practicing teachers or individuals with some teaching experience.

Applicants who are new to teaching, and who wish to teach in U.S. K–12 public school settings, should inquire about the teacher education licensure program. Applicants who are new to teaching, but who do not need a teaching license (certification) because they do not wish to teach in U.S. public schools, may consider the TESOL certificate to gain initial teaching experiences before applying for the MA.

## **Program Requirements and Courses**

To complete the LDE program and earn a master's degree and/or endorsement, or to earn a TESOL certificate, students must complete the appropriate course work as outlined in the table below.

<h3><b>Requirements for LDE Program (Degree/Endorsement or TESOL Certificate)</b></h3>
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<b>Course</b>	<b>MA without CDE Endorsement in LDE</b>	<b>MA and CDE Endorsement in LDE</b>	<b>CDE Endorsement in LDE Only</b>	<b>MA and CDE Endorsement in LDE</b> <i>(when added to UC Denver's graduate teacher education licensure program)</i>	<b>TESOL Certificate</b>
LLC 5910 - Foundations of Language, Literacy and Culture.	Required	Required	Required	Required	
<i>One course from culture options:</i> LLC 5140 - Multicultural Education. LLC 5150 - Culture of the Classroom. LLC 5160 - Historical and Legal Foundations of Bilingual Education.	Select One	Select One	Select One	Select One	
LLC 5070 - Linguistic Analysis of English: Implications for Teaching.	Required	Required	Required	Required	Required
LLC 5030 - Language/Literacy Acquisition Part I.	Required	Required	Required	Required	Required
LLC 5820 - Techniques in Teaching English as a Second Language.	Required	Required	Required	Required	Required
LLC 5050 - Linguistic and Cultural Issues in Linking	Required	Required	Required	Required	Required

Assessment and Instruction.					
<i>One course from field-based teaching options:</i> LLC 5020 - Workshop in Literacy and Language Teaching. LLC 5825 - Methods and Materials of Language Teaching. LLC 5826 - Language Teaching Lab. LLC 5730 - Language and Literacy Across the Curriculum. LLC 5770 - Effective Literacy Instruction for Second Language Learners.	5826 preferred	Elem: 5825 preferred  Sec: 5826 preferred	Elem: 5825 preferred  Sec: 5826 preferred	Elem: 5825 preferred  Sec: 5826 preferred	5826
LLC 5035 - Language and Literacy: Acquisition, Processes, and Cognition, Part II.	Required	Required			
LLC 6912 - Seminar and Practicum in Literacy and Language, ESL and Bilingual Education.	Required	Required	Required	Required	
<i>One course from research and evaluation methodology:</i> REM 5050 - Assessment for Teachers. REM 5080 -	Select One	Select One		Select One	

Research for Teachers.					
<i>One course from educational psychology:</i> EPSY 5110 - Human Learning. EPSY 5220 - Adult Learning and Education.	Select One	Select One			
Graduate-level University of Colorado elective	Select One	Select One			
Cumulative online portfolio	Required	Required	Required	Required	
LDE PLACE Exam		Required	Required	Required	
Total Semester Hours	36	36	24	27	15

## CRUE or CIEL Certificate Requirements

Those considering the CRUE certificate will find course requirements at [www.cruecenter.org/certificate.php](http://www.cruecenter.org/certificate.php). Students interested in the CIEL certificate must complete the following:

LLC 5030 – Language and Literacy Acquisition I. Semester Hours: 3

-OR-

LLC 5070 – Linguistic Analysis of English. Semester Hours: 3

LLC 5050 – Linguistic and Cultural Issues in Linking Assessment and Instruction. Semester Hours: 3

-OR-

LLC 5820 – Techniques in Teaching ESL. Semester Hours: 3

-OR-

LLC 5825 – Methods and Materials of Language Teaching. Semester Hours: 3

-OR-

LLC 5826 – Language Teaching Laboratory. Semester Hours: 3

LLC 6912 - Seminar and Practicum in Literacy and Language, ESL and Bilingual Education  
Semester Hours: 3

**Total: 9 Hours**

## **Cumulative Portfolio of Performance Based Assessments (PBAS)**

The portfolio is required for the CDE endorsement, counts as the comprehensive exam for the master's degree and permits you to document your development over the course of your program. Portfolios are reviewed by LDE faculty members. At least two faculty members must agree that the portfolio is acceptable in order to pass. The portfolio process is reviewed in every class as each of the PBAs is completed in the classes, helping students to update their portfolios throughout the program. For more portfolio guidelines, visit the Web site at [www.ucdenver.edu/education/lde](http://www.ucdenver.edu/education/lde).

## **PLACE Exam for Linguistically Diverse Education Endorsement**

To add the endorsement to their teaching license, students must pass the PLACE (Program for Licensing Assessments for Colorado Educators) exam for linguistically diverse education, secure and submit the appropriate paperwork from the Colorado Department of Education, and pay fees required for the PLACE and for the endorsement paperwork. Information about PLACE is online at [www.place.nesinc.com](http://www.place.nesinc.com).

## **Course Scheduling**

During the fall and spring semesters, most university courses are offered in the late afternoon and evening and meet for three hours once a week over a 16-week semester. Some alternative course schedules are available, such as meeting on five Friday-evening/all-day Saturday combinations. In the summer semester, three-to eight-week sessions are offered, and courses may be in the morning, afternoon or evening. A current schedule of courses is available online at <http://courses.cudenver.edu>.

## **Planning**

For practicing full-time teachers, we recommend taking one course each fall and spring semester and up to two courses each summer. Students may simultaneously complete requirements for the MA and the endorsement for linguistically diverse education. Support for course planning is available in LDE advising sessions—usually held once in fall and once in spring. These sessions help students build their programs around course sequences and availability (some courses are offered only once per year).

## **Active Status in the Graduate School**

Students must complete their programs within seven years, maintaining a GPA of 3.0. Students typically take four courses each calendar year. Failure to enroll over three contiguous semesters will result in a requirement to resubmit part I of the application for admission and a letter of intent.

## Design Build Graduate Certificate

**Contact:** Pam Erickson

**Telephone:** 303-556-3387

**E-mail:** pam.erickson@ucdenver.edu

The College of Architecture and Planning offers a graduate certificate in the emerging area of design build as an extension of the MArch program. It requires a total of 15 semester hours, some of which also count toward the MArch program, some of which do not. Course work in this extension emphasizes the designer's point of view.

### Certificate Requirements

Four courses totaling 15 semester hours can be applied to the MArch graduation requirements:

ARCH 6370 - Introduction To Design Build. **Semester Hours:** 3

ARCH 6371 - Maintaining Quality and Managing Risks: Design Build. **Semester Hours:** 3

ARCH 6373 - Construction in Design Build. **Semester Hours:** 3

ARCH 6170 - Advanced Design Studio. **Semester Hours:** 4

ARCH 6171 - Advanced Design Seminar. **Semester Hours:** 2

**Total: 15 Hours**

## Designing E-learning Environments Graduate Certificate

The DeE certificate is an 15-semester-hour program offered entirely online that focuses specifically on the skills needed to design and facilitate online learning opportunities for learners in K–12, higher education and corporate settings. This program is perfect for educators who are not interested in a graduate degree. More information is available at [www.ucdenver.edu/academics/colleges/SchoolOfEducation/Academics/MASTERS/ILT/Pages/eLearning.aspx](http://www.ucdenver.edu/academics/colleges/SchoolOfEducation/Academics/MASTERS/ILT/Pages/eLearning.aspx).

### Sample plan for eLearning Certificate

## **Year 1**

Fall: I T 5660 - Designing and Teaching in eLearning Environments.

Spring: I T 5670 - Developing eLearning Instruction.

Summer: I T 5680 - Integrating Media in eLearning Environments.

## **Comprehensive Examination for All ILT Students**

The comprehensive exam consists of a professional portfolio where in students demonstrate program competencies through work products and related accomplishments. The portfolio is created throughout the student's program and submitted for faculty review the final semester.

For more information or for complete details about ILT programs, see the ILT Web site.

## **Digital Storytelling Graduate Certificate**

A 9-semester-hour certificate in digital storytelling includes face-to-face workshops as well as a 4-semester-hour online course. Participants develop digital stories using nonlinear video editing programs and other presentation tools. They learn to integrate digital storytelling methods into existing courses and curricula for all ages.

## **Domestic Violence Graduate Certificate**

### **Certificate Requirements**

Students take the four specified courses below and one elective.

P AD 5910 - Women and Violence: A Sociological Perspective. **Semester Hours: 3**

P AD 5920 - Psychology of Violence Against Women. **Semester Hours: 3**

P AD 5930 - Battered Women and the Legal System. **Semester Hours: 3**

P AD 5940 - Domestic Violence Social Change and Advocacy. **Semester Hours: 3**

**Total: 15 Hours**

## **Early and Adolescent Literacy Certificates**

# **Literacy, Language and Culturally Responsive Teaching**

## **MA Requirements for the Reading and Writing Option and Secondary English Education Option, plus Reading Teacher Endorsement and Certificate Programs**

**Office:** Lawrence Street Center, 701

**Telephone:** 303-315-6300

**Fax:** 303-315-6311

**E-mail:** [education@ucdenver.edu](mailto:education@ucdenver.edu)

**Web sites:** [www.ucdenver.edu/education/literacy](http://www.ucdenver.edu/education/literacy) and [www.ucdenver.edu/education/englished](http://www.ucdenver.edu/education/englished)

### **Reading and Writing**

#### **Secondary English**

#### **Early and Adolescent Literacy Certificates**

## **Faculty**

Information about faculty in this program is available online at [www.ucdenver.edu/education/literacy](http://www.ucdenver.edu/education/literacy).

The faculty of literacy, language and culturally responsive teaching (L2CRT) believe that effective teaching requires an awareness of and the ability to respond to individual differences. L2CRT faculty also emphasize the importance of teachers as scholars and reflective practitioners. In particular, teachers must understand how linguistic and cultural diversity affect their teaching. Two themes run throughout all program offerings. The first concerns the importance of recognizing a variety of literacies—“home” literacies, school literacy, “mainstream” literacy, first and second language literacies—and to develop teaching practices that utilize an understanding of the complexity of literacy development across language contexts. The second theme involves the meaningful use of language and literacy to improve the quality of one’s life. As an approach to teaching, this theme emphasizes the creation of diverse, rich environments in which learners experience oral and written language as part of authentic tasks, and where concern for the cultural and linguistic heritage of the students is evident.

## **Reading and Writing Option and Reading Teacher Endorsement**

This master's program is designed for K-6 and 7-12 teachers. Those interested in elementary reading and writing should communicate with Professors Espinoza, Nathenson-Mejia or Taylor. Those interested in secondary and adult reading and writing should communicate with Professor Shanklin (see Web site for faculty contact information).

Reading is a credentialed program meeting the Colorado Department of Education requirements for reading teacher endorsement. Therefore, students who obtain a master's degree emphasizing reading education from UC Denver are certified to hold positions in public and private schools as special developmental and remedial reading teachers in K-6 or 7-12. This program is also valuable for elementary and secondary teachers who wish to enhance reading and writing instruction in their classrooms.

By placing emphasis on the reading, writing and oral and visual language development of culturally, linguistically and academically diverse student populations, this master's program is at the forefront of the field. Language is approached from a socio-psycholinguistic perspective that emphasizes the learner's construction of meaning rather than the learning of isolated skills. Importance is placed on using theory, inquiry and personal reflection to inform classroom practice. The program prepares teachers to become decision makers capable of developing learner-centered curricula where each student's reading and writing abilities are assessed to address developmental or special needs.

## Curriculum

Course offerings lead to an MA degree in curriculum and instruction with an emphasis in reading and writing, as well as a reading teacher endorsement, at one of two levels: K-6 or 7-12.

Those who have completed UC Denver's graduate teacher education licensure program must earn an additional 27 semester hours to obtain the MA and endorsement. Those who completed licensure through other means must earn an additional 36 semester hours to obtain the MA and endorsement.

Teachers may add a reading teacher endorsement to an already-earned master's degree in education by taking those courses listed under the chosen endorsement level. (In the state of Colorado, the reading teacher endorsement cannot simply be added to a bachelor's degree.) Electives and core courses are not required. Two additional courses must be taken in other areas specified by the Colorado Department of Education. In many cases, previous master's degree courses will satisfy this requirement.

<b>Requirements for Reading and Writing Program (Degree/Endorsement Options)</b>		
	<b>ELEMENTARY (K-6)</b>	<b>SECONDARY (7-12)</b>

<b>Course</b>	<b>MA &amp; CDE Endorsement</b>	<b>MA &amp; CDE Endorsement</b> <i>(when added to UC Denver's graduate teacher education licensure program)</i>	<b>CDE Endorsement Only</b>	<b>MA &amp; CDE Endorsement</b>	<b>MA &amp; CDE Endorsement</b> <i>(when added to UC Denver's graduate teacher education licensure program)</i>	<b>CDE Endorsement Only</b>
LLC 5020 - Workshop in Literacy and Language Teaching.	Required		Required	Required	Required	Required
LLC 5810 - Workshop in Language Acquisition and Development .	Required	Required	Required	Required	Required	Required
LLC 5910 - Foundations of Language, Literacy and Culture.	Required	Required	Required	Required	Required	Required
LLC 5710 - Primary Literacy: Pre-3rd Grade.	Required	Required	Required			
LLC 5720 - Writing: Process, Development , and Teaching Grades 3-12.	Required	Required	Required	Required	Required	Required
LLC 5730 - Language and Literacy Across the	Required		Required	Required		Required

Curriculum.						
Children's literature course, per advisor approval	Select one	Select one	Select one			
LLC 5740 - Adolescent Literature.				Required	Required <i>(waived if taken as part of English Licensure)</i>	Required
LLC 6910 - Seminar and Practicum in Literacy and Language, K-6.	Required	Required	Required			
LLC 6911 - Seminar and Practicum in Literacy and Language, 7-12+.				Required	Required	Required
LLC 5055 - Linking Assessment and Instruction in Language and Literacy, Part I.	Required	Required	Required	Required	Required	Required
LLC 6915 - Seminar and Practicum in Literacy Professional Development .	Required	Required		Required	Required	Required
Core course in Research and Evaluation Methodology	Select one	5080		Select one	5080	

(REM) - see list below						
Interdisciplinary core course - see list below	Select one			Select one		
Graduate-level School of Education and Human Development elective				Select one		
Portfolio	Required	Required		Required	Required	
PLACE Exam	Required	Required	Required	Required	Required	Required
Total Semester Hours	36	27	27	36	27	27

## Secondary English Education Option

The master's program in secondary English education is designed to enhance the preparation of middle and high school English/language arts teachers. Students complete course work in language development, assessment and field experiences. With the help of their advisor, they also select specific courses from the English Department or within the School of Education and Human Development that provide a well-rounded repertoire of knowledge and skills to fulfill the needs of an English educator. Special consideration is given to working with diverse ethnic populations. Students interested in English education should see Professor Shanklin (see Web site for faculty contact information).

## Program Requirements

To earn a master of arts degree in curriculum and instruction with an emphasis in secondary English education, students must complete the following:

30 graduate semester hours in English education

6 graduate semester hours of core courses

performance-based assessments that culminate in a portfolio finalized in the last semester of the program as fulfillment of the MA comprehensive exam requirement

Each student's course plan is developed in conjunction with his/her advisor. Please review [www.ucdenver.edu/education/englished](http://www.ucdenver.edu/education/englished) for recommended course sequence.

LLC 5055 – Linking Assessment and Instruction in Language and Literacy. Part I. Semester Hours: 3

LLC 5740 – Adolescent Literature. Semester Hours: 3

LLC 5760 – Theory and Methods of English Education. Semester Hours: 3

-OR-

LLC 5835 – Special Topics: Advanced Theories and Methods of English Education. Semester Hours: 3

LLC 5810 – Workshop in Language Acquisition and Development. Semester Hours: 3

LLC 5910 – Foundations of Language, Literacy and Culture. Semester Hours: 3

LLC 6911. Seminar and Practicum in Literacy and Language, Grades 7-12+. Semester Hours: 3  
Research and Evaluation Methodology core course (see list below).

Interdisciplinary core course (see list below).

Four electives, per advisor approval, from the English department and/or the School of Education & Human Development. The following are recommended:

LLC 5720 – Writing: Process, Development and Teaching, Grades 3-12. Semester Hours: 3

-OR-

ENGL 5110 – Denver Writing Project. Semester Hours: 3

Courses in working with English language learners and in instructional technology may also be helpful. For a technology course, please contact the professor about prerequisite knowledge.

**Total: 36 semester hours**

Program Requirements--When Added to UC Denver's Graduate Teacher Education Licensure Program

MA in curriculum and instruction with emphasis in secondary content leadership (English), when added to UC Denver's graduate teacher education licensure program:

18 graduate semester hours

performance-based assessments that culminate in a portfolio finalized in the last semester of the program as fulfillment of the MA comprehensive exam requirement

Each student's course plan is developed in conjunction with his/her advisor. Please review [www.ucdenver.edu/education/englished](http://www.ucdenver.edu/education/englished) for recommended course sequence.

FNDS 5050 – Critical Issues in American Education. Semester Hours: 3

-OR-

IPTE 5080 – Principals and Practice of Change. Semester Hours: 3

-OR-

SPED 5300 – Collaborating in Schools and Communities. Semester Hours: 3

REM 5080 – Research for Teachers. Semester Hours: 3

Four electives, per advisor approval, from the English Department and/or the School of Education and Human Development. The following are recommended:

LLC 5720 – Writing: Process, Development and Teaching, Grades 3-12. Semester Hours: 3

-OR-

ENGL 5110 – Denver Writing Project. Semester Hours: 3

Courses in working with English language learners and in instructional technology may also be helpful. For a technology course, please contact the professor about prerequisite knowledge.

**Total: 18 semester hours**

## **Core Courses**

### **Research and Evaluation Methodology**

REM 5000 - Orientation to Research and Measurement in Education. Semester Hours: 3

REM 5050 - Assessment for Teachers. Semester Hours: 3

REM 5080 - Research for Teachers. Semester Hours: 3

REM 5100 - Basic Statistics. Semester Hours: 3

REM 5200 - Introduction to Research Methods. Semester Hours: 3

REM 5300 - Introduction to Measurement. Semester Hours: 3

### **Interdisciplinary**

EPSY 5100 - Advanced Child Growth and Development Semester Hours: 3

EPSY 5140 - Advanced Adolescent Growth and Development. Semester Hours: 3

EPSY 5220 - Adult Learning and Education. Semester Hours: 3

EPSY 6200 - Human Development Over the Life Span. Semester Hours: 3

FNDS 5050 - Critical Issues in American Education. Semester Hours: 3

FNDS 5420 - History and Philosophy of Education: Twentieth Century America. Semester Hours: 3

LLC 5140 - Multicultural Education. Semester Hours: 3

LLC 5150 - Culture of the Classroom. Semester Hours: 3

LLC 5160 - Historical and Legal Foundations of Bilingual Education. Semester Hours: 3

LLC 5820 - Techniques in Teaching English as a Second Language. Semester Hours: 3

### **Cumulative Portfolio**

The MA portfolio counts as the comprehensive exam for the master's degree. The portfolio is an accumulation of the performance based assessments completed during program courses and reflects on the student's development over the course of the degree program. Reading and writing students must include confirmation of Reading Teacher PLACE exam registration in their portfolios. Information about the PLACE is online at [www.place.nesinc.com](http://www.place.nesinc.com).

### **Course Scheduling**

During the fall and spring semesters, most university courses are offered in the late afternoon and evening and meet for three hours once a week over a 16-week semester. Some alternative course schedules are available, such as meeting on five Friday-evening/all-day Saturday combinations. In the summer semester, three- to eight-week sessions are offered, and courses

may be in the morning, afternoon or evening. A current schedule of courses is available online at <http://courses.ucdenver.edu>.

## Planning

For practicing full-time teachers, we recommend taking one course each fall and spring semester, and up to two courses each summer. Plan carefully because courses are intended to build upon each other, and some courses are only offered once a year.

## Active Status in the Graduate School

Students must complete their programs within seven years, maintaining a GPA of 3.0. Students typically take four courses each calendar year. Failure to enroll over three contiguous semesters will result in a requirement to resubmit part I of the application for admission and a letter of intent.

## Early and Adolescent Literacy Certificates

The early literacy certificate and adolescent literacy certificate each include three graduate-level courses (for a total of 9 semester hours) and are conveniently offered entirely online. They are specifically designed to help licensed teachers develop the skills necessary to reach student readers. To find out more, please visit [www.ucdenver.edu/education](http://www.ucdenver.edu/education) or email [cpe@ucdenver.edu](mailto:cpe@ucdenver.edu).

To learn about how these certificate credits may apply toward one of the above programs in reading and writing, contact [education@ucdenver.edu](mailto:education@ucdenver.edu).

# Emergency Management and Homeland Security Graduate Certificate

## Certificate Requirements

Students take two required courses as well as electives approved by advisor.

GEOG 5230 - Hazard Mitigation and Vulnerability Assessment. **Semester Hours:** 3

P AD 5650 - Disaster and Emergency Management Policies. **Semester Hours:** 3

Electives approved by advisor (3) (6-9 semester hours)

**Total: 15 Hours**

The emergency management and homeland security certificate requires the completion of three electives chosen from a preapproved, multidisciplinary list of courses relevant to emergency management. Students may choose electives in one of three tracks: policy and management; spatial analysis, planning and quantitative assessment; or public safety, homeland security and justice.

# Environmental Policy, Management and Law Graduate Certificate

## Certificate Requirements

Students take at least two of the three courses listed below:

P AD 5631 - Seminar in Environmental Politics and Policy. **Semester Hours: 3**

P AD 5632 - Seminar in Environmental Management. **Semester Hours: 3**

P AD 5633 - Seminar in Natural Resource and Environmental Health Law. **Semester Hours: 3**

**Total: 15 Hours**

# Environmental Sciences Graduate Certificate

The graduate-level certificate in environmental sciences has six options: air quality, ecosystems, environmental health, geospatial analysis, hazardous waste and water quality. Each option comprises four courses and is designed to approach an environmental issue from various disciplines. To earn a certificate, students are required to satisfactorily complete the courses in the option of their interest. These courses may be taken as electives within an MS degree program or through nondegree admission. Students must have the prerequisites for each course and must meet the requirements listed. Contact the option advisor for the particular option of interest before starting. A certificate will be issued upon proof of satisfactory completion of the courses. For an MS degree, students must coordinate the option courses with electives in their program. The listings of courses in each option are in the electives section of the master's program information.

In addition to the master of science in environmental sciences, the department also participates in the master of integrated science (MIS) degree program. For more information, see the MIS program description under CLAS degree programs.

# Geospatial Information Science Graduate Certificate

**Contact:** Brian Muller

**Telephone:** 303-556-5967

**E-mail:** brian.muller@ucdenver.edu

The College of Architecture and Planning offers a certificate in geospatial information science through participating departments. The emphasis of this certificate is on applications of GIS in urban and environmental planning and design fields. The certificate is available to any student earning one of our graduate degrees; to students earning cognate degrees, for example in the School of Public Affairs, College of Engineering and Applied Science or from the Department of Geography; and to nondegree students who have already earned such a degree.

## Certificate Requirements

A minimum of 18 semester hours (with at least 12 related planning and design hours to be earned in residence at UC Denver or University of Colorado at Boulder);

A minimum B (3.0) average and a minimum grade of B- (2.7) in any course, as outlined in the certificate curriculum:

*One required introductory class:* Introduction to GIS (both theory and methods) (3 semester hours)

*At least three additional courses in GIS or remote sensing methods* to be approved in advance by the GIS committee (9 semester hours). Such courses may include:

Cartography (Boulder and Denver, geography)

GIS Analysis (Denver, civil engineering)

GIS II (Boulder, geography)

Advanced GIS Workshops (Boulder and Denver, multiple departments)

GIS Management (Denver, civil engineering)

Quantitative Methods in Geography (Boulder, geography)

Remote Sensing (Boulder and Denver, multiple departments)

*Applications Option 1:* Studio or thesis project involving application of planning and design GIS-based methods to be approved by the faculty GIS committee (6 semester hours)

*Applications Option 2:* Internship or other work experience is strongly encouraged for all students and may at the discretion of the committee be substituted for other courses (6 semester hours)

It is not possible or desirable to specify every course that should count toward a certificate. CAP and other participating programs will continue to generate new GIS-related courses as the curriculum evolves, and CAP delivers much of its instruction through studio courses that vary in content each semester. A certificate program must include an ongoing structure for managing course requirements and determining when individual students have met them.

# Historic Preservation Graduate Certificate

**Contact:** Christopher Koziol  
**Telephone:** 303-556-6516  
**E-mail:** christopher.koziol@ucdenver.edu

The College of Architecture and Planning together with the Department of History in the College of Liberal Arts and Sciences offers a graduate certificate in historic preservation. The certificate can be earned as part of an MArch, MLA, MURP or an MA in history. It requires a total of 18 semester hours.

## Certificate Requirements

HIST 5232 - Historic Preservation. **Semester Hours:** 3

URP 6634 - Preservation Theory and Practice. **Semester Hours:** 3

## Total: 6 Hours

These are core courses on preservation theory and practice from the architect and planner's perspective of intervening through design and regulation and from the historian's perspective of how the past might guide the future.

A pre-approved thesis or studio (6 semester hours) is required.

Students choose their remaining courses from a selection in the following categories:

History of architecture, landscape architecture or historic places (3 semester hours)

Preservation methods (3 semester hours), including preservation technology, documentation of sites and structures, visual research methods and other subjects.

Students are encouraged but not required to take an internship in preservation.

Preservation certificate students work out with their advisor a selection of courses appropriate to their needs and the requirements of their degree program.

## **Local Government Graduate Certificate**

### **Certificate Requirements**

Students take at least two of the three courses listed below:

P AD 5625 - Local Government Management. **Semester Hours: 3**

P AD 5626 - Local Government Politics and Policy. **Semester Hours: 3**

P AD 5628 - Urban Social Problems. **Semester Hours: 3**

Electives approved by advisor (3) (6-9 semester hours)

**Total: 15 Hours**

## **Nonprofit Management Graduate Certificate**

### **Certificate Requirements**

Students take two required courses as well as electives approved by advisor.

P AD 5110 - Seminar in Nonprofit Management. **Semester Hours: 3**

P AD 5140 - Nonprofit Financial Management. **Semester Hours: 3**

Additional electives (3): **Semester Hours: 9**

**Total: 15 Hours**

## **Professional Writing Certificate for Graduate Students**

### **Professional Writing Certificate**

The certificate consists of 12 semester hours that may be completed in one or two semesters. Enrollment is open to undergraduates, graduates, working professionals and returning students, and the certificate has no prerequisites.

## **Courses**

### **Three Required Courses (9 semester hours)**

ENGL 2070 - Grammar, Rhetoric and Style. **Semester Hours: 3**

-OR-

ENGL 2154 - Introduction to Creative Writing. **Semester Hours: 3**

ENGL 3154 - Technical Writing. **Semester Hours: 3**

-OR-

ENGL 3170 - Business Writing. **Semester Hours: 3**

ENGL 4701 - Multimedia in the Community. **Semester Hours: 3**

or at the graduate level:

ENGL 5701 - Multimedia in the Community. **Semester Hours: 3**

-OR-

ENGL 3084 - Advanced Composition. **Semester Hours: 3**

## **Elective Courses**

### **Three semester hours, chosen from the following courses:**

ENGL 3084 - Advanced Composition. **Semester Hours: 3** (if not taken as a required course)

ENGL 3154 - Technical Writing. **Semester Hours: 3** (if not taken as a required course)

ENGL 3170 - Business Writing. **Semester Hours: 3** (if not taken as a required course)

ENGL 3416 - Magazine Writing. **Semester Hours: 3**

ENGL 3939 - Internship/Cooperative Education. **Semester Hours: 1 to 3**

ENGL 4180 - Argumentation and Logic. **Semester Hours:** 3

ENGL 4190 - Special Topics in Rhetoric and Writing. **Semester Hours:** 3 (with advisor approval)

ENGL 4280 - Proposal and Grant Writing. **Semester Hours:** 3

Other writing electives may be taken as offered, with advisor approval.

**Total: 12 Hours**

## Public Relations Graduate Certificate

Public relations is a management function that establishes and maintains mutually beneficial relationships between an organization and the publics on whom its success or failure depends. Virtually every kind of institution—for-profit and not-for-profit alike—recognizes the need for dialogue with the groups of people who can and will influence its future. The graduate certificate in public relations is designed to provide students with the principles and theories that guide the work of public relations practitioners in a variety of contexts including private industry, government and nonprofit settings.

The graduate certificate in public relations is for working professionals who already have earned bachelor's degrees but who would like to enhance or upgrade their skills in the area of public relations. These individuals complete the certificate as nondegree students; those who decide to enroll in the MA program in communication following completion of the certificate may transfer 9 hours of credit earned for the certificate to the master's degree. For students already enrolled in a master's program in communication, the certificate can be completed as part of or in addition to the course work required for the master's degree. Students who have completed the undergraduate certificate in public relations are not eligible to complete this certificate.

### Certificate Requirements

The graduate certificate in public relations requires four courses (12 semester hours). Students who have not had a previous course in public relations must complete:

### Required Courses

CMMU 5635 - Principles of Public Relations. **Semester Hours:** 3

### Elective Courses

Students choose three or four, depending on whether they already have had a course equivalent to CMMU 5635:

CMMU 5240 - Organizational Communication. **Semester Hours: 3**

CMMU 5290 - Web Design. **Semester Hours: 3**

CMMU 5300 - Multimedia Authoring. **Semester Hours: 3**

CMMU 5665 - Principles of Advertising. **Semester Hours: 3**

CMMU 5805 - Graphics. **Semester Hours: 3**

**Total: 12 Hours**

Students may be allowed to take courses other than those on this list to fulfill the requirements for the certificate if those courses better fit their professional goals. Requests for approval for different courses should be made in writing to the MA program director.

## **Scientific Foundations of Technical Innovation Certificate for Graduate Students**

## **Scientific Foundations of Technical Innovation Certificate**

The goal of this certificate is to give students and working professionals an opportunity to broaden their technical knowledge while contributing to regional economic development. Two real-world projects—one for a client and one for the student’s own pursuits—are combined with a series of six short courses to provide both context and substance for gaining knowledge needed to create technical prototypes. The model is based on the method by which most physical science graduate students learn technical domains on a “just-in-time” basis. It is also a method by which many corporations quickly bring new project team members up to speed on project knowledge. Entry into the certificate program requires prior completion of two semesters of calculus-based physics and two semesters of calculus **or** permission of the certificate advisor.

### **Undergraduate required courses**

PHYS 4850 - Physics for Design and Innovation I. **Semester Hours: 3**

PHYS 4400-4499 - Topics in Scientific Instrumentation and Laboratory Methods. **Semester Hours: 1**

Choose six 1-semester-hour short courses out of a larger list of offered topics; the specific sequence must be approved by the certificate advisor

PHYS 4852 - Physics for Design and Innovation II. **Semester Hours: 3**

**Total: 12 Hours**

## **Graduate required courses**

Graduate versions of the courses (5000-level) require an undergraduate degree and additional work on technical analysis or connection to professional practice.

PHYS 5850 - Physics for Design and Innovation I. **Semester Hours: 3**

PHYS 5400-5499 - Topics in Scientific Instrumentation and Laboratory Methods. **Semester Hours: 1**

Choose six 1-semester-hour short courses out of a larger list of offered topics; the specific sequence must be approved by the certificate advisor.

PHYS 5852 - Physics for Design and Innovation II. **Semester Hours: 3**

**Total: 12 Hours**

# **Teaching English to Speakers of Other Languages (TESOL) Graduate Certificate**

**Linguistically Diverse Education**

**Requirements for LDE Program**

**(Degree/Endorsement or Certificates - TESOL, CIEL, CRUE)**

**Office:** Lawrence Street Center, 701

**Telephone:** 303-315-6300

**Fax:** 303-315-6311

**E-mail:** [education@ucdenver.edu](mailto:education@ucdenver.edu)

**Web site:** [www.ucdenver.edu/education/lde](http://www.ucdenver.edu/education/lde)

## Faculty

Information about faculty in this program is available at [www.ucdenver.edu/education/lde](http://www.ucdenver.edu/education/lde). The faculty of linguistically diverse education (LDE) believe that effective teaching requires an awareness of and the ability to respond to individual differences. LDE faculty also emphasize the importance of teachers as scholars and reflective practitioners. In particular, teachers must understand how linguistic and cultural diversity affect their teaching. Two themes run throughout all program offerings. The first concerns the importance of recognizing a variety of literacies—“home” literacies, school literacy, “mainstream” literacy, first and second language literacies—and to develop teaching practices that utilize an understanding of the complexity of literacy development across language contexts. The second theme involves the meaningful use of language and literacy to improve the quality of one’s life. As an approach to teaching, this theme emphasizes the creation of diverse, rich environments in which learners experience oral and written language as part of authentic tasks, and where concern for the cultural and linguistic heritage of the students is evident.

## Program Options

The LDE program offers options leading to the following:

- a master of arts in curriculum and instruction
- the Colorado Endorsement for Linguistically Diverse Education
- a Teaching English to Speakers of Other Languages (TESOL) certificate
- a Content Instruction for English Learners (CIEL) certificate
- a Culturally Responsive Urban Education (CRUE) certificate

The program is intended for:

- novice teachers who have completed their Colorado teaching credentials in UC Denver’s graduate teacher education licensure program and are enrolled in the MA in curriculum and instruction with an emphasis in LDE (see 27 semester-hour option)
- veteran elementary and secondary teachers returning to graduate studies for the master’s degree (36 semester hours)
- veteran elementary and secondary teachers returning to acquire Colorado endorsement credentials (24 semester hours)
- individuals interested in teaching English abroad (TESOL: 15 semester hours)

veteran elementary and secondary teachers returning to graduate studies for a certificate to aid them in helping their English language learners succeed (CIEL: 9 semester hours)

elementary and secondary teachers who desire preparation in better meeting the needs of culturally diverse learners (CRUE: 9 semester hours)

individuals interested in teaching adults (MA: 36 semester hours)

The MA is a field-based professional development program involving university faculty and practicing LDE instructors in public school and intensive English settings. Courses, laboratories and practica emphasize scholarly approaches to complex problems of practice and feature interactive, collaborative and practical approaches to working with English language learners.

We advocate a sociocultural approach to issues of language and learning, acknowledging the legitimacy of linguistic and cultural differences and recognizing that academic settings represent important socializing forces in students' lives. Because of this, we emphasize the "whole learner" in our teaching and in teacher education and teacher development, understanding that individuals do not merely add a language to their repertoire of communication but make fundamental identity adjustments as they progress in their studies. For this reason, all our course work, laboratories and practica experiences are field-based, putting our program participants in contact with veteran teachers and English language learners. We draw heavily on recent scholarship in collaborative approaches to school-university partnerships and systemic school change in developing classroom methods and materials, curricula and teacher development experiences.

The MA program also provides a foundation in teaching English in a variety of contexts in the United States and abroad. Teachers who work in LDE programs or in other content areas (such as art, language arts, math, music, science, social studies or technology), but who wish to integrate LDE principles and strategies into their instruction for their English language learners, will find the MA program relevant to their interests and goals.

Course work includes language teaching methodology, language acquisition, linguistic analysis of English, multicultural foundations, assessment, literacy and other areas. This program has been developed as an advanced course of study for practicing teachers or individuals with some teaching experience.

Applicants who are new to teaching, and who wish to teach in U.S. K–12 public school settings, should inquire about the teacher education licensure program. Applicants who are new to teaching, but who do not need a teaching license (certification) because they do not wish to teach in U.S. public schools, may consider the TESOL certificate to gain initial teaching experiences before applying for the MA.

## **Program Requirements and Courses**

To complete the LDE program and earn a master's degree and/or endorsement, or to earn a TESOL certificate, students must complete the appropriate course work as outlined in the table

below.

<b>Requirements for LDE Program (Degree/Endorsement or TESOL Certificate)</b>					
<b>Course</b>	<b>MA without CDE Endorsement in LDE</b>	<b>MA and CDE Endorsement in LDE</b>	<b>CDE Endorsement in LDE Only</b>	<b>MA and CDE Endorsement in LDE (when added to UC Denver's graduate teacher education licensure program)</b>	<b>TESOL Certificate</b>
LLC 5910 - Foundations of Language, Literacy and Culture.	Required	Required	Required	Required	
<i>One course from culture options:</i> LLC 5140 - Multicultural Education. LLC 5150 - Culture of the Classroom. LLC 5160 - Historical and Legal Foundations of Bilingual Education.	Select One	Select One	Select One	Select One	
LLC 5070 - Linguistic Analysis of English: Implications for Teaching.	Required	Required	Required	Required	Required
LLC 5030 - Language/Literacy Acquisition Part I.	Required	Required	Required	Required	Required
LLC 5820 - Techniques in	Required	Required	Required	Required	Required

Teaching English as a Second Language.					
LLC 5050 - Linguistic and Cultural Issues in Linking Assessment and Instruction.	Required	Required	Required	Required	Required
<i>One course from field-based teaching options:</i> LLC 5020 - Workshop in Literacy and Language Teaching. LLC 5825 - Methods and Materials of Language Teaching. LLC 5826 - Language Teaching Lab. LLC 5730 - Language and Literacy Across the Curriculum. LLC 5770 - Effective Literacy Instruction for Second Language Learners.	5826 preferred	Elem: 5825 preferred  Sec: 5826 preferred	Elem: 5825 preferred  Sec: 5826 preferred	Elem: 5825 preferred  Sec: 5826 preferred	5826
LLC 5035 - Language and Literacy: Acquisition, Processes, and Cognition, Part II.	Required	Required			
LLC 6912 - Seminar and Practicum in Literacy and Language, ESL and Bilingual Education.	Required	Required	Required	Required	
<i>One course from research and evaluation methodology:</i>	Select One	Select One		Select One	

REM 5050 - Assessment for Teachers. REM 5080 - Research for Teachers.					
<i>One course from educational psychology:</i> EPSY 5110 - Human Learning. EPSY 5220 - Adult Learning and Education.	Select One	Select One			
Graduate-level University of Colorado elective	Select One	Select One			
Cumulative online portfolio	Required	Required	Required	Required	
LDE PLACE Exam		Required	Required	Required	
Total Semester Hours	36	36	24	27	15

## CRUE or CIEL Certificate Requirements

Those considering the CRUE certificate will find course requirements at [www.cruecenter.org/certificate.php](http://www.cruecenter.org/certificate.php). Students interested in the CIEL certificate must complete the following:

LLC 5030 – Language and Literacy Acquisition I. Semester Hours: 3

-OR-

LLC 5070 – Linguistic Analysis of English. Semester Hours: 3

LLC 5050 – Linguistic and Cultural Issues in Linking Assessment and Instruction. Semester Hours: 3

-OR-

LLC 5820 – Techniques in Teaching ESL. Semester Hours: 3

-OR-

LLC 5825 – Methods and Materials of Language Teaching. Semester Hours: 3

-OR-

LLC 5826 – Language Teaching Laboratory. Semester Hours: 3

LLC 6912 - Seminar and Practicum in Literacy and Language, ESL and Bilingual Education  
Semester Hours: 3

**Total: 9 Hours**

## **Cumulative Portfolio of Performance Based Assessments (PBAS)**

The portfolio is required for the CDE endorsement, counts as the comprehensive exam for the master's degree and permits you to document your development over the course of your program. Portfolios are reviewed by LDE faculty members. At least two faculty members must agree that the portfolio is acceptable in order to pass. The portfolio process is reviewed in every class as each of the PBAs is completed in the classes, helping students to update their portfolios throughout the program. For more portfolio guidelines, visit the Web site at [www.ucdenver.edu/education/lde](http://www.ucdenver.edu/education/lde).

## **PLACE Exam for Linguistically Diverse Education Endorsement**

To add the endorsement to their teaching license, students must pass the PLACE (Program for Licensing Assessments for Colorado Educators) exam for linguistically diverse education, secure and submit the appropriate paperwork from the Colorado Department of Education, and pay fees required for the PLACE and for the endorsement paperwork. Information about PLACE is online at [www.place.nesinc.com](http://www.place.nesinc.com).

## **Course Scheduling**

During the fall and spring semesters, most university courses are offered in the late afternoon and evening and meet for three hours once a week over a 16-week semester. Some alternative course schedules are available, such as meeting on five Friday-evening/all-day Saturday combinations. In the summer semester, three-to eight-week sessions are offered, and courses may be in the morning, afternoon or evening. A current schedule of courses is available online at <http://courses.cudenver.edu>.

## **Planning**

For practicing full-time teachers, we recommend taking one course each fall and spring semester and up to two courses each summer. Students may simultaneously complete requirements for the MA and the endorsement for linguistically diverse education. Support for

course planning is available in LDE advising sessions—usually held once in fall and once in spring. These sessions help students build their programs around course sequences and availability (some courses are offered only once per year).

## Active Status in the Graduate School

Students must complete their programs within seven years, maintaining a GPA of 3.0. Students typically take four courses each calendar year. Failure to enroll over three contiguous semesters will result in a requirement to resubmit part I of the application for admission and a letter of intent.

# Teaching of English to Speakers of Other Languages (CTESOL)

## Program Description

To meet the increasing needs of individuals seeking advanced training in teaching English as a second language, the English department at UC Denver now offers a graduate certificate in the teaching of English to speakers of other languages (CTESOL).

The certificate program is designed to build the necessary skills to teach English as a second language through focused preparation. It is primarily aimed at native speakers of English who want to teach overseas, but may serve the needs of international students wanting to teach English in their home country or other countries.

Upon successful completion of the program, CTESOL participants will be able to:

- Discuss the theoretical basis of second language instruction
- Demonstrate a variety of effective ESL teaching techniques
- Explain, in pedagogically relevant ways, the linguistic structures of the English language

## Curriculum

The curriculum consists of 12 semester hours (9 semester hours of required courses, and three semester hours of electives). The required courses must be taken at UC Denver. A GPA of 3.0 or better is required for all graduate courses.

## Required Courses

ENGL 5171 - Language Theory. **Semester Hours: 3**

ENGL 5601 - Principles and Practices of Second Language Acquisition. **Semester Hours: 3**

## **Elective Courses**

ENGL 5093 - Rhetoric and the Teaching of Writing. **Semester Hours: 3**

or an alternative elective approved by the program advisor

**Total: 12 Hours**

## **Additional Information**

### **LENGTH OF TIME**

The course of study will typically last one academic year, including the summer session.

### **WHEN YOU MAY BEGIN**

You may begin in any semester. There is no fixed deadline for application for admission.

### **PREREQUISITES**

All applicants must have a bachelor's degree or the equivalent to be accepted to the program. Graduate students at UC Denver will also be permitted to apply for the certificate while they are concurrently completing another graduate degree. Permission may not be granted to graduate students in applied linguistics.

Non-native speakers of English are required to submit an official TOEFL (Test of English as a Foreign Language) report showing a score of at least 580. Those who score below 580 but above 525 on the TOEFL may be admitted conditionally to the program. Under these conditions, students will have their English language skills assessed by the faculty of the program immediately after they arrive on campus to determine whether further courses are needed to develop English language proficiency. After assessment, the students may be assigned to full-time language study in an intensive English program, permitted to take graduate-level classes on a conditional basis along with further designated language study or permitted to begin graduate study without further restrictions.

### **CONTACT INFORMATION**

Hongguang (Ian) Ying, Associate Professor  
Office: 1050 Ninth Street Park, Room 100  
Phone: 303-556-6728  
Email: [Hongguang.Ying@ucdenver.edu](mailto:Hongguang.Ying@ucdenver.edu)

# **Technical and Professional Communication Graduate Certificate**

The graduate certificate in technical and professional communication is designed for working adults who are employed or seeking employment in the field of technical communication, one of the fastest-growing sectors in today's global, high-tech economy. Students pursuing the certificate receive state-of-the-art training in the core skills demanded by the profession including technical writing, technical editing and graphic design. The certificate also allows students to choose courses from specialized areas within technical communication, such as multimedia authoring, health risk communication and usability testing.

The graduate certificate in technical and professional communication is designed for working professionals who already have earned bachelor's degrees but who would like to enhance or upgrade their skills in the area of technical communication. These individuals complete the certificate as nondegree students; those who decide to enroll in the MA program in communication following completion of the certificate may transfer all 9 hours of credits earned for the certificate to the master's degree. For students already enrolled in a master's program in communication, the certificate can be completed as part of or in addition to the course work required for the master's degree.

## **Certificate Requirements**

The graduate certificate in technical and professional communication requires 9 semester hours (three courses), with 6 hours of required courses and 3 hours of electives.

## **Required Courses**

CMMU 5405 - Technical Communication: Writing. **Semester Hours: 3**

CMMU 5505 - Technical Communication: Editing. **Semester Hours: 3**

CMMU 5830 - Visual Principles in Technical Communication. **Semester Hours: 3**

## **Elective Courses**

Any course in the area of technical communication at the 5000 level or above.

**Total: 9 Hours**

**Reserve Officers' Training Corps (ROTC)**

**Aerospace Studies - Air Force ROTC**

**Contact:** Lynda Smith

**Office:** CU-Boulder Folsom Stadium, Room 218

**Telephone:** 303-492-8351

**Fax:** 303-492-8353

**Web site:** [www.colorado.edu/AFROTC/](http://www.colorado.edu/AFROTC/)

**E-mail:** Det105@colorado.edu

### **Mailing Address**

AFROTC Det 105

University of Colorado

371 UCB

Boulder, CO 80309-0371

*The Reserve Officers' Training Corps (Air Force, Army and Navy) programs offer students the opportunity to receive a commission as an officer in the United States Air Force, United States Army, United States Navy and United States Marine Corps. This program is in conjunction with a student's major course of study and is similar to an academic minor. Both the Army ROTC and the Air Force ROTC programs offer two-year and four-year programs with options for undergraduate and graduate students, active duty and reserve. The Naval ROTC program offers the same with the exception that there is no support available for graduate students. All offer competitive scholarships and a varying degree of course credit. For more information, contact the ROTC offices on the Boulder or Downtown Campus.*

At A Glance: Air Force Aerospace Studies (Air Force ROTC)

## **Aerospace Studies**

U.S. Air Force ROTC offers several programs leading to a commission in the U.S. Air Force upon receipt of at least a baccalaureate degree.

## **Standard Four-Year Program**

This standard program is designed for incoming freshmen, or any student with four years remaining until degree completion. It consists of three parts: the general military course for lower-division students (normally freshmen and sophomores); the professional officer course for upper-division students (normally juniors and seniors); and leadership laboratory (attended by all cadets). Completion of a four-week summer training course is required prior to commissioning.

## **Modified Two-Year Program**

All undergraduate and graduate students are eligible for these programs. They are offered to full-time, regularly enrolled degree students and require at least two years of full-time college (undergraduate or graduate level, or a combination). Those selected for this program must complete a six-week field training program during the summer months as a prerequisite for entry into the professional officer course the following fall semester.

## **Leadership Laboratory**

All AFROTC cadets must attend leadership laboratory (two hours per week). The laboratory involves a study of Air Force customs and courtesies, drill and ceremonies, career opportunities and the life and work of an Air Force junior officer.

## **Other AFROTC Programs**

Other programs are frequently available based on current Air Force needs. Any AFROTC staff member in Boulder (303-492-8351) can discuss best alternatives. Interested students should make initial contact as early as possible, as selection is on a competitive basis. There is no obligation until a formal contract is entered.

## **Air Force College Scholarship Program**

A scholarship board is held at the end of each semester for students who have at least one semester of full-time college credit and a 2.5 GPA. Students selected for this program are placed on scholarships that pay tuition, book allowance, nonrefundable educational fees, and subsistence of \$300–\$500 per month, tax-free. These scholarships are available in all academic disciplines and are two to three years in length. All cadets enrolled in the professional officer course receive \$450–\$500 per month subsistence during the regular academic year.

## **Flight Opportunities**

Prior to entering the fourth year of the AFROTC program, qualified AFROTC students can compete for pilot and navigator allocations. Cadets receiving a pilot or navigator allocation will begin flight training after completion of their degree and commissioning as a second lieutenant. All cadets are eligible to fly with the Civil Air Patrol while enrolled in AFROTC.

## **USAF Nursing Programs**

Qualified nursing students can compete for nursing scholarships. This scholarship can lead to a rewarding career as an Air Force officer, serving as a doctor or nurse. The prehealth scholarship pays for an undergraduate degree and medical school.

## **AFROTC Course Credit**

AFROTC credit for graduation varies with each college. Students should contact the appropriate college for determination of credit.

## **Registration**

The AFROTC program is offered through the University of Colorado-Boulder. Students at the UC Denver Downtown Campus may register for AFROTC classes through the concurrent registration process. Contact your dean's office for the appropriate forms. AFROTC classes begin with the AIRR prefix.

# Military Science - Army ROTC

## Contact

### UC Denver Office

CPT Byron Elliott  
Auraria Campus  
S. Classroom Bldg 213 A/B  
**Telephone:** 303-352-7079  
**Fax:** 303-556-2159

### CU-Boulder Office

Nancy McMillin  
Folsom Stadium, Room 215  
**Telephone:** 303-492-6495

**Web site:** [www. Colorado.edu/AROTC/](http://www.Colorado.edu/AROTC/)

**E-mail:** [arotc@colorado.edu](mailto:arotc@colorado.edu)

### Mailing Address

AROTC  
University of Colorado  
370 UCB  
Boulder, CO 80309-0370

*The Reserve Officers' Training Corps (Air Force, Army and Navy) programs offer students the opportunity to receive a commission as an officer in the United States Air Force, United States Army, United States Navy and United States Marine Corps. This program is in conjunction with a students' major course of study and is similar to an academic minor. Both the Army ROTC and the Air Force ROTC programs offer two-year and four-year programs with options for undergraduate and graduate students, active duty and reserve. The Naval ROTC program offers the same with the exception that there is no support available for graduate students. All offer competitive scholarships and a varying degree of course credit. For more information, contact the ROTC offices on the Boulder or Downtown Campus.*

At A Glance: Military Science (Army ROTC)

## Military Science

Army ROTC is an elective program that can lead to a commission as an officer in the active Army, the Army Reserve or the Army National Guard. All Army ROTC classes are offered at UC Denver for freshmen, sophomores and juniors, at the University of Colorado at Boulder (UCB) and at Colorado School of Mines (CSM). Students interested in Army ROTC classes should contact the Department of Military Science at UC Denver. The Department of Military Science offers two programs for students.

## **Standard Four-Year Program**

The four-year program consists of two phases: the basic course (freshman and sophomore years) and the advanced course (junior and senior years).

### **Basic**

The basic course offers a 2- or 3-semester-hour class each semester covering Army history and organization as well as military leadership and management. Laboratory sessions provide the opportunity to apply leadership skills while learning basic military skills. Enrollment in the basic course incurs no military obligation except for Army scholarship recipients.

### **Advanced**

The advanced course covers leadership, tactics and unit operations, training techniques, military law and professional ethics, and includes a leadership practicum each semester. A 35-day summer advanced camp at Fort Lewis, Washington, provides challenging leadership training and is a prerequisite for commissioning. The advanced course students must have completed the basic course and obtain permission from the professor of military science.

## **Two-Year Program**

The two-year program for academic juniors and graduate students consists of the advanced course, preceded by a four-week summer ROTC basic course at Fort Knox, Kentucky. Veterans or students who have participated in three years of Junior ROTC or Civil Air Patrol may be eligible to enroll in the advanced course without attendance at basic camp or completion of the basic course. Inquiries on advanced placement should be directed to the Department of Military Science. The advanced course students must obtain permission from the professor of military science.

## **Scholarship Programs**

Four-year college scholarships are available to high school seniors, who should apply before December 1 of their senior year. Competition for two- and three-year scholarships is open to all University of Colorado students whether or not they are currently enrolled in ROTC. Scholarship students receive full tuition and laboratory fees, a \$1,200 per-year book allowance and an allowance of \$350-\$500 per month during the academic year. Students interested in the scholarship program should contact the enrollment officer no later than the beginning of the spring semester to apply for the following academic year. Contact the enrollment and scholarship officer at 303-492-3549 or [armyrotc@colorado.edu](mailto:armyrotc@colorado.edu).

## Activities and Leadership Laboratories

Students may participate in activities with the Buffalo Battalion's Charlie Company located on the Auraria Campus, to include color guard, intramural sports, running club and ranger challenge. Weekly or Saturday leadership labs provide cadets with practical leadership experience and performance-oriented, hands-on instruction outside the classroom. Leadership labs are compulsory for enrolled cadets. PT is conducted three times a week with the purpose of developing muscular strength, endurance and cardio-respiratory endurance.

## Army Nursing Program

Qualified nursing students can compete for nursing scholarships. This scholarship can lead to a rewarding career as an Army Nurse Corps officer. Contact the Army ROTC enrollment officer at 303-492-3549 for information and benefits.

## Registration

Students who wish to register for Army ROTC classes sign up for them through the normal course registration process. AROTC classes begin with the MILR prefix. For more information about Army ROTC, contact the Department of Military Science office, which is conveniently located in the CCD Administration Building at South Classroom Building, Room 213 A/B, Auraria Campus, 303-352-7079.

## Courses

MILR 1011 - Adventures in Leadership. **Semester Hours:** 2

MILR 1021 - Adventures in Leadership II. **Semester Hours:** 2

MILR 2031 - Leadership and Management I. **Semester Hours:** 3

MILR 2041 - Leadership and Management II. **Semester Hours:** 3

MILR 3062 - Leadership and Development II. **Semester Hours:** 3

## Naval Studies – Naval ROTC (U.S. Navy and Marine Corps)

**Contact:** LT Ricardo Leyva

**Office:** CU-Boulder Folsom Stadium, Room 233

**Telephone:** 303-492-2576

**Fax:** 303-492-0543

**Web site:** [www.colorado.edu/NROTC](http://www.colorado.edu/NROTC)

**E-mail:** Ricardo.leyva@colorado.edu

**Mailing Address:**

NROTC Recruiting Officer  
University of Colorado  
374 UCB  
Boulder, CO 80309-0374

*The Reserve Officers' Training Corps (Air Force, Army, and Navy) programs..... as an officer in the United States Air Force, United States Army, United States Navy and United States Marine Corps. Both the Army ROTC and the Air Force ROTC programs offer two-year and four-year programs with options for undergraduate and graduate students, active duty, and reserve. The Naval ROTC program offers the same, with the exception that there is no support available for graduate students. All offer competitive scholarships and a varying degree of course credit. For more information, contact the ROTC offices on the Boulder or Downtown campus.*

At A Glance: Naval Studies (Naval ROTC)

## **Naval Studies**

U.S. Naval ROTC provides several programs all leading to a commission in the U.S. Navy or U.S. Marine Corps upon receipt of a baccalaureate degree.

## **Standard Four-Year Program**

Incoming freshmen can receive full tuition funding (8 semesters) for their undergraduate education. This is the “normal” pathway by which students enter the program. Applications need to be completed online via the national NROTC Web site ([www.nrotc.navy.mil](http://www.nrotc.navy.mil)) well before the student matriculates, typically the January prior to fall admission. Students are highly encouraged to apply early. Scholarships are awarded based on high school GPA, ACT/SAT scores and extracurricular activity levels. Students interested in engineering or nursing degrees may be eligible for up to nine semesters of funding. If interested in nursing, please contact the recruiting officer for more detail.

## **Two-Year Program**

Students can apply for a four-semester scholarship in the spring semester of their sophomore year. Scholarships are awarded based on college GPA, personal interview and recommendation by the NROTC unit. Please contact the recruiting officer for more information.

## **College Program**

The main prerequisite for joining the NROTC unit is that the student is currently admitted to UC Denver. Anyone in this status has a very good chance of being allowed to participate with the NROTC unit in a nonscholarship (a.k.a. college program) status, and to eventually commission

as an officer in the U.S. Navy or Marine Corps. After participating in the NROTC unit in a nonscholarship status for at least one semester, the NROTC unit may recommend that students be considered for a full-tuition scholarship. A scholarship board is held at the end of each semester for these students. Chances for being awarded a full-tuition scholarship for as many as seven semesters are very good if the student has a cumulative college GPA of 3.0 or higher. High school GPA and ACT/SAT scores are not considered in the scholarship selection process. This is a great opportunity for students who either missed the deadline for applying to NROTC, who are already in college or who perhaps didn't perform well enough in high school to earn a scholarship through the standard four-year program.

## **NROTC Course Credit**

NROTC credit for graduation varies with each college. Students should contact the appropriate college for determination of credit.

## **Registration**

The NROTC program is offered through the University of Colorado-Boulder. Students at the UC Denver Downtown Campus may register for NROTC classes through the concurrent registration process. Contact your dean's office for the appropriate forms. NROTC classes begin with the NAVR prefix.

## **Requirements**

# **SEHD Degree Programs and Associated State Licenses**

## **School of Education and Human Development Degree Programs and Associated State Licenses**

<b>Programs</b>	<b>Approved Degrees</b>	<b>Licenses and Endorsements</b>
<b>ALPS: Administrative Leadership and Policy Studies</b>	<b>Master of Arts:</b> Administrative Leadership and Policy Studies <b>Educational Specialist (EdS):</b>	Principal License Administrator License

	Administrative Leadership and Policy Studies	
<b>C&amp;P: Curriculum and Pedagogy</b>	<b>Master of Arts:</b> Curriculum and Instruction	Endorsements/emphases: • Elementary Education • Secondary Math, Science or Social Studies
<b>CPCE: Counseling Psychology and Counselor Education</b>	<b>Master of Arts:</b> Counseling Psychology and Counselor Education	<b>Public School Counselor License:</b> 0–21 <b>Encouraged to apply for licensure from the State of Colorado:</b> Couples and Family Therapy Clinical Mental Health Counseling – Interdisciplinary Clinical Mental Health Counseling – Multicultural
<b>Doctoral Studies in Education</b>	<b>Doctor of Education (EdD)*</b> in Leadership for Educational Equity <b>Doctor of Philosophy (PhD)*</b> in Educational Studies and Research <i>*At time of publication these programs are under review for approval at the university system level</i>	
<b>Graduate and Undergraduate Teacher Licensure</b>	<b>Master of Arts:</b> Curriculum and Instruction Educational Psychology Special Education  <b>College of Liberal Arts Degrees:</b> <b>Bachelor of Arts</b> <b>Bachelor of Science</b>	<b>Graduate Teacher Licensure:</b> Elementary Education Secondary Education: Math, Science, Social Studies, English, Foreign Language Special Education: Generalist–K–12  <b>Undergraduate Teacher Licensure:</b> Elementary Education Secondary Education: Math, English, Social Studies, Foreign Language

<b>ECE: Early Childhood Education</b>	<b>Master of Arts:</b> Early Childhood Education	Early Childhood Special Education Specialist Birth - 8
<b>EPSY: Educational Psychology</b>	<b>Master of Arts:</b> Educational Psychology	
<b>ILT: Information and Learning Technologies</b>	<b>Master of Arts:</b> Information and Learning Technologies	Endorsements/emphases: • K–12 ILT Specialist/Teacher Level • School Library
<b>LDE: Linguistically Diverse Education</b>	<b>Master of Arts:</b> Curriculum and Instruction	Endorsement/emphasis: • Linguistically Diverse Education
<b>L2CRT: Literacy, Language and Culturally Responsive Teaching</b>	<b>Master of Arts:</b> Curriculum and Instruction	Endorsements/emphases: • Reading Teacher: K–6, 7–12 • Secondary English Education
<b>SPED: Special Education</b>	<b>Master of Arts:</b> Special Education	Special Education Generalist K-12
<b>SPSY: School Psychology</b>	<b>Educational Specialist (EdS):</b> School Psychology	School Psychology Birth - 21

## Courses

**ACCT 2200 - Financial Accounting and Financial Statement Analysis.**

**ACCT 2220 - Managerial Accounting and Professional Issues.**

**ACCT 2550 - Introductory Accounting for Entrepreneurs and the Arts.**

**ACCT 3054 - Accounting Systems and Data Processing.**

**ACCT 3220 - Intermediate Financial Accounting I.**

**ACCT 3230 - Intermediate Financial Accounting II.**

**ACCT 3320 - Intermediate Cost Accounting.**

**ACCT 3939 - Internship/Cooperative Education.**

**ACCT 4030 - Financial Accounting.**

**ACCT 4070 - Management Accounting.**

**ACCT 4240 - Advanced Financial Accounting.**

**ACCT 4330 - Managerial Accounting Problems and Cases.**

**ACCT 4370 - International Accounting.**

**ACCT 4410 - Income Tax Accounting.**

**ACCT 4520 - Oil and Gas Accounting.**

**ACCT 4620 - Auditing.**

**ACCT 4780 - Accounting IS Processes and Control.**

**ACCT 4800 - Accounting for Government and Nonprofit Organizations.**

**ACCT 4840 - Independent Study.**

**ACCT 4915 - Accounting for the Public Interest.**

**ACCT 4950 - Special Topics.**

**ACCT 6015 - Accounting for the Public Interest.**

**ACCT 6020 - Auditing.**

**ACCT 6024 - Advanced Financial Accounting.**

**ACCT 6030 - Financial Accounting.**

**ACCT 6033 - Advanced Managerial Accounting.**

**ACCT 6070 - Management Accounting.**

**ACCT 6080 - Accounting for Government and Nonprofit Organizations.**

**ACCT 6140 - Tax Planning for Managers.**

**ACCT 6250 - Seminar: Financial Accounting.**

**ACCT 6260 - Seminar: Managerial Accounting.**

**ACCT 6280 - Professional Judgment and Decision Making in Accounting.**

**ACCT 6290 - Management Control Systems.**

**ACCT 6340 - Financial Statement Analysis.**

**ACCT 6350 - Current Issues in Professional Accounting.**

**ACCT 6360 - Fraud Examination.**

**ACCT 6370 - International Accounting.**

**ACCT 6380 - Forensic Accounting.**

**ACCT 6390 - International Taxation.**

**ACCT 6410 - Advanced Tax For Individuals.**

**ACCT 6420 - Advanced Tax for Businesses.**

**ACCT 6430 - International Taxation.**

**ACCT 6450 - Research Problems in Income Tax Accounting.**

**ACCT 6460 - Advance Topics in Taxation.**

**ACCT 6470 - Internal Auditing.**

**ACCT 6510 - Accounting IS Processes and Control.**

**ACCT 6520 - Issues in Oil and Gas Accounting.**

**ACCT 6620 - Advanced Auditing.**

**ACCT 6800 - Special Topics.**

**ACCT 6840 - Independent Study.**

**ACCT 6939 - Internship/Cooperative Education.**

**ACCT 6950 - Master's Thesis.**

**ANTH 1000 - Anthropology: Past and Present.**

**ANTH 1111 - Freshman Seminar.**

**ANTH 1302 - Introduction to Archaeology: SS3.**

**ANTH 1303 - Introduction to Biological Anthropology: SC1.**

**ANTH 2102 - Culture and the Human Experience: SS3.**

**ANTH 2700 thru 2790 - Current Topics in Anthropology.**

**ANTH 2840 - Independent Study.**

**ANTH 2939 - Internship/Cooperative Education.**

**ANTH 3000 - Globalization, Migration, Transnationalism.**

**ANTH 3006 - Development, Environment and Culture.**

**ANTH 3101 - Foundations of Cultural Anthropology.**

**ANTH 3121 - Language and Communication.**

**ANTH 3142 - Cultural Diversity in the Modern World.**

**ANTH 3200 - Human Migration: Nomads, Sojourners, and Settlers.**

**ANTH 3301 - World Prehistory.**

**ANTH 3310 - Colorado Archaeology.**

**ANTH 3330 - Topics in Archaeology.**

**ANTH 3410 - Anthropology of Work.**

**ANTH 3420 - Anthropology and Politics of the Global Tobacco Epidemic.**

**ANTH 3500 - Human Osteology.**

**ANTH 3512 - Human Evolution.**

**ANTH 3910 - Cross-Cultural Field Experience.**

**ANTH 3939 - Internship/Cooperative Education.**

**ANTH 4000 - Special Topics in Anthropology.**

**ANTH 4010 - Global Health Studies I: The Biocultural Basis of Health.**

**ANTH 4020 - Global Health Studies II: Comparative Health Systems.**

**ANTH 4030 - Ethnobiology.**

**ANTH 4040 - Anthropology of Food and Nutrition.**

**ANTH 4050 - Quantitative Methods in Anthropology.**

**ANTH 4060 - Evolutionary Medicine.**

**ANTH 4070 - Culture of Development and Globalization.**

**ANTH 4080 - Global Health Practice.**

**ANTH 4090 - Political Economy of Drug Culture.**

**ANTH 4101 - Applied Statistics Using SAS and SPSS I.**

**ANTH 4102 - Applied Statistics Using SAS and SPSS II.**

**ANTH 4130 - Comparative Religious Systems.**

**ANTH 4140 - Principles of Economic Anthropology.**

**ANTH 4150 - Human Biocultural Adaptability.**

**ANTH 4160 - Topics in Language, Society and Culture.**

**ANTH 4170 - Culture and the Environment.**

**ANTH 4180 - The Nature of Power.**

**ANTH 4190 - Ethnicity and Nationalism.**

**ANTH 4200 - Gender in Cross-Cultural Perspective.**

**ANTH 4210 - Archaeology of the American Southwest.**

**ANTH 4220 - Community in Global Context.**

**ANTH 4250 - Culture Change in the Modern World.**

**ANTH 4260 - Human Reproductive Ecology.**

**ANTH 4320 - Archaeology of Mexico and Central America.**

**ANTH 4330 - Lithic Analysis.**

**ANTH 4380 - Archaeology of Hunters-Gatherers.**

**ANTH 4390 - Laboratory Methods in Archaeology.**

**ANTH 4400 - Archaeology of Power and Inequality.**

**ANTH 4450 - Development and Conservation: Contemporary Issues.**

**ANTH 4460 - Development and Conservation: Theory and Practice.**

**ANTH 4500 - Advanced Issues in Human Evolution.**

**ANTH 4520 - Human Biological Variation.**

**ANTH 4540 - Forensic Anthropology.**

**ANTH 4550 - Primate Comparative Anatomy.**

**ANTH 4560 - Human Ecology.**

**ANTH 4570 - Landscape Archaeology.**

**ANTH 4580 - Neanderthals and the Origin of Modern Humans.**

**ANTH 4590 - Primate Behavior.**

**ANTH 4640 - Darwinian Approach to Human Behavior.**

**ANTH 4730 - Peoples and Cultures of Sub-Saharan Africa.**

**ANTH 4740 - Ethnography of Mexico and Central America.**

**ANTH 4810 - Integrating Anthropology.**

**ANTH 4840 - Independent Study.**

**ANTH 4910 - Field Experience in Archaeology.**

**ANTH 4995 - Travel Study.**

**ANTH 5000 - Special Topics in Anthropology.**

**ANTH 5014 - Global Health Studies I: The Biocultural Basis of Health.**

**ANTH 5024 - Global Health Studies II: Comparative Health Systems.**

**ANTH 5030 - Ethnobiology.**

**ANTH 5040 - Anthropology of Food and Nutrition.**

**ANTH 5053 - Quantitative Methods in Anthropology.**

**ANTH 5060 - Evolutionary Medicine.**

**ANTH 5070 - Culture of Development and Globalization.**

**ANTH 5080 - Global Health Practice.**

**ANTH 5090 - Political Economy of Drug Culture.**

**ANTH 5130 - Comparative Religious Systems.**

**ANTH 5140 - Principles of Economic Anthropology.**

**ANTH 5150 - Human Biocultural Adaptability.**

**ANTH 5160 - Topics in Language, Society and Culture.**

**ANTH 5170 - Culture and the Environment.**

**ANTH 5180 - The Nature of Power.**

**ANTH 5190 - Ethnicity and Nationalism.**

**ANTH 5200 - Gender in Cross-Cultural Perspective.**

**ANTH 5210 - Archaeology of the American Southwest.**

**ANTH 5220 - Community in Global Context.**

**ANTH 5260 - Human Reproductive Ecology.**

**ANTH 5320 - Archaeology of Mexico and Central America.**

**ANTH 5330 - Lithic Analysis.**

**ANTH 5380 - Archaeology of Hunters-Gatherers.**

**ANTH 5400 - Archaeology of Power and Inequality.**

**ANTH 5450 - Development and Conservation: Contemporary Issues.**

**ANTH 5460 - Development and Conservation: Theory and Practice.**

**ANTH 5500 - Advanced Issues in Human Evolution.**

**ANTH 5520 - Human Biological Variation.**

**ANTH 5530 - Anthropological Genetics.**

**ANTH 5540 - Forensic Anthropology.**

**ANTH 5550 - Primate Comparative Anatomy.**

**ANTH 5560 - Human Ecology.**

**ANTH 5570 - Landscape Archaeology.**

**ANTH 5580 - Neanderthals and the Origin of Modern Humans.**

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**ANTH 5810 - Integrating Anthropology.**

**ANTH 5840 - Independent Study.**

**ANTH 5910 - Field Experience in Archaeology.**

**ANTH 5939 - Internship/Cooperative Education.**

**ANTH 5995 - Travel Study.**

**ANTH 6000 - Seminar in Current Research Topics.**

**ANTH 6040 - Advanced Topics in Medical Anthropology.**

**ANTH 6041 - Human Genetics: Legal, Ethical and Social Issues.**

**ANTH 6063 - Qualitative Research Design and Methods.**

**ANTH 6103 - Current Theory in Ethnography.**

**ANTH 6133 - Anthropological Perspectives on Language.**

**ANTH 6307 - Contemporary Perspectives in Archaeology.**

**ANTH 6317 - Archaeological Research Design and Analysis.**

**ANTH 6503 - Biological Anthropology Core: The Fossil Record.**

**ANTH 6513 - Biological Anthropology Core: Modern Human Variation.**

**ANTH 6520 - Seminar: Selected Topics in Physical Anthropology.**

**ANTH 6840 - Independent Study.**

**ANTH 6950 - Master's Thesis.**

**ARCH 5000 - Math and Physics for Architects.**

**ARCH 5110 - Design Studio I.**

**ARCH 5111 - Introduction to Drawing.**

**ARCH 5120 - Design Studio II.**

**ARCH 5121 - Design Seminar II.**

**ARCH 5130 - Design Studio III.**

**ARCH 5131 - Design Seminar III.**

**ARCH 5140 - Design Studio IV.**

**ARCH 5141 - Design Seminar IV.**

**ARCH 5210 - Introduction to Architecture.**

**ARCH 5220 - History of Architecture I.**

**ARCH 5230 - History of Architecture II.**

**ARCH 5240 - Human Factors in Design.**

**ARCH 5310 - Introduction to Building Technology.**

**ARCH 5320 - Building Construction and Methods.**

**ARCH 5330 - Environmental Control Systems I.**

**ARCH 5340 - Environmental Control Systems II.**

**ARCH 5350 - Structures I.**

**ARCH 5360 - Structures II.**

**ARCH 5410 - Professional Practice.**

**ARCH 6150 - Comprehensive Design Studio.**

**ARCH 6151 - Comprehensive Design Seminar.**

**ARCH 6160 - Architectural Photography.**

**ARCH 6161 - Precedents in Architecture.**

**ARCH 6162 - Furniture Design.**

**ARCH 6170 - Advanced Design Studio.**

**ARCH 6171 - Advanced Design Seminar.**

**ARCH 6190 - Special Topics in Design Studies.**

**ARCH 6210 - History of American Architecture.**

**ARCH 6212 - History of Modern Architecture.**

**ARCH 6220 - History of Architectural Theory.**

**ARCH 6221 - Post-Structuralist Architecture.**

**ARCH 6290 - Special Topics in Cultural Studies.**

**ARCH 6370 - Introduction To Design Build.**

**ARCH 6371 - Maintaining Quality and Managing Risks: Design Build.**

**ARCH 6372 - Architecture in a Single Source Project Delivery.**

**ARCH 6373 - Construction in Design Build.**

**ARCH 6390 - Special Topics in Technology.**

**ARCH 6412 - Construction Documents.**

**ARCH 6490 - Special Topics in Professional Studies.**

**ARCH 6520 - Architecture in Other Cultures.**

**ARCH 6624 - The Built Environment in Other Cultures I: Research Design.**

**ARCH 6840 - Independent Study.**

**ARCH 6910 - Teaching Assistantship.**

**ARCH 6930 - Architecture Internship.**

**ARCH 6931 - Architecture Internship.**

**ARCH 6950 - Thesis Preparation.**

**ARCH 6951 - Architecture Thesis.**

**ARCH 7840 - Independent Study.**

**ARTS 1000 - Arts In Our Time.**

**ARTS 1111 - Freshman Seminar.**

**ARTS 1150 - Topics in Cross-Disciplinary Arts I.**

**ARTS 2150 - Topics in Cross-Disciplinary Arts II.**

**ARTS 3150 - Topics in Cross-Disciplinary Arts III.**

**ARTS 4150 - Topics in Cross-Disciplinary Arts IV.**

**ARTS 5150 - Topics In Cross-Disciplinary Arts.**

**BIOL 1111 - Freshman Seminar.**

**BIOL 1115 - Biology Content.**

**BIOL 1136 - Human Biology.**

**BIOL 1352 - Basics of Cancer Biology.**

**BIOL 1550 - Basic Biology: Ecology and the Diversity of Life: SC1.**

**BIOL 1560 - Basic Biology: From Cells to Organisms: SC1.**

**BIOL 2051 - General Biology I: SC1.**

**BIOL 2061 - General Biology II: SC1.**

**BIOL 2071 - General Biology Laboratory I: SC1.**

**BIOL 2081 - General Biology Laboratory II: SC1.**

**BIOL 2750 - Introduction to Molecular Research Techniques.**

**BIOL 2840 - Independent Study.**

**BIOL 2939 - Internship/Cooperative Education.**

**BIOL 3104 - Behavioral Genetics.**

**BIOL 3122 - Natural History of Colorado.**

**BIOL 3124 - Introduction to Molecular Biology.**

**BIOL 3134 - Advanced Topics.**

**BIOL 3225 - Human Physiology.**

**BIOL 3244 - Human Anatomy.**

**BIOL 3330 - Plant Diversity.**

**BIOL 3411 - Principles of Ecology.**

**BIOL 3412 - Fundamentals of Applied Ecology.**

**BIOL 3413 - Ecology Laboratory.**

**BIOL 3520 - Invertebrate Zoology.**

**BIOL 3521 - Vertebrate Biology.**

**BIOL 3611 - General Cell Biology.**

**BIOL 3612 - Cell Biology Laboratory.**

**BIOL 3621 - Introduction to Immunology.**

**BIOL 3654 - General Microbiology.**

**BIOL 3832 - General Genetics.**

**BIOL 3840 - Independent Study.**

**BIOL 3939 - Internship/Cooperative Education.**

**BIOL 4024 - Introduction to Biotechnology.**

**BIOL 4050 - Advanced Biology Topics.**

**BIOL 4051 - Advanced Topics In Microbiology.**

**BIOL 4052 - Advanced Ecology.**

**BIOL 4053 - Disease Ecology.**

**BIOL 4054 - Developmental Biology.**

**BIOL 4064 - Advanced Cell Biology.**

**BIOL 4074 - Human Reproductive Biology.**

**BIOL 4125 - Molecular Biology Lab.**

**BIOL 4126 - Molecular Genetics.**

**BIOL 4128 - Topics in Molecular Biology.**

**BIOL 4134 - Human Genetics.**

**BIOL 4144 - Medical Microbiology.**

**BIOL 4154 - Conservation Biology.**

**BIOL 4165 - Neurobiology.**

**BIOL 4250 - Mechanisms of Animal Behavior.**

**BIOL 4315 - Plant Systematics.**

**BIOL 4335 - Plant Science.**

**BIOL 4345 - Flora of Colorado.**

**BIOL 4415 - Microbial Ecology.**

**BIOL 4416 - Aquatic Ecology.**

**BIOL 4425 - Biogeography.**

**BIOL 4450 - Marine Biology.**

**BIOL 4455 - Comparative Environmental Physiology.**

**BIOL 4465 - Cardiovascular Physiology.**

**BIOL 4474 - Ecological Methods.**

**BIOL 4475 - Mechanisms of Human Pathology.**

**BIOL 4494 - Population and Evolutionary Genetics.**

**BIOL 4550 - Cell Signaling.**

**BIOL 4560 - Seminar: Nervous System Disorders.**

**BIOL 4621 - Immunology.**

**BIOL 4622 - Topics in Immunology.**

**BIOL 4634 - Biology of Cancer.**

**BIOL 4640 - Mammalogy.**

**BIOL 4674 - Endocrinology.**

**BIOL 4705 - Introduction to Research.**

**BIOL 4750 - Technology Transfer and Biotechnology.**

**BIOL 4764 - Introductory Biostatistics.**

**BIOL 4840 - Independent Study.**

**BIOL 4910 - Field Studies.**

**BIOL 4974 - Evolution.**

**BIOL 4990 - Undergraduate Research Seminar.**

**BIOL 5001 - RM-MSMSP: Cells, Human Systems and Heredity.**

**BIOL 5002 - RM-MSMSP: Ecology, Biodiversity and Adaptation.**

**BIOL 5003 - RM-MSMSP: The Biology of Life: Integrated Perspectives.**

**BIOL 5024 - Introduction to Biotechnology.**

**BIOL 5050 - Advanced Biology Topics.**

**BIOL 5051 - Advanced Topics In Microbiology.**

**BIOL 5052 - Advanced Ecology.**

**BIOL 5053 - Disease Ecology.**

**BIOL 5054 - Developmental Biology.**

**BIOL 5064 - Advanced Cell Biology.**

**BIOL 5074 - Human Reproductive Biology.**

**BIOL 5099 - Biology For Computer Scientists, Engineers and Mathematicians.**

**BIOL 5125 - Molecular Biology Lab.**

**BIOL 5126 - Molecular Genetics.**

**BIOL 5128 - Topics in Molecular Biology.**

**BIOL 5134 - Human Genetics.**

**BIOL 5144 - Medical Microbiology.**

**BIOL 5154 - Conservation Biology.**

**BIOL 5165 - Neurobiology.**

**BIOL 5250 - Mechanisms of Animal Behavior.**

**BIOL 5315 - Plant Systematics.**

**BIOL 5330 - Evolution and Diversification of Plants.**

**BIOL 5335 - Plant Science.**

**BIOL 5345 - Flora of Colorado.**

**BIOL 5415 - Microbial Ecology.**

**BIOL 5416 - Aquatic Ecology.**

**BIOL 5425 - Biogeography.**

**BIOL 5445 - Applied Environmental Biology.**

**BIOL 5450 - Marine Biology.**

**BIOL 5455 - Comparative Environmental Physiology.**

**BIOL 5465 - Cardiovascular Physiology.**

**BIOL 5474 - Ecological Methods.**

**BIOL 5475 - Mechanisms of Human Pathology.**

**BIOL 5494 - Population and Evolutionary Genetics.**

**BIOL 5550 - Cell Signaling.**

**BIOL 5560 - Seminar: Nervous System Disorders.**

**BIOL 5621 - Immunology.**

**BIOL 5622 - Topics in Immunology.**

**BIOL 5634 - Biology of Cancer.**

**BIOL 5640 - Mammalogy.**

**BIOL 5674 - Endocrinology.**

**BIOL 5705 - Introduction to Research.**

**BIOL 5750 - Technology Transfer and Biotechnology.**

**BIOL 5764 - Introductory Biostatistics.**

**BIOL 5840 - Independent Study.**

**BIOL 5910 - Field Studies.**

**BIOL 5939 - Internship/Cooperative Education.**

**BIOL 5974 - Evolution.**

**BIOL 6655 - Seminar.**

**BIOL 6950 - Master's Thesis.**

**BLAW 3000 - Legal and Ethical Environments of Business I.**

**BLAW 4120 - Legal Issues for Entrepreneurs.**

**BLAW 6500 - Legal Issues for CPAs.**

**BUSN 5939 - Cooperative Education.**

**BUSN 6520 - Managing Individuals and Teams.**

**BUSN 6521 - Managing Individuals and Teams (Health Section).**

**BUSN 6530 - Data Analysis for Managers.**

**BUSN 6540 - Legal and Ethical Environment of Business.**

**BUSN 6541 - Legal and Ethical Environment of Business (Health Section).**

**BUSN 6550 - Analyzing and Interpreting Accounting Information.**

**BUSN 6560 - Marketing Management.**

**BUSN 6610 - Information Systems Management and Strategy.**

**BUSN 6620 - Applied Economics for Managers.**

**BUSN 6621 - Applied Economics for Managers (health section).**

**BUSN 6630 - Management of Operations.**

**BUSN 6631 - Management of Operations (Health Section).**

**BUSN 6640 - Financial Management.**

**BUSN 6710 - Strategic Management.**

**BUSN 6711 - Strategic Management (health section).**

**BUSN 6800 - Topics In Business.**

**BUSN 6811 - IT and New Business Paradigms.**

**BUSN 6820 - Project Management.**

**BUSN 6822 - Services Operations.**

**BUSN 6824 - Business Forecasting.**

**BUSN 6826 - Supply Chain Management.**

**BUSN 6828 - Business Applications of Data Mining.**

**BUSN 6830 - Business and the Natural Environment.**

**BUSN 6832 - Quality and Process Improvement.**

**BUSN 6834 - Simulation Modeling.**

**BUSN 6836 - Decision Analysis.**

**BUSN 6840 - Independent Study.**

**BUSN 6850 - Accounting and Finance for Sustainability.**

**BUSN 6860 - Finance in the Sports Entertainment Industries.**

**C E 1800-183X - Special Topics.**

**C E 1840 - Independent Study.**

**C E 2121 - Analytical Mechanics I.**

**C E 2200 - Computing Methods in Civil Engineering.**

**C E 2212 - Plane Surveying.**

**C E 2800-283X - Special Topics.**

**C E 2840 - Independent Study.**

**C E 3111 - Analytical Mechanics II.**

**C E 3121 - Mechanics of Materials.**

**C E 3131 - Applied Mechanics.**

**C E 3141 - Introduction to Structural Materials.**

**C E 3154 - Water Quality Laboratory.**

**C E 3313 - Theoretical Fluid Mechanics.**

**C E 3323 - Applied Fluid Mechanics.**

**C E 3401 - Introduction to Environmental Engineering.**

**C E 3414 - Design of Water and Wastewater Systems.**

**C E 3505 - Structural Analysis.**

**C E 3602 - Transportation Engineering.**

**C E 3708 - Introduction to Geotechnical Engineering.**

**C E 3800-383X - Special Topics.**

**C E 3840 - Independent Study.**

**C E 4000 - Senior Seminar.**

**C E 4067 - Senior Design Project.**

**C E 4077 - Engineering Economy.**

**C E 4087 - Engineering Contracts.**

**C E 4115 - Introduction to Structural Dynamics.**

**C E 4427 - Storm Water System Design.**

**C E 4537 - Numerical Methods for Engineers.**

**C E 4565 - Timber Structure Design.**

**C E 4575 - Structural Steel Design.**

**C E 4585 - Reinforced Concrete Design.**

**C E 4602 - Highway Engineering.**

**C E 4718 - Intermediate Soils Engineering.**

**C E 4738 - Intermediate Foundation Engineering.**

**C E 4780 - Engineering Geology.**

**C E 4800-483X - Special Topics.**

**C E 4840 - Independent Study.**

**C E 5111 - Structural Dynamics.**

**C E 5121 - Intermediate Mechanics of Materials.**

**C E 5333 - Applied Hydrology.**

**C E 5334 - Groundwater Hydrology.**

**C E 5336 - Storm Water Modeling.**

**C E 5343 - Open Channel Hydraulics.**

**C E 5344 - Unsteady Open Channel Hydraulics.**

**C E 5345 - Computational Methods for Water Resources.**

**C E 5381 - Introduction to Geographic Information Systems.**

**C E 5382 - GIS Spatial Database Development.**

**C E 5383 - GIS Analyses -- Theory and Practice.**

**C E 5384 - GIS Management and Policies.**

**C E 5385 - GIS Relational Database Systems.**

**C E 5386 - GIS Laboratory.**

**C E 5387 - Advanced Remote Sensing.**

**C E 5393 - Water Resources Development and Management.**

**C E 5394 - Water Resources Systems.**

**C E 5401 - Introduction to Environmental Engineering.**

**C E 5402 - Environmental and Water Quality Modeling.**

**C E 5403 - Environmental Regulations and Management Systems.**

**C E 5404 - Chemical Processes in Environmental Engineering.**

**C E 5414 - Physical Processes in Environmental Engineering.**

**C E 5427 - Storm Water System Design.**

**C E 5434 - Biological Processes in Environmental Engineering.**

**C E 5444 - Design of Solid Residuals and Natural Treatment Systems.**

**C E 5456 - Engineering Practice.**

**C E 5457 - Administration of Public Works.**

**C E 5460 - Intro Sustainable Urban Infrastructure.**

**C E 5461 - Defining & measuring Sustainability.**

**C E 5480 - Hazardous Wastes and Site Remediation.**

**C E 5481 - Sustainable Urban Water Systems.**

**C E 5494 - Risk Assessment.**

**C E 5514 - Matrix Analysis of Structures.**

**C E 5515 - Introduction to Finite Element Analysis.**

**C E 5537 - Numerical Methods in Civil Engineering.**

**C E 5575 - Advanced Topics in Structural Steel Design.**

**C E 5585 - Advanced Topics in Reinforced Concrete.**

**C E 5602 - Advanced Highway Design.**

**C E 5611 - Traffic and Safety Data Analysis.**

**C E 5612 - Traffic Impact Assessment.**

**C E 5613 - Traffic Flow Theory and Fundamentals.**

**C E 5621 - Highway Capacity Analysis.**

**C E 5622 - Traffic Operations and Control.**

**C E 5631 - Transportation Planning Methods.**

**C E 5632 - Urban Transportation Modeling.**

**C E 5652 - Airport Planning and Design.**

**C E 5662 - Transportation System Safety.**

**C E 5682 - Pavement Design.**

**C E 5692 - Urban Traffic Workshop.**

**C E 5708 - Advanced Soils Engineering.**

**C E 5709 - Settlement Analysis.**

**C E 5718 - Engineering Properties of Soils.**

**C E 5719 - Design and Construction of Geosynthetic-Reinforced Soil Structures.**

**C E 5728 - Groundwater and Seepage.**

**C E 5738 - Foundation Engineering.**

**C E 5748 - Design of Earth Embankment Dams.**

**C E 5758 - Foundations on Expansive Soils.**

**C E 5768 - Theoretical and Applied Rock Mechanics.**

**C E 5778 - Applied and Experimental Rock Mechanics.**

**C E 5780 - Engineering Geology.**

**C E 5788 - Design and Construction of Municipal Solid Waste Disposal Facilities.**

**C E 5798 - Dynamics of Soils and Foundations.**

**C E 5800-583X - Special Topics.**

**C E 5840 - Independent Study.**

**C E 5950 - Master's Thesis.**

**C E 5960 - Master's Report.**

**C E 6110 - PhD Seminar.**

**C E 6111 - Dynamics of Structures.**

**C E 6131 - Theory of Elasticity.**

**C E 6165 - Buckling in Structures.**

**C E 6336 - Urban Flood Control System Design.**

**C E 6353 - Hydraulic Design.**

**C E 6515 - Advanced Theory of Structures.**

**C E 6738 - Finite Element Method in Geotechnical Engineering.**

**C E 6840 - Independent Study.**

**C E 7800-783X - Special Topics.**

**C E 7840 - Independent Study.**

**C E 7990 - Doctoral Dissertation.**

**C E 8990 - Doctoral Dissertation.**

**C J 1001 - Introduction to Criminal Justice.**

**C J 1111 - Law & Order: Anatomy of the CJS.**

**C J 2041 - Crime Theory and Causes.**

**C J 2110 - Drugs, Alcohol and Crime.**

**C J 2210 - Probation and Parole.**

**C J 2320 - Police-Community Relations.**

**C J 2510 - Juvenile Justice Administration.**

**C J 3100 - Criminal Justice Research Methods.**

**C J 3150 - Statistics for Criminal Justice.**

**C J 3160 - White-Collar Crime.**

**C J 3220 - Community-Based Corrections.**

**C J 3250 - Violence in Society.**

**C J 3252 - Violent Offenders.**

**C J 3310 - Police in Contemporary Society.**

**C J 3420 - Pleas, Trials and Sentences.**

**C J 3540 - Crime and Delinquency Prevention.**

**C J 4042 - Corrections.**

**C J 4043 - Law Enforcement.**

**C J 4044 - Courts and Judicial Process.**

**C J 4120 - Race, Class and Crime.**

**C J 4130 - Poverty and Crime.**

**C J 4140 - Domestic Violence and Crime.**

**C J 4170 - Victim Studies.**

**C J 4180 - Comparative Study of Criminal Justice Systems.**

**C J 4190 - Women and Crime.**

**C J 4230 - Corrections and Treatment.**

**C J 4310 - Leadership Roles in Criminal Justice.**

**C J 4410 - Criminal Law and Constitutional Procedures.**

**C J 4430 - Law and Society.**

**C J 4440 - Courts and Social Policy.**

**C J 4520 - Gangs and Criminal Organizations.**

**C J 4530 - Families and Intergenerational Crime.**

**C J 4600 - Special Topics in CJ.**

**C J 4840 - Independent Study.**

**C J 4939 - Internship/Cooperative Education.**

**C J 5000 - Law and Social Control.**

**C J 5100 - Administration of Criminal Justice.**

**C J 5120 - Nature and Causes of Crime.**

**C J 5200 - Wrongful Convictions.**

**C J 5210 - Prisoner Reentry.**

**C J 5220 - The American Jury System.**

**C J 5230 - Gun Rights and Gun Control.**

**C J 5240 - Gang Patterns and Policies.**

**C J 5250 - Criminal Offenders.**

**C J 5260 - Crime and Literature.**

**C J 5270 - Case Studies in CJ.**

**C J 5280 - Leadership in the Modern Criminal Justice System.**

**C J 5320 - Seminar: Police Administration.**

**C J 5321 - Research Methods in Criminal Justice.**

**C J 5325 - Qualitative Methods for Criminal Justice.**

**C J 5410 - Victimology.**

**C J 5420 - Violence in Society.**

**C J 5430 - Drugs, Alcohol and Crime.**

**C J 5510 - Seminar: Contemporary Issues in Law Enforcement.**

**C J 5520 - Seminar: Corrections.**

**C J 5530 - Seminar: Community Corrections.**

**C J 5540 - Seminar: Juvenile Justice Administration.**

**C J 5550 - Seminar: Criminal Justice Policy Analysis.**

**C J 5551 - Seminar: Judicial Administration.**

**C J 5552 - Seminar: Criminal Justice Ethics.**

**C J 5553 - Seminar: Women and Criminal Justice.**

**C J 5554 - Seminar: Criminal Justice Reform.**

**C J 5561 - Advanced Seminar in Criminal Justice.**

**C J 5571 - Advanced Seminar: The Social Organization of Crime.**

**C J 5572 - Advanced Seminar: Race, Crime and Justice.**

**C J 5573 - Advanced Seminar: Organized Crime.**

**C J 5574 - Advanced Seminar: White Collar Crime.**

**C J 5575 - Advanced Seminar: The Mentally Disordered Offender.**

**C J 5576 - Advanced Seminar: Social Science in the Criminal Justice System.**

**C J 5910 - Women and Violence: A Sociological Perspective.**

**C J 5920 - Psychology of Violence Against Women.**

**C J 5930 - Battered Women and the Legal System.**

**C J 5940 - Domestic Violence Social Change and Advocacy.**

**C J 6600 - Special Topics in Criminal Justice.**

**C J 6840 - Independent Study.**

**C J 6910 - Field Study in Criminal Justice.**

**C J 6950 - Master's Thesis.**

**C J 7000 - Law and Social Control.**

**C J 7100 - Administration of Criminal Justice.**

**C J 7120 - Nature and Causes of Crime.**

**C J 7200 - Wrongful Convictions.**

**C J 7210 - Prisoner Reentry.**

**C J 7220 - The American Jury System.**

**C J 7230 - Gun Rights and Gun Control.**

**C J 7240 - Gang Patterns and Policies.**

**C J 7250 - Criminal Offenders.**

**C J 7260 - Crime and Literature.**

**C J 7270 - Case Studies in CJ.**

**C J 7280 - Leadership in the Modern Criminal Justice System.**

**C J 7320 - Seminar: Police Administration.**

**C J 7321 - Research Methods in Criminal Justice.**

**C J 7325 - Qualitative Methods for Criminal Justice.**

**C J 7410 - Victimology.**

**C J 7420 - Violence in Society.**

**C J 7430 - Drugs, Alcohol and Crime.**

**C J 7510 - Seminar: Contemporary Issues in Law Enforcement.**

**C J 7520 - Seminar: Corrections.**

**C J 7530 - Seminar: Community Corrections.**

**C J 7540 - Seminar: Juvenile Justice Administration.**

**C J 7550 - Seminar: Criminal Justice Policy Analysis.**

**C J 7551 - Seminar: Judicial Administration.**

**C J 7552 - Seminar: Criminal Justice Ethics.**

**C J 7553 - Seminar: Women and Criminal Justice.**

**C J 7554 - Seminar: Criminal Justice Reform.**

**C J 7571 - Advanced Seminar: The Social Organization of Crime.**

**C J 7572 - Advanced Seminar: Race, Crime and Justice.**

**C J 7573 - Advanced Seminar: Organized Crime.**

**C J 7574 - Advanced Seminar: White Collar Crime.**

**C J 7575 - Advanced Seminar: The Mentally Disordered Offender.**

**C J 7576 - Advanced Seminar: Social Science in the Criminal Justice System.**

**C J 7600 - Special Topics in Criminal Justice.**

**C J 7910 - Women and Violence: A Sociological Perspective.**

**C J 7920 - Psychology of Violence Against Women.**

**C J 7930 - Battered Women and the Legal System.**

**C J 7940 - Domestic Violence Social Change and Advocacy.**

**C J 8840 - Independent Study.**

**C J 8990 - Doctoral Dissertation.**

**C SC 1320 - Introduction to Computing.**

**C SC 1410 - Fundamentals of Computing.**

**C SC 1510 - Logic Design.**

**C SC 1800-1839 - Special Topics.**

**C SC 2132 - Circuit Analysis I.**

**C SC 2142 - Circuit Analysis II.**

**C SC 2312 - Intermediate Programming.**

**C SC 2421 - Data Structures and Program Design.**

**C SC 2511 - Discrete Structures.**

**C SC 2525 - Assembly Language and Computer Organization.**

**C SC 2531 - Logic Laboratory.**

**C SC 2571 - Fundamentals of UNIX.**

**C SC 3320 - Advanced Programming.**

**C SC 3412 - Algorithms.**

**C SC 3415 - Principles of Programming Languages.**

**C SC 3453 - Operating System Concepts.**

**C SC 3511 - Hardware-Software Interface.**

**C SC 3560 - Probability and Computing.**

**C SC 3645 - Discrete Linear Systems.**

**C SC 3651 - Digital Hardware Design.**

**C SC 3840 - Independent Study: C SC.**

**C SC 4034 - Theoretical Foundations of Computer Science.**

**C SC 4202 - Introduction to Artificial Intelligence.**

**C SC 4287 - Database System Concepts.**

**C SC 4408 - Applied Graph Theory.**

**C SC 4411 - Computational Geometry.**

**C SC 4501 - JAVA.**

**C SC 4508 - Introduction to Software Engineering.**

**C SC 4535 - Probability and Statistics.**

**C SC 4555 - Compiler Design.**

**C SC 4565 - Introduction to Computer Graphics.**

**C SC 4591 - Computer Architecture.**

**C SC 4630 - Linguistic Geometry.**

**C SC 4640 - Universal Compiler: Theory and Construction.**

**C SC 4650 - Numerical Analysis I.**

**C SC 4660 - Numerical Analysis II.**

**C SC 4735 - Computers, Society and Ethics.**

**C SC 4738 - Senior Design I.**

**C SC 4739 - Senior Design II.**

**C SC 4740 - Computer Security.**

**C SC 4761 - Introduction To Computer Networks.**

**C SC 4771 - Introduction To Mobile Computing.**

**C SC 4788 - Bioinformatics.**

**C SC 4800-4839 - Special Topics.**

**C SC 4840 - Independent Study.**

**C SC 4939 - Cooperative Education.**

**C SC 5098 - Computer Science For Bioscientists.**

**C SC 5144 - Applied Combinatorics.**

**C SC 5217 - Information Theory.**

**C SC 5255 - Object Oriented Design.**

**C SC 5408 - Applied Graph Theory.**

**C SC 5409 - Graph Theory and Graph Algorithms.**

**C SC 5411 - Computational Geometry.**

**C SC 5446 - Theory of Automata.**

**C SC 5451 - Algorithms.**

**C SC 5542 - Neural Networks.**

**C SC 5551 - Parallel and Distributed Systems.**

**C SC 5552 - Advanced Topics in Parallel Processing.**

**C SC 5559 - Database Systems.**

**C SC 5565 - Introduction to Computer Graphics.**

**C SC 5573 - Operating Systems.**

**C SC 5574 - Advanced Topics in Operating Systems.**

**C SC 5582 - Artificial Intelligence.**

**C SC 5585 - Advanced Computer Graphics.**

**C SC 5593 - Advanced Computer Architectures.**

**C SC 5610 - Computational Biology.**

**C SC 5619 - Complex Intelligent Systems.**

**C SC 5630 - Linguistic Geometry.**

**C SC 5640 - Universal Compiler: Theory and Construction.**

**C SC 5654 - Algorithms for Communication Networks.**

**C SC 5660 - Numerical Analysis I.**

**C SC 5661 - Numerical Analysis II.**

**C SC 5667 - Introduction to Approximation Theory.**

**C SC 5682 - Expert Systems.**

**C SC 5690 - Knowledge Representation for Intelligent Systems.**

**C SC 5701 - High-Performance Communication Systems and Network Analysis.**

**C SC 5702 - Data Mining.**

**C SC 5704 - Introduction to Distributed Systems.**

**C SC 5728 - Software Engineering.**

**C SC 5765 - Computer Networks.**

**C SC 5771 - Introduction to Mobile Computing.**

**C SC 5780 - Theory Of Distributed Computing.**

**C SC 5799 - High Performance Network-based Computing.**

**C SC 5800-5839 - Special Topics.**

**C SC 5840 - Independent Study.**

**C SC 5941 - Directed Study: Programming Project.**

**C SC 6595 - Computational Methods in Nonlinear Programming.**

**C SC 6664 - Numerical Linear Algebra.**

**C SC 6840 - Independent Study.**

**C SC 6950 - Master's Thesis.**

**C SC 6960 - Master's Report.**

**C SC 7002 - Computer Security.**

**C SC 7200 - Advances In Management Information Systems.**

**C SC 7210 - Topics In Analytical Research In Management Information Systems.**

**C SC 7211 - Topics In Behavioral and Organizational Research In Management Information Systems.**

**C SC 7502 - Research Methods.**

**C SC 7551 - Parallel and Distributed Systems.**

**C SC 7552 - Advanced Topics in Parallel Processing.**

**C SC 7574 - Advanced Topics in Operating Systems.**

**C SC 7582 - Artificial Intelligence.**

**C SC 7654 - Algorithms for Communication Networks.**

**C SC 7711 - Bioinformatics I.**

**C SC 7712 - Bioinformatics II.**

**C SC 7765 - Computer Networks.**

**C SC 7800 thru 7839 - Special Topics.**

**C SC 8990 thru 8999 - Doctoral Dissertation.**

**CHEM 1000 - Foundations for General Chemistry.**

**CHEM 1111 - Freshman Seminar.**

**CHEM 1115 - Chemistry Content.**

**CHEM 1130 - Engineering General Chemistry.**

**CHEM 1474 - Core Chemistry: Chemistry For the Consumer: SC1.**

**CHEM 2031 - General Chemistry I: SC1.**

**CHEM 2038 - General Chemistry Laboratory I: SC1.**

**CHEM 2061 - General Chemistry II: SC1.**

**CHEM 2068 - General Chemistry Laboratory II: SC1.**

**CHEM 2300 - Nutritional Chemistry.**

**CHEM 2840 - Independent Study.**

**CHEM 2939 - Internship/Cooperative Education.**

**CHEM 3011 - Inorganic Chemistry.**

**CHEM 3018 - Inorganic Chemistry Laboratory.**

**CHEM 3111 - Analytical Chemistry.**

**CHEM 3118 - Analytical Chemistry Laboratory.**

**CHEM 3411 - Organic Chemistry I.**

**CHEM 3418 - Organic Chemistry Laboratory I.**

**CHEM 3421 - Organic Chemistry II.**

**CHEM 3428 - Organic Chemistry Laboratory II.**

**CHEM 3491 - Honors Organic Chemistry II.**

**CHEM 3498 - Honors Organic Chemistry Laboratory II.**

**CHEM 3810 - Biochemistry.**

**CHEM 3840 - Independent Study.**

**CHEM 3939 - Internship/Cooperative Education.**

**CHEM 4121 - Instrumental Analysis.**

**CHEM 4128 - Instrumental Analysis Laboratory.**

**CHEM 4511 - Physical Chemistry I.**

**CHEM 4518 - Physical Chemistry I Laboratory.**

**CHEM 4521 - Physical Chemistry II.**

**CHEM 4538 - Physical Chemistry II Laboratory.**

**CHEM 4700 - Environmental Chemistry.**

**CHEM 4810 - General Biochemistry I.**

**CHEM 4820 - General Biochemistry II.**

**CHEM 4828 - Biochemistry Lab.**

**CHEM 4835 - Biochemistry of Cancer.**

**CHEM 4840 - Independent Study.**

**CHEM 5010 - Advanced Inorganic Chemistry.**

**CHEM 5071 - RM-MSMSP: Atoms and Properties of Matter.**

**CHEM 5072 - RM-MSMSP: Interactions of Elements and Compounds.**

**CHEM 5110 - Advanced Analytical Chemistry.**

**CHEM 5130 - Surface Analytical Techniques.**

**CHEM 5250 - Chemometrics: Data Analysis.**

**CHEM 5310 - Advanced Organic Chemistry.**

**CHEM 5510 - Computational Chemistry.**

**CHEM 5520 - Molecular Structure and Spectra.**

**CHEM 5530 - Advanced Physical Chemistry.**

**CHEM 5550 - Applications of Group Theory in Chemistry.**

**CHEM 5600 - Topics in Chemistry.**

**CHEM 5700 - Environmental Chemistry.**

**CHEM 5710 - Air Pollution Chemistry.**

**CHEM 5720 - Atmospheric Sampling and Analysis.**

**CHEM 5810 - General Biochemistry I.**

**CHEM 5820 - General Biochemistry II.**

**CHEM 5835 - Biochemistry of Cancer.**

**CHEM 5840 - Independent Study.**

**CHEM 5950 - Master's Thesis.**

**CHEM 6000 - Chemistry Seminar.**

**CHEM 6001 - Master's Research Seminar.**

**CHEM 6002 - Chemistry Seminar I.**

**CHEM 6003 - Chemistry Seminar II.**

**CHEM 6840 - Independent Study.**

**CHEM 6950 - Master's Thesis.**

**CHEM 6960 - Master's Report.**

**CHIN 1010 - Beginning Chinese I.**

**CHIN 1020 - Beginning Chinese II.**

**CHIN 1071 - Mandarin Chinese for the Professions.**

**CHIN 1111 - Freshman Seminar.**

**CHIN 2110 - Second Year Chinese I.**

**CHIN 2120 - Second Year Chinese II.**

**CHIN 2840 - Independent Study.**

**CHIN 2939 - Internship/Cooperative Education.**

**CHIN 2970 - Contemporary Chinese Cinema.**

**CHIN 3300 - Special Topics on Chinese Film.**

**CHIN 3840 - Independent Study.**

**CHIN 3995 - Travel Study.**

**CLAS 1020 - Introduction to Career Planning.**

**CLAS 1100 - American Ways: Communication, Culture, and the Classroom.**

**CLAS 1111 - Freshman Seminar.**

**CLAS 2939 - Cooperative Education.**

**CLAS 3020 - Education, Mentoring, and Leadership.**

**CLAS 3100 - Perspectives on Teaching.**

**CLAS 3935 - Outward Bound.**

**CLAS 3939 - Cooperative Education.**

**CLAS 4840 - Independent Study.**

**CMMU 1011 - Fundamentals of Communication: SS3.**

**CMMU 1021 - Fundamentals of Mass Communication: SS3.**

**CMMU 1051 - Topics in Communication.**

**CMMU 1111 - Freshman Seminar.**

**CMMU 2020 - Communication and Citizenship.**

**CMMU 2041 - Interpersonal Communication.**

**CMMU 2050 - Business and Professional Speaking.**

**CMMU 2101 - Presentational Speaking.**

**CMMU 2800 - Technology for Workplace Communication.**

**CMMU 2939 - Cooperative Education.**

**CMMU 3120 - Technical Communication.**

**CMMU 3271 - Communication and Diversity.**

**CMMU 3620 - Television Production.**

**CMMU 3650 - Mass Communication and Society.**

**CMMU 3680 - Mass Communication Skills.**

**CMMU 3840 - Independent Study.**

**CMMU 3939 - Internship/Cooperative Education.**

**CMMU 4011 - Research Methods: Quantitative.**

**CMMU 4015 - Communication and Civility.**

**CMMU 4020 - Feminist Perspectives on Communication.**

**CMMU 4021 - Perspectives on Rhetoric.**

**CMMU 4022 - Critical Analysis of Communication.**

**CMMU 4031 - Perspectives on Communication.**

**CMMU 4041 - Theories and Methods in Interpersonal Communication.**

**CMMU 4045 - Female-Male Friendships.**

**CMMU 4111 - Theories of Leadership.**

**CMMU 4120 - Writing Technical Reports.**

**CMMU 4130 - User Interface Design and Analysis.**

**CMMU 4140 - Argumentation.**

**CMMU 4151 - Group Communication.**

**CMMU 4200 - Persuasion.**

**CMMU 4210 - Communication and Discourse Analysis.**

**CMMU 4212 - Software Documentation.**

**CMMU 4215 - Ethics in Communication.**

**CMMU 4220 - Human Information Processing.**

**CMMU 4221 - Research Methods: Qualitative.**

**CMMU 4222 - Professional Communication.**

**CMMU 4230 - Nonverbal Communication.**

**CMMU 4240 - Organizational Communication.**

**CMMU 4245 - Advanced Organizational Communication.**

**CMMU 4255 - Negotiations and Bargaining.**

**CMMU 4260 - Communication and Conflict.**

**CMMU 4262 - Mediation.**

**CMMU 4265 - Gender and Communication.**

**CMMU 4268 - Communication and Diversity in U.S. History.**

**CMMU 4270 - Intercultural Communication.**

**CMMU 4275 - Family Communication.**

**CMMU 4280 - Communication and Change.**

**CMMU 4282 - Environmental Communication.**

**CMMU 4285 - Communication Processes in Technology Transfer.**

**CMMU 4290 - Web Design.**

**CMMU 4300 - Multimedia Authoring.**

**CMMU 4310 - Advanced Multimedia Authoring.**

**CMMU 4320 - Content Management.**

**CMMU 4330 - Dynamic Web Design Workshop.**

**CMMU 4340 - Advanced Web Design.**

**CMMU 4410 - Science Writing.**

**CMMU 4500 - Health Communication.**

**CMMU 4510 - Usability Testing.**

**CMMU 4605 - Rhetorical Theory for Technical Communication.**

**CMMU 4620 - Health Risk Communication.**

**CMMU 4621 - Visual Communication.**

**CMMU 4635 - Principles of Public Relations.**

**CMMU 4640 - Advanced Public Relations.**

**CMMU 4665 - Principles of Advertising.**

**CMMU 4680 - Mass Communication Law and Policy.**

**CMMU 4681 - Communication Issues in Trial Court Practices and Processes.**

**CMMU 4682 - Political Communication.**

**CMMU 4683 - Media in the Courtroom.**

**CMMU 4688 - Senior Seminar: Transitioning from College to Career.**

**CMMU 4710 - Topics in Communication.**

**CMMU 4750 - Legal Reasoning and Writing.**

**CMMU 4755 - Universal Internet Usability.**

**CMMU 4760 - Computer-Mediated Communication.**

**CMMU 4805 - Graphics.**

**CMMU 4830 - Visual Principles in Technical Communication.**

**CMMU 4840 - Independent Study.**

**CMMU 4995 - Travel Study Topics.**

**CMMU 5011 - Research Methods: Quantitative.**

**CMMU 5015 - Communication and Civility.**

**CMMU 5020 - Feminist Perspectives on Communication.**

**CMMU 5021 - Perspectives on Rhetoric.**

**CMMU 5022 - Critical Analysis of Communication.**

**CMMU 5025 - Philosophy of Communication.**

**CMMU 5041 - Theories and Methods in Interpersonal Communication.**

**CMMU 5045 - Female-Male Friendships.**

**CMMU 5111 - Theories of Leadership.**

**CMMU 5120 - Writing Technical Reports.**

**CMMU 5130 - User Interface Design and Analysis.**

**CMMU 5140 - Argumentation.**

**CMMU 5151 - Group Communication.**

**CMMU 5210 - Communication and Discourse Analysis.**

**CMMU 5212 - Software Documentation.**

**CMMU 5215 - Ethics in Communication.**

**CMMU 5220 - Human Information Processing.**

**CMMU 5221 - Research Methods: Qualitative.**

**CMMU 5222 - Professional Communication.**

**CMMU 5230 - Nonverbal Communication.**

**CMMU 5240 - Organizational Communication.**

**CMMU 5245 - Advanced Organizational Communication.**

**CMMU 5250 - Difference Matters and Organizational Communication.**

**CMMU 5255 - Negotiations and Bargaining.**

**CMMU 5260 - Communication and Conflict.**

**CMMU 5262 - Mediation.**

**CMMU 5265 - Gender and Communication.**

**CMMU 5268 - Communication and Diversity in U.S. History.**

**CMMU 5270 - Intercultural Communication.**

**CMMU 5275 - Family Communication.**

**CMMU 5280 - Communication and Change.**

**CMMU 5282 - Environmental Communication.**

**CMMU 5285 - Communication Processes in Technology Transfer.**

**CMMU 5290 - Web Design.**

**CMMU 5300 - Multimedia Authoring.**

**CMMU 5310 - Advanced Multimedia Authoring.**

**CMMU 5320 - Content Management.**

**CMMU 5330 - Dynamic Web Design Workshop.**

**CMMU 5340 - Advanced Web Design.**

**CMMU 5405 - Technical Communication: Writing.**

**CMMU 5410 - Science Writing.**

**CMMU 5500 - Health Communication.**

**CMMU 5505 - Technical Communication: Editing.**

**CMMU 5510 - Usability Testing.**

**CMMU 5605 - Rhetorical Theory for Technical Communication.**

**CMMU 5620 - Health Risk Communication.**

**CMMU 5621 - Visual Communication.**

**CMMU 5635 - Principles of Public Relations.**

**CMMU 5640 - Advanced Public Relations.**

**CMMU 5665 - Principles of Advertising.**

**CMMU 5680 - Mass Communication Law and Policy.**

**CMMU 5681 - Communication Issues in Trial Court Practices and Processes.**

**CMMU 5682 - Political Communication.**

**CMMU 5710 - Topics in Communication.**

**CMMU 5750 - Legal Reasoning and Writing.**

**CMMU 5755 - Universal Internet Usability.**

**CMMU 5760 - Computer-Mediated Communication.**

**CMMU 5805 - Graphics.**

**CMMU 5830 - Visual Principles in Technical Communication.**

**CMMU 5840 - Independent Study.**

**CMMU 5939 - Internship/Cooperative Education.**

**CMMU 5995 - Travel Study Topics.**

**CMMU 6013 - Introduction to Graduate Work in Communication.**

**CMMU 6205 - Empirical Research Methods for Communication and Technical Communication.**

**CMMU 6300 - Educational Perspectives on Communication.**

**CMMU 6410 - Usability Test Design Project.**

**CMMU 6950 - Master's Thesis.**

**CMMU 6960 - Master's Project.**

**CNST 1000 - China and the Chinese: AH1.**

**CNST 4000 - Senior Seminar in Chinese Studies.**

**CPCE 5010 - Counseling Theories.**

**CPCE 5100 - Techniques of Counseling.**

**CPCE 5110 - Group Counseling.**

**CPCE 5150 - Family Therapy Theory.**

**CPCE 5160 - Techniques in Family Therapy.**

**CPCE 5170 - Issues In Family Studies.**

**CPCE 5180 - Counseling Couples.**

**CPCE 5280 - Addictions Counseling.**

**CPCE 5330 - Counseling Issues and Ethics.**

**CPCE 5400 - Career Development.**

**CPCE 5420 - Organizational Development.**

**CPCE 5810 - Multicultural Counseling Issues for Individuals and Families.**

**CPCE 5815 - Intro to School Counseling.**

**CPCE 5820 - Strategies of Agency Counseling.**

**CPCE 5830-5839 - Special Topics.**

**CPCE 5840 - Independent Study.**

**CPCE 5910 - Practicum in CPCE.**

**CPCE 5915 - Fieldwork in School Counseling.**

**CPCE 5930 - Internship in Counseling Psychology and Counselor Education.**

**CPCE 6000 - Introduction to Sex Therapy.**

**CPCE 6100 - Spiritual Dimensions of Counseling.**

**CPCE 6140 - Counseling Children, Adolescents and Their Parents.**

**CPCE 6160 - Advanced Assessment: Theory and Treatment in Family Systems.**

**CPCE 6220 - Youth Challenges and Resiliency.**

**CPCE 6240 - Consultation Strategies.**

**CPCE 6250 - Mental Health Diagnosis.**

**CPCE 6330 - Advanced Seminar in Counseling and Psychotherapy.**

**CPCE 6350 - Theories of Personality Development and Change.**

**CPCE 6810 - Advanced Multicultural Counseling.**

**CPCE 6840 - Independent Study.**

**CPCE 6910 - Advanced Practicum in Counseling.**

**CPCE 6950 - Master's Thesis.**

**CPCE 7100 - Advanced Theories and Techniques in Psychotherapy.**

**CPCE 7800 - Supervision in Counseling and Psychotherapy.**

**CSL 1551 - Effective Problem Solving: Data, Information and Knowledge.**

**CSL 1552 - Effective Problem Solving: Beyond Knowledge.**

**CSL 2939 - Cooperative Education.**

**CSL 3110 - Leadership Styles, Cultural Diversity, and Ethical Responsibility.**

**CSL 3120 - Interdisciplinary Scholarship and Life-Long Learning.**

**CSL 3210 - Practical Leadership Skills.**

**CSL 3220 - Service Through Action and Internships.**

**CSL 3221 - Service Through Action and Internships.**

**CSL 3510 - Understanding Systems I.**

**CSL 4101 - Proseminar: New Paradigms in Higher Education.**

**CSL 4242 - Topics in Technology.**

**CSL 4286 - Cognitive Science: An Invitation.**

**CSL 4800 - Special Topics.**

**CSL 4900 - Applied Learning.**

**DSCI 2010 - Business Statistics.**

**DSCI 3000 - Operations Management.**

**DSCI 3780 - Supply Chain Management.**

**DSCI 4840 - Independent Study.**

**DSCI 4950 - Special Topics in Decision Sciences.**

**DSCI 5939 - Cooperative Education.**

**DSCI 6010 - Deterministic Models.**

**DSCI 6020 - Stochastic Models.**

**DSCI 6220 - Research methods: Design and Analysis.**

**DSCI 6230 - Business Forecasting.**

**DSCI 6440 - Quality and Process Improvement.**

**DSCI 6460 - Decision Analysis.**

**DSCI 6480 - Simulation Modeling.**

**DSCI 6600 - Purchasing, Materials Management and Negotiation.**

**DSCI 6800 - Special Topics.**

**DSCI 6820 - Project Management.**

**DSCI 6822 - Services Operations.**

**DSCI 6826 - Supply Chain Management.**

**DSCI 6828 - Business Applications of Data Mining.**

**DSCI 6840 - Independent Study.**

**DSCI 6910 - Decision Sciences Practicum.**

**DSPL 7011 - Research Design.**

**DSPL 7012 - Theories of Planning.**

**DSPL 7013 - Environment and Behavior.**

**DSPL 7014 - Colloquium.**

**DSPL 7686 - Special Topics in Design and Planning.**

**DSPL 7840 - Independent Study.**

**DSPL 7950 - Doctoral Thesis Research.**

**E E 1201 - Introduction to Electrical Engineering.**

**E E 1510 - Logic Design.**

**E E 1520 - Embedded Systems Engineering I.**

**E E 2132 - Circuit Analysis I.**

**E E 2142 - Circuit Analysis II.**

**E E 2520 - Embedded Systems Engineering 2.**

**E E 2531 - Logic Laboratory.**

**E E 2552 - Sophomore Circuits Laboratory.**

**E E 2651 - Introduction to Computer Engineering.**

**E E 3030 - Electric Circuits and Systems.**

**E E 3133 - Electromagnetic Fields.**

**E E 3164 - Energy Conversion.**

**E E 3215 - Electronics I.**

**E E 3225 - Electronics II.**

**E E 3316 - Linear Systems Theory.**

**E E 3651 - Digital Hardware Design.**

**E E 3701 - Computer Architecture and RTOS.**

**E E 3715 - Electronics Laboratory.**

**E E 3724 - Power Laboratory I.**

**E E 3735 - Junior Laboratory.**

**E E 3817 - Engineering Probability and Statistics.**

**E E 3939 - Cooperative Education.**

**E E 4025 - Device Electronics.**

**E E 4133 - Advanced Electromagnetic Fields.**

**E E 4136 - Control Systems Analysis.**

**E E 4174 - Power Electronic Systems.**

**E E 4184 - Power Systems Analysis.**

**E E 4225 - Advanced Electronics.**

**E E 4247 - Communication Theory.**

**E E 4248 - Digital Communication Systems.**

**E E 4249 - Space Communications Systems.**

**E E 4276 - Digital Control Systems.**

**E E 4309 - Senior Design Project I.**

**E E 4319 - Senior Design Project II.**

**E E 4406 - Control Systems Laboratory.**

**E E 4411 - Computer Systems Laboratory.**

**E E 4423 - Microwave Laboratory.**

**E E 4435 - Advanced Electronics Laboratory.**

**E E 4444 - Power Systems Laboratory.**

**E E 4466 - Adaptive Control System Design.**

**E E 4467 - Communications Laboratory.**

**E E 4501 - Microprocessor-based Design.**

**E E 4511 - Hardware-Software Interface.**

**E E 4521 - Microprocessor Lab.**

**E E 4555 - VLSI Circuit Simulation.**

**E E 4561 - Hardware-Software Lab.**

**E E 4637 - Digital Signal Processing.**

**E E 4800-483X - Special Topics.**

**E E 4807 - Special Topics Prereq: E E 3316, E E 3817, senior standing and consent of instructor.**

**E E 4808 - Renewable Energy Systems.**

**E E 4840 - Independent Study.**

**E E 4939 - Cooperative Education.**

**E E 5005 - VLSI Device Modeling.**

**E E 5025 - Device Electronics.**

**E E 5133 - Electromagnetic Radiation and Antenna.**

**E E 5174 - Power Electronic Systems.**

**E E 5184 - Power Systems Analysis.**

**E E 5210 - Optimization Methods in Engineering.**

**E E 5220 - Methods of Engineering Analysis.**

**E E 5230 - Advanced Linear Systems.**

**E E 5248 - Digital Communication Systems.**

**E E 5249 - Space Communications Systems.**

**E E 5250 - Information Theory.**

**E E 5252 - Computer Communication Networks.**

**E E 5436 - Nonlinear Control Systems I.**

**E E 5446 - Introduction to Modern Control Theory.**

**E E 5455 - Numerical Analysis of Semiconductor Devices.**

**E E 5456 - Sampled Data and Digital Control Systems.**

**E E 5466 - Adaptive Control System Design.**

**E E 5476 - Optimal Control Systems.**

**E E 5486 - Modeling and System Identification.**

**E E 5496 - Robust Control.**

**E E 5501 - Microprocessor-based Design.**

**E E 5511 - Hardware-Software Interface.**

**E E 5521 - Design and Test of Digital Systems.**

**E E 5522 - VLSI Systems.**

**E E 5551 - Pattern Recognition.**

**E E 5555 - VLSI Circuit Simulation.**

**E E 5593 - Advanced Computer Architecture.**

**E E 5617 - Random Processes for Engineers.**

**E E 5627 - Stochastic Point Processes.**

**E E 5637 - Digital Signal Processing.**

**E E 5638 - Digital Image Processing.**

**E E 5647 - Adaptive Signal Processing.**

**E E 5657 - Detection and Estimation Theory.**

**E E 5667 - Wavelet Theory and Applications.**

**E E 5687 - Optical Communication Systems.**

**E E 5697 - Optical and Spatial Information Processing.**

**E E 5714 - Energy Systems Analysis.**

**E E 5764 - Power Distribution Systems.**

**E E 5774 - Power Systems Dynamics and Protection.**

**E E 5800 - Special Topics.**

**E E 5804 - Introduction to Biomedical Photonics.**

**E E 5807 - Special Topics Prereq: graduate standing and consent of instructor.**

**E E 5808 - Renewable Energy Systems.**

**E E 5810 - Blind Signal Processing.**

**E E 5813 - Energy Systems Planning.**

**E E 5840 - Independent Study.**

**E E 5980 - Statistical Quality Control.**

**E E 6800-6839 - Special Topics.**

**E E 6950 - Master's Thesis.**

**E E 6960 - Master's Report.**

**E E 7800-7839 - Special Topics.**

**E E 7840 - Independent Study.**

**E E 8990 - Doctoral Dissertation.**

**ECE 5000 - The Early Childhood Profession.**

**ECE 5010 - Curriculum and Program Development in Early Childhood Education.**

**ECE 5020 - Approaches to Young Children's Learning.**

**ECE 5030 - Directing Programs for Young Children.**

**ECE 5040 - Administrative Seminar.**

**ECE 5060 - Working with Parents and Families.**

**ECE 5070 - Cognitive, Social, Emotional Development and Disorders in Young Children.**

**ECE 5080 - Language and Literacy in Young Children.**

**ECE 5090 - Neuromotor Development and Disorders in Young Children.**

**ECE 5102 - Introduction to Developmentally Appropriate Curriculum.**

**ECE 5104 - Advanced Developmentally Appropriate Curriculum.**

**ECE 5140 - Measurement and Evaluation in Early Childhood Education.**

**ECE 5200 - Screening and Assessment of Young Children.**

**ECE 5202 - Stress, Violence, and Behavior Challenges in Young Children's Lives.**

**ECE 5204 - Early Childhood Mental Health.**

**ECE 5800 - Workshop: Topics in Early Childhood Education.**

**ECE 5840 - Independent Study.**

**ECE 5911 - Educational and Observational Practicum in Early Childhood Education.**

**ECE 5920 - Readings in Early Childhood Education.**

**ECE 6010 - Literacy and Mathematics K-2.**

**ECE 6100 - Medical and Physiological Aspects of Developmental Disabilities.**

**ECE 6110 - Intervention Strategies for Children with Disabilities and At-risk Infants.**

**ECE 6200 - Early Intervention Strategies.**

**ECE 6600 - Seminar: Early Childhood Education Practices and Issues.**

**ECE 6690 - Seminar: Research and Current Issues in Early Childhood Education.**

**ECE 6910 - Practicum in Infancy.**

**ECE 6911 - Practicum in Early Childhood Education.**

**ECE 6912 - Practicum: Early Childhood Special Education.**

**ECE 6913 - Practicum in Working with Parents and Families.**

**ECE 6914 - Primary Practicum in Early Childhood Special Education.**

**ECE 6950 - Master's Thesis.**

**ECON 1111 - Freshman Seminar.**

**ECON 2012 - Principles of Economics: Macroeconomics: SS1.**

**ECON 2022 - Principles of Economics: Microeconomics: SS1.**

**ECON 2939 - Internship/Cooperative Education.**

**ECON 3100 - Economics of Race and Gender.**

**ECON 3300 - Economics Of Crime and Punishment.**

**ECON 3366 - Managerial Economics.**

**ECON 3400 - Economics of Sex and Drugs.**

**ECON 3801 - Introduction to Mathematical Economics.**

**ECON 3811 - Statistics with Computer Applications.**

**ECON 3939 - Internship/Cooperative Education.**

**ECON 4001 - Topics in Economics.**

**ECON 4050 - Special Economic Problems.**

**ECON 4071 - Intermediate Microeconomic Theory.**

**ECON 4081 - Intermediate Macroeconomic Theory.**

**ECON 4091 - History of Economic Thought.**

**ECON 4101 - Applied Statistics Using SAS and SPSS I.**

**ECON 4102 - Applied Statistics Using SAS and SPSS II.**

**ECON 4110 - Money and Banking.**

**ECON 4150 - Economic Forecasting.**

**ECON 4210 - Public Finance.**

**ECON 4230 - Law and Economics.**

**ECON 4240 - Economic Policy Analysis.**

**ECON 4310 - Managerial Economics.**

**ECON 4410 - International Trade.**

**ECON 4420 - International Finance.**

**ECON 4430 - Economic Growth.**

**ECON 4530 - Economics of Natural Resources.**

**ECON 4540 - Environmental Economics.**

**ECON 4610 - Labor Economics.**

**ECON 4640 - Sports Economics.**

**ECON 4716 - Comparative Economic Systems.**

**ECON 4740 - Industrial Organization.**

**ECON 4770 - Economic Development--Theory and Problems.**

**ECON 4811 - Introduction to Econometrics.**

**ECON 4840 - Independent Study.**

**ECON 4850 - Honors Independent Study.**

**ECON 5050 - Special Economic Problems.**

**ECON 5051 - Data Analysis and Research Methodology.**

**ECON 5052 - Data Analysis and Research Methodology II.**

**ECON 5073 - Microeconomic Theory.**

**ECON 5083 - Macroeconomic Theory.**

**ECON 5090 - History of Economic Thought.**

**ECON 5150 - Economic Forecasting.**

**ECON 5310 - Managerial Economics.**

**ECON 5320 - Financial Economics.**

**ECON 5410 - International Trade.**

**ECON 5530 - Economics of Natural Resources.**

**ECON 5540 - Environmental Economics.**

**ECON 5660 - Health Economics.**

**ECON 5740 - Industrial Organization.**

**ECON 5800 - Special Topics.**

**ECON 5803 - Mathematical Economics.**

**ECON 5813 - Econometrics I.**

**ECON 5823 - Econometrics II.**

**ECON 5840 - Independent Study.**

**ECON 5939 - Internship/Cooperative Education.**

**ECON 5950 - Master's Thesis.**

**ECON 6010 - Advanced Microeconomic Theory.**

**ECON 6020 - Advanced Macroeconomic Theory.**

**ECON 6053 - Seminar In Applied Economics.**

**ECON 6054 - Seminar In Applied Economics II.**

**ECON 6060 - Special Topics.**

**ECON 6073 - Research Seminar.**

**ECON 6110 - Money and Central Banking.**

**ECON 6210 - Public Finance.**

**ECON 6410 - International Trade.**

**ECON 6420 - International Finance.**

**ECON 6610 - Labor Economics.**

**ECON 6770 - Economic Growth and Development.**

**ECON 6801 - Advanced Mathematical Economics.**

**ECON 6810 - Econometrics and Forecasting.**

**ECON 6840 - Independent Study.**

**ECON 6950 - Master's Thesis.**

**EDLI 6000 - Academic Writing for Doctoral Students.**

**EDLI 6010 - APA Conventions in Academic Writing.**

**EDLI 6020 - Advanced Academic Writing for Doctoral Students.**

**EDLI 6994 - Introduction to Academic Discourse.**

**EDLI 7000 - Doctoral Seminar in Research Methods.**

**EDLI 7010 - Dissertation Planning and Design.**

**EDLI 7100 - Leadership in Education.**

**EDLI 7200 - Administrative Leadership and Values Appraisals.**

**EDLI 7210 - Educational Policy Making in a Democratic Society.**

**EDLI 7220 - Leadership and Power.**

**EDLI 7230 - Organizational Performance in Schools.**

**EDLI 7240 - Problems and Practices in Integrated Services.**

**EDLI 7250 - Nature of Work in Schools.**

**EDLI 7260 - Managing Integrated Services.**

**EDLI 7300 - Individual and Organizational Change.**

**EDLI 7600 - Doctoral Laboratory.**

**EDLI 7601 - Doctoral Research Lab: Administrative Leadership and Policy Studies Lab.**

**EDLI 7602 - Doctoral Research Lab: Postsecondary Teaching and Learning.**

**EDLI 7603 - Doctoral Research Lab: Technology- Enhanced Learning.**

**EDLI 7604 - Doctoral Research Lab: Learning and Activity.**

**EDLI 7605 - Doctoral Research Lab: Urban School Lab.**

**EDLI 7607 - Doctoral Lab for Diversity and Equity.**

**EDLI 7608 - Doctoral Research Lab: Inquiry or Professional Development.**

**EDLI 7611 - Doctoral Research Lab: Leadership Capacity Lab.**

**EDLI 7612 - Doctoral Research Lab: Literacy and Responsive Teaching.**

**EDLI 7700 - Doctoral Pro Seminar.**

**EDLI 7710 - Theoretical Bases of Instructional Technology.**

**EDLI 7711 - Curriculum Reform in a Democracy.**

**EDLI 7712 - Seminar: Learning Theory and Learners.**

**EDLI 7830 thru 7832 - Special Topics In Educational Leadership and Innovation.**

**EDLI 7833 - Culture and Critical Theory.**

**EDLI 7834 - Divergent Scholarly Work on Identity and Voice Through Critical Theory.**

**EDLI 8994 - Doctoral Dissertation PhD.**

**EDUC 5000 thru 5009 - Special Topics: Administrative Leadership and Policy Studies.**

**EDUC 5010 - Paraeducator Supervision Academy.**

**EDUC 5020 - Trainers of Paraeducators Academy.**

**EDUC 5030 - Top Cadre of Trainers (TOPCAT) Seminar.**

**EDUC 5040 - Mentoring Novice and Pre-service Teachers.**

**EDUC 5050 - Computer Application for Educational Management.**

**EDUC 5070 - Elementary School Curriculum.**

**EDUC 5090 - Senior High School Curriculum.**

**EDUC 5100 - Curriculum and Program Development and Evaluation.**

**EDUC 5400 - Special Education Seminar for Principals.**

**EDUC 5700 - Administrative Leadership in Educational Organizations.**

**EDUC 5710 - Administering the Environment of Public Schools.**

**EDUC 5720 - Supervision of the Curricular and Instructional Program of the School.**

**EDUC 5730 - Administering the School Improvement Process.**

**EDUC 5751 - Principal/Administrator Licensing I.**

**EDUC 5752 - Principal Administrator Licensing II.**

**EDUC 5753 - Principal/Administrator Licensing III.**

**EDUC 5754 - Principal or Administrator Licensing IV.**

**EDUC 5830 - Governance and Administration of Education.**

**EDUC 5831 - School Law.**

**EDUC 5832 - Group Development and Training.**

**EDUC 5833 - School Business Management.**

**EDUC 5834 - Seminar in School Administration.**

**EDUC 5835 - Supervision of Instruction.**

**EDUC 5836 - Workshop: Educational Administration, Curriculum and Supervision.**

**EDUC 5840 - Independent Study.**

**EDUC 5930 - Clinical Practice in Administrative Leadership.**

**EDUC 5931 - Internship in Curriculum.**

**EDUC 5950 - Master's Thesis.**

**EDUC 6000 thru 6010 - Special Topics: Administrative Leadership and Policy Studies.**

**EDUC 6101 - Initial Portfolio Analysis for Administrator Licensure.**

**EDUC 6102 - Initial Portfolio Analysis for Principal Licensure.**

**EDUC 6103 - Portfolio Product Development for Administrative Licensure.**

**EDUC 6104 - Portfolio Product Development for Principal Licensure.**

**EDUC 6105 - Portfolio Evaluation for Administrative Licensure.**

**EDUC 6106 - Portfolio Evaluation for Principal Licensure.**

**EDUC 6840 - Independent Study.**

**EDUC 6930 - Clinical Practice for Administrative Leadership.**

**EDUC 6951 - Master's Thesis.**

**EDUC 7000-7010 - Special Topics in Administration, Supervision, and Curriculum Development.**

**EDUC 7120 - Curriculum of Middle Level School.**

**EDUC 7140 - Student Activities Curriculum.**

**EDUC 7150 - Doctoral Seminar in Curricular Theories.**

**EDUC 7160 - Processes and Materials in Curriculum Appraisal.**

**EDUC 7340 - Doctoral Seminar: Problems and Trends in Education.**

**EDUC 7350 - Elementary Principalship.**

**EDUC 7360 - Administration and Supervision of Elementary School.**

**EDUC 7370 - Administration and Supervision of Senior High School.**

**EDUC 7380 - Doctoral Seminar: Theory of Educational Administration.**

**EDUC 7400 - Doctoral Seminar in School Finance.**

**EDUC 7410 - Educational Facilities Planning.**

**EDUC 7420 - Personnel Development and Training.**

**EDUC 7430 - School and Community Relations.**

**EDUC 7490 - Doctoral Seminar.**

**EDUC 7560 - Administration and Supervision in the Junior High School and Middle School.**

**EDUC 7630 - Doctoral Seminar: Junior and/or Senior High School Education.**

**EDUC 7700 - Doctoral Pro Seminar.**

**EDUC 7800 - Doctoral Research Seminar: Education Administration, Curriculum and Supervision.**

**EDUC 7810 - Doctoral Seminar in School Law.**

**EDUC 7820 - Doctoral Seminar in Curriculum.**

**EDUC 7823 - Doctoral Seminar in Educational Supervision.**

**EDUC 7825 - Doctoral Seminar in Educational Leadership.**

**EDUC 7840 - Independent Study.**

**EDUC 7911 - Practicum in Education Administration, Supervision and Curriculum.**

**EDUC 7921 - Readings in Education Administration, Curriculum and Supervision.**

**EDUC 7931 - Internship in Educational Administration and Supervision.**

**EDUC 7932 - Internship in Curriculum.**

**EDUC 8997 - Doctoral Dissertation EdD.**

**ELED 4800 - Curriculum Workshop.**

**ELED 5060 - Improvement of Instruction.**

**ELED 5140 - Elementary Curriculum: Integrating Language Arts with Literature.**

**ELED 5150 - Elementary Curriculum: Teaching Mathematics, Science and Social Studies.**

**ELED 5160 - Expressive Arts.**

**ELED 5170 - Community and Interpersonal Relations.**

**ELED 5200 - Classroom Management.**

**ELED 5320 - Advanced Language Arts in the Elementary School.**

**ELED 5340 - Multicultural Science Education.**

**ELED 5350 - Science in Elementary School.**

**ELED 5400 - Contemporary Mathematics for Elementary Schools.**

**ELED 5401 - Assessment in Mathematics Education.**

**ELED 5410 - Teaching Numbers and Arithmetic.**

**ELED 5411 - Mathematics Education and Gender.**

**ELED 5415 - Math Science Connections: Indoors.**

**ELED 5416 - Math-Science Connections: Outdoor.**

**ELED 5417 - Structure of Rational Numbers.**

**ELED 5418 - Mathematical Modeling.**

**ELED 5419 - Exploring the Structure of Geometry Using technology.**

**ELED 5430 - Topics in Mathematics Education.**

**ELED 5440 - Problem Solving and Geometry in the Elementary School.**

**ELED 5450 - Social Studies in Elementary School.**

**ELED 5464 - Teaching About Ethnicity, Race and Prejudice.**

**ELED 5470 - Introduction to Middle School.**

**ELED 5480 - Museum Studies in Paleontology.**

**ELED 5490 - Middle School Curriculum.**

**ELED 5510 - Teacher Leadership: Theory to Reality.**

**ELED 5520 - Teacher Leadership: Essential Knowledge.**

**ELED 5530 - Teacher Leadership: Vital Skills.**

**ELED 5660 - Energy Education.**

**ELED 5775 - Knowledge of Teaching.**

**ELED 5780 - Storytelling.**

**ELED 5800 - Curriculum Workshop for Elementary Teachers.**

**ELED 5840 - Independent Study.**

**ELED 5910 - Advanced Practicum: Elementary.**

**ELED 5920 - Readings in Elementary Education.**

**ELED 5930 - Internship in Elementary Education.**

**ELED 6100 - Seminar: Elementary Education.**

**ELED 6110 - Curriculum Development and School Improvement.**

**ELED 6120 - International Perspectives on the Curriculum.**

**ELED 6600 - Special Topics: Laboratory in Educational Leadership and Innovation.**

**ELED 6950 - Master's Thesis.**

**ELED 7600 - Special Topics: Laboratory in Educational Leadership and Innovation.**

**ELED 7840 - Independent Study.**

**ENGL 1010 - Writing Workshop.**

**ENGL 1020 - Core Composition I: CO1.**

**ENGL 1050 - Vocabulary for Professionals.**

**ENGL 1111 - Freshman Seminar.**

**ENGL 1200 - Introduction to Fiction.**

**ENGL 1400 - Introduction to Literary Studies.**

**ENGL 1601 - Telling Tales: Narrative Art in Literature and Film: AH2.**

**ENGL 2030 - Core Composition II: CO2.**

**ENGL 2070 - Grammar, Rhetoric and Style.**

**ENGL 2154 - Introduction to Creative Writing.**

**ENGL 2250 - Introduction to Film.**

**ENGL 2300-2349 - Topics in Literature and Film.**

**ENGL 2390 - Writing the Short Script.**

**ENGL 2415 - Introduction to Movie Writing.**

**ENGL 2510 - Greek and Roman Mythology.**

**ENGL 2520 - The Bible as Literature.**

**ENGL 2600 - Great Works in British and American Literature: AH2.**

**ENGL 2840 - Independent Study.**

**ENGL 2970 - Russian Cinema and Cultural History.**

**ENGL 3001 - Critical Writing.**

**ENGL 3020 - Poetry Workshop.**

**ENGL 3050 - Fiction Workshop.**

**ENGL 3070 - History of Silent Film.**

**ENGL 3075 - Film Genres.**

**ENGL 3080 - History of Sound Film.**

**ENGL 3084 - Advanced Composition.**

**ENGL 3085 - Film Directors.**

**ENGL 3154 - Technical Writing.**

**ENGL 3160 - Language Theory.**

**ENGL 3170 - Business Writing.**

**ENGL 3200 - From Literature to Film.**

**ENGL 3300-3324 - Topics in Film.**

**ENGL 3330-3350 - Topics in Literature.**

**ENGL 3384 - J.R.R. Tolkien.**

**ENGL 3385 - Fantasy Literature.**

**ENGL 3386 - Classic Science Fiction.**

**ENGL 3415 - Screenwriting Workshop.**

**ENGL 3416 - Magazine Writing.**

**ENGL 3450 - Twentieth Century Women Writers.**

**ENGL 3520 - Religious Narratives.**

**ENGL 3530 - The Hero's Journey.**

**ENGL 3661 - Shakespeare.**

**ENGL 3700 - American Literature to the Civil War.**

**ENGL 3750 - American Literature from the Civil War.**

**ENGL 3795 - Race and Ethnicity in American Literature.**

**ENGL 3798 - International Perspectives in Literature and Film.**

**ENGL 3840 - Independent Study.**

**ENGL 3939 - Internship/Cooperative Education.**

**ENGL 3995 - Travel Study.**

**ENGL 4000 - Studies of Major Authors.**

**ENGL 4025 - Advanced Poetry Workshop.**

**ENGL 4055 - Advanced Fiction Workshop.**

**ENGL 4080 - History of the English Language.**

**ENGL 4160 - Poetics.**

**ENGL 4166 - History of American Poetry.**

**ENGL 4180 - Argumentation and Logic.**

**ENGL 4190 - Special Topics in Rhetoric and Writing.**

**ENGL 4200 - History of the English Novel I.**

**ENGL 4210 - History of the English Novel II.**

**ENGL 4220 - African-American Literature.**

**ENGL 4230 - The American Novel.**

**ENGL 4235 - Faulkner.**

**ENGL 4236 - The American Short Story.**

**ENGL 4240 - Topics in Contemporary American Literature.**

**ENGL 4250 - Twentieth Century Fiction.**

**ENGL 4280 - Proposal and Grant Writing.**

**ENGL 4300 - History of British Drama.**

**ENGL 4306 - Survey of Feminist Thought.**

**ENGL 4320 - History of Poetry in English.**

**ENGL 4350 - History of American Drama.**

**ENGL 4400 - Old English I.**

**ENGL 4410 - Old English II: Beowulf.**

**ENGL 4420 - Film Theory and Criticism.**

**ENGL 4460 - Contemporary World Literature.**

**ENGL 4500 - Medieval Literature.**

**ENGL 4510 - Whores and Saints: Medieval Women.**

**ENGL 4520 - English Renaissance.**

**ENGL 4530 - Milton.**

**ENGL 4540 - Restoration and the 18th Century.**

**ENGL 4560 - English Romanticism.**

**ENGL 4580 - The Victorian Age.**

**ENGL 4600 - Modernism.**

**ENGL 4601 - Principles and Practices of Second Language Acquisition.**

**ENGL 4651 - Second Language Writing.**

**ENGL 4701 - Multimedia in the Community.**

**ENGL 4720 - Honors in Literature.**

**ENGL 4730 - Chaucer's Canterbury Tales.**

**ENGL 4731 - Chaucer's Early Poetry.**

**ENGL 4735 - Philosophy and Literature.**

**ENGL 4740 - Honors in Writing.**

**ENGL 4770 - Topics in English: Film and Literature.**

**ENGL 4800 thru 4805 - Special Topics in Creative Writing.**

**ENGL 4840 - Independent Study.**

**ENGL 4920 - Directed Readings.**

**ENGL 4990 - Senior Writing Project in Creative Writing or Film Studies.**

**ENGL 4991 - Senior Seminar in Writing.**

**ENGL 4995 - Senior Writing Project.**

**ENGL 4999 - Literary Studies Senior Seminar.**

**ENGL 5000 - Studies of Major Authors.**

**ENGL 5001 - Special Topics.**

**ENGL 5080 - History of the English Language.**

**ENGL 5093 - Rhetoric and the Teaching of Writing.**

**ENGL 5100 - Literary Research and Writing.**

**ENGL 5110 - Denver Writing Project.**

**ENGL 5120 - Denver Writing Project Advanced Institute.**

**ENGL 5150 - Critical Inquiry and Classroom Research.**

**ENGL 5160 - Poetics.**

**ENGL 5166 - History of American Poetry.**

**ENGL 5171 - Language Theory.**

**ENGL 5190 - Special Topics in Rhetoric and Writing.**

**ENGL 5200 - History of the English Novel I.**

**ENGL 5210 - History of the English Novel II.**

**ENGL 5220 - African-American Literature.**

**ENGL 5230 - The American Novel.**

**ENGL 5235 - Faulkner.**

**ENGL 5236 - The American Short Story.**

**ENGL 5240 - Topics In Contemporary American Literature.**

**ENGL 5250 - Twentieth Century Fiction.**

**ENGL 5280 - Proposal and Grant Writing.**

**ENGL 5300 - History of British Drama.**

**ENGL 5306 - Survey of Feminist Thought.**

**ENGL 5320 - History of Poetry in English.**

**ENGL 5350 - History of American Drama.**

**ENGL 5400 - Old English I.**

**ENGL 5410 - Old English II: Beowulf.**

**ENGL 5420 - Film Theory and Criticism.**

**ENGL 5460 - Contemporary World Literature.**

**ENGL 5500 - Medieval Literature.**

**ENGL 5510 - Whores and Saints: Medieval Women.**

**ENGL 5520 - English Renaissance.**

**ENGL 5530 - Milton.**

**ENGL 5540 - Restoration and the 18th Century.**

**ENGL 5560 - English Romanticism.**

**ENGL 5580 - The Victorian Age.**

**ENGL 5600 - Modernism.**

**ENGL 5601 - Principles and Practices of Second Language Acquisition.**

**ENGL 5650 - American Literature to the Civil War.**

**ENGL 5651 - Second Language Writing.**

**ENGL 5655 - American Literature: Civil War to the Cold War.**

**ENGL 5701 - Multimedia in the Community.**

**ENGL 5730 - Chaucer's Canterbury Tales.**

**ENGL 5731 - Chaucer's Early Poetry.**

**ENGL 5735 - Philosophy and Literature.**

**ENGL 5770 - Topics in English: Film and Literature.**

**ENGL 5840 - Independent Study.**

**ENGL 5913 - Practicum in Language and Rhetoric.**

**ENGL 6001 - Critical Theory in Literature and Film.**

**ENGL 6002 - Rhetorical Theory: Teaching Writing.**

**ENGL 6010-6019 - Studies of Major Authors.**

**ENGL 6110-6119 - Special Topics in Literature.**

**ENGL 6120-6129 - Special Topics in Film.**

**ENGL 6210 - Teaching Second Language and Second Dialect Speakers.**

**ENGL 6840 - Independent Study.**

**ENGL 6920 - Directed Readings.**

**ENGL 6950 - Master's Thesis.**

**ENGL 6960 - Master's Project.**

**ENGR 1000 - Introduction to Engineering.**

**ENGR 1025 - Engineering Graphics and Computer-Aided Design.**

**ENGR 1208-12X8 - Special Topics.**

**ENGR 2208-22X8 - Special Topics.**

**ENGR 3012 - Thermodynamics.**

**ENGR 3208-32X8 - Special Topics.**

**ENGR 3400 - Technology and Culture.**

**ENGR 3600 - International Dimensions of Technology and Culture.**

**ENGR 4208-42X8 - Special Topics.**

**ENGR 4840 - Independent Study.**

**ENGR 5208-52X8 - Special Topics.**

**ENGR 5800 - Long Range Infrastructure Planning and Design: Colorado 2050.**

**ENTP 2550 - Introductory Accounting for Entrepreneurs and the Arts.**

**ENTP 3000 - Principles of Entrepreneurship.**

**ENTP 3120 - Legal Issues for Entrepreneurs.**

**ENTP 3780 - Managing Entrepreneurial Ventures.**

**ENTP 4950 - Special Topics.**

**ENTP 6000 - Fundamentals of Entrepreneurship.**

**ENTP 6020 - The Business Plan.**

**ENTP 6040 - Growing Your Venture.**

**ENTP 6800 - Special Topics.**

**ENTP 6820 - Business Consulting.**

**ENTP 6822 - Legal and Ethical Issues of Entrepreneurship.**

**ENTP 6824 - Entrepreneurial Financial Management.**

**ENTP 6826 - International Entrepreneurship.**

**ENTP 6828 - Assess and Develop Market Opportunities.**

**ENTP 6830 - Launching Technology-Based Ventures.**

**ENTP 6832 - Corporate Entrepreneurship and Innovation.**

**ENTP 6834 - Entrepreneurial Marketing.**

**ENTP 6836 - Designing and Leading the Entrepreneurial Organization.**

**ENTP 6838 - Real Estate for the Entrepreneur.**

**ENTP 6842 - New Concept Development.**

**ENTP 6844 - Managing New Entrepreneurial Ventures.**

**ENTP 6846 - Marketing a New Business.**

**ENTP 6848 - Leadership in New Ventures.**

**ENTP 6852 - Introduction to Life Science Technology Transfer.**

**ENTP 6854 - Design & Manage Entrepreneurial Organizations.**

**ENTP 6856 - Strategic Planning for Entrepreneurs.**

**ENTP 6858 - Innovation in the Social Sector.**

**ENTP 6860 - Business Planning for Social Entrepreneurs.**

**ENTP 6930 - Bioscience Internship.**

**ENVS 1042 - Introduction to Environmental Sciences: SC1.**

**ENVS 1342 - Introduction to Environment and Society: SS2.**

**ENVS 2939 - Internship/Cooperative Education.**

**ENVS 3082 - Energy and the Environment.**

**ENVS 3500 - Topics in Environmental Sciences.**

**ENVS 4210 - Mining and the Environment.**

**ENVS 4500 - Topics In Environmental Sciences.**

**ENVS 4995 - Travel Study.**

**ENVS 5000 - Biogeochemical Cycles.**

**ENVS 5020 - Earth Environments and Human Impacts.**

**ENVS 5030 - Environmental Geology.**

**ENVS 5403 - Unsaturated Zone Hydrology.**

**ENVS 5410 - Aquatic Chemistry.**

**ENVS 5500 - Topics in Environmental Sciences.**

**ENVS 5600 - Applied Statistics for the Natural Sciences.**

**ENVS 5620 - Health Risk Communication.**

**ENVS 5730 - Air Quality Modeling and Analysis.**

**ENVS 5840 - Independent Study.**

**ENVS 5939 - Cooperative Education.**

**ENVS 5995 - Travel Study.**

**ENVS 6000 - Environmental Sciences Seminar.**

**ENVS 6002 - Environmental Sciences Seminar.**

**ENVS 6200 - Risk Assessment.**

**ENVS 6210 - Human Health and Environmental Pollution.**

**ENVS 6220 - Toxicology.**

**ENVS 6230 - Environmental Epidemiology.**

**ENVS 6840 - Independent Study.**

**ENVS 6950 - Master's Thesis.**

**ENVS 6960 - Master's Report.**

**EPSY 5000 - Psychological Foundations of Education.**

**EPSY 5020 - Advanced Psychological Foundations of Education.**

**EPSY 5050 - Children's Thinking.**

**EPSY 5100 - Advanced Child Growth and Development.**

**EPSY 5110 - Human Learning.**

**EPSY 5120 - Behavior Analysis.**

**EPSY 5140 - Advanced Adolescent Growth and Development.**

**EPSY 5160 - Behavior Disorders in Exceptional Children.**

**EPSY 5170 - Behavior Analysis and Intervention.**

**EPSY 5180 - Psychology of Gifted, Talented and Creative Children.**

**EPSY 5200 - Social Psychology of Learning.**

**EPSY 5220 - Adult Learning and Education.**

**EPSY 5240 - Cognition and Instruction.**

**EPSY 5260 - Child Study and Observation.**

**EPSY 5500 - Student Teaching.**

**EPSY 5800 - Workshop: School Applications of Educational Psychology.**

**EPSY 5840 - Independent Study.**

**EPSY 5920 - Readings in Educational Psychology.**

**EPSY 6000 - Seminar in Educational Psychology.**

**EPSY 6120 - Family Dynamics.**

**EPSY 6170 - Assessment of Handicapped and At-risk Infants.**

**EPSY 6200 - Human Development Over the Life Span.**

**EPSY 6250 - Advanced Abnormal Psychology.**

**EPSY 6350 - Theories of Personality Development and Change.**

**EPSY 6500 - Student Teaching: Implementation and Reflection.**

**EPSY 6600 - Human Motivation.**

**EPSY 6840 - Independent Study.**

**EPSY 6910 - Practicum in Educational Psychology.**

**EPSY 6950 - Master's Thesis.**

**EPSY 7910 - Educational Psychology Practicum.**

**ETST 1111 - Freshman Seminar.**

**ETST 2000 - Introduction to Ethnic Studies: SS3.**

**ETST 2024 - Race and Ethnic Relations.**

**ETST 2036 - American Indian Cultural Images.**

**ETST 2105 - African American Contemporary Social Issues.**

**ETST 2115 - Genocide in the 21st Century: Darfur and Beyond.**

**ETST 2125 - The Bi-Racial Family.**

**ETST 2145 - The Gullah in Novel and Film.**

**ETST 2155 - African American History: HI1.**

**ETST 2165 - Cultural Diversity Awareness in the Workplace.**

**ETST 2294 - Race and the Media.**

**ETST 2400 - Issues in Chicano/a Education.**

**ETST 2496 - American Indian Literature.**

**ETST 2606 - The American Indian Experience.**

**ETST 2840 - Independent Study.**

**ETST 2939 - Internship/Cooperative Education.**

**ETST 3001 - Urban Sociology.**

**ETST 3002 - Ethnicity, Health and Social Justice.**

**ETST 3108 - Chicano/a and Latino/a History.**

**ETST 3110 - Indigenous Studies.**

**ETST 3129 - Contemporary Latin American Literature.**

**ETST 3216 - Federal Law and American Indians.**

**ETST 3224 - U.S./Middle East Culture and Religion.**

**ETST 3254 - Race and Ethnicity in the Inner City.**

**ETST 3272 - Global Media.**

**ETST 3274 - Power, Poverty, Culture.**

**ETST 3297 - Social History of Asian Americans.**

**ETST 3307 - Selected Topics: Asian Americans.**

**ETST 3350 - Colonial Latin America.**

**ETST 3357 - Asian American Literature.**

**ETST 3365 - Aztlan in the United States: Chicano History from 1821.**

**ETST 3394 - Literature of Social Protest from an Ethnic Perspective.**

**ETST 3396 - History of the American Indian.**

**ETST 3408 - Social Psychology of Latinos/as.**

**ETST 3567 - Asian American Women.**

**ETST 3574 - Topics in Ethnic Studies.**

**ETST 3616 - Selected Topics: American Indians.**

**ETST 3697 - Contemporary Asian American Issues.**

**ETST 3704 - Culture, Racism and Alienation.**

**ETST 3794 - Ethnic Diversity in American Literature.**

**ETST 3838 - History of the Mexican American in Colorado.**

**ETST 3840 - Independent Study.**

**ETST 3939 - Internship/Cooperative Education.**

**ETST 4000 - Research Methods in Ethnic Studies.**

**ETST 4144 - Indigenous Political Systems.**

**ETST 4146 - Indigenous Politics.**

**ETST 4156 - The Arab-Israeli Peace Process.**

**ETST 4220 - African-American Literature.**

**ETST 4411 - Modern Mexico.**

**ETST 4515 - The African American in Politics.**

**ETST 4555 - International Women's Resistance.**

**ETST 4558 - Chicano and Latino Politics.**

**ETST 4574 - Special Topics.**

**ETST 4616 - Selected Topics: Chicanos/as and Latinos/as.**

**ETST 4726 - North American Indian Art.**

**ETST 4730 - Peoples and Cultures of Sub-Saharan Africa.**

**ETST 4768 - Chicano/Chicana Narrative and Social History.**

**ETST 4827 - Women and the Law.**

**ETST 4840 - Independent Study.**

**ETST 4960 - Senior Seminar in Ethnic Studies.**

**EXCH 3996 - Student Exchange.**

**F A 1001 - Introduction to Art: AH1.**

**F A 1015 - Interdisciplinary Foundations.**

**F A 1100 - Drawing I.**

**F A 1140 - Topics in Photography.**

**F A 1150 - Introduction to Photography.**

**F A 1400 - Two Dimensional Design.**

**F A 1435 - Intro to Electronic Art and Design.**

**F A 1500 - Three-Dimensional Design.**

**F A 1600 - Painting Methods and Materials.**

**F A 1810 - Digital Animation Foundations: Producing Animation.**

**F A 1820 - Digital Animation Foundations: Introduction to Digital 3D.**

**F A 2000 - Life Drawing.**

**F A 2015 - Intermedia Foundations.**

**F A 2020 - Drawing II: Spatial Thinking and Visualization.**

**F A 2100 - The Media of Drawing.**

**F A 2130 - Experiments in Color/Photography for Non-Majors.**

**F A 2140 - Topics in Photography.**

**F A 2155 - Introduction to Digital Photography.**

**F A 2200 - Painting I.**

**F A 2210 - Painting II: Figure.**

**F A 2405 - Introduction to Digital Design.**

**F A 2415 - Typography Studio.**

**F A 2500 - Bronze Casting and Metal Sculpture.**

**F A 2510 - Wood and Metal Sculpture.**

**F A 2600 - History of Art I (survey).**

**F A 2610 - History of Art II (survey).**

**F A 2810 - Digital Animation Techniques: Surface Modeling.**

**F A 2820 - Digital Animation Techniques: Surface Properties.**

**F A 2830 - Digital Animation Techniques: Lighting.**

**F A 2850 - Digital Animation Techniques: 3D Character Creation.**

**F A 2995 - Travel Study Topics.**

**F A 3000 - Intermediate Drawing.**

**F A 3110 - Imaging and Identity.**

**F A 3120 - Visual Culture Studies.**

**F A 3130 - Photography, Optics and Perspectives in Italy.**

**F A 3135 - Historic Photographic Processes in Italy.**

**F A 3140 - Postcolonial Art and Theory.**

**F A 3150 - Feminism and Art.**

**F A 3155 - Digital Book Making/Narrative Strategies.**

**F A 3160 - Color and Studio Lighting Dynamics.**

**F A 3165 - Concepts and Processes in Photography.**

**F A 3170 - Photography: Constructing the Fine Print.**

**F A 3175 - Photography: Creative Commercial Applications.**

**F A 3200 - Intermediate Painting I.**

**F A 3210 - Intermediate Painting II.**

**F A 3230 - Abstract Drawing.**

**F A 3240 - Abstract Painting.**

**F A 3250 - Sculpture: Contemporary Artists and Concepts.**

**F A 3260 - Portraiture.**

**F A 3300 - Painting and the Printed Image.**

**F A 3310 - Drawing and the Printed Image.**

**F A 3340 - Topics in Studio Art.**

**F A 3342 - Topics in Studio Art.**

**F A 3343 - Topics in Studio Art.**

**F A 3350 - Topics in Multimedia.**

**F A 3400 - Web Design and Digital Imaging for Non-Majors.**

**F A 3405 - Digital Video for Non-Majors.**

**F A 3409 - Design Studio I**

**F A 3414 - Motion Design I.**

**F A 3415 - Design Studio I.**

**F A 3424 - Interactive Media.**

**F A 3428 - Design Studio II.**

**F A 3434 - 3D Motion Design.**

**F A 3438 - Text, Image and Electronic Art.**

**F A 3440 - Visible Stories.**

**F A 3441 - Narrative and Experience.**

**F A 3444 - Interactive Media II.**

**F A 3450 - Digital Painting.**

**F A 3454 - Motion Design II.**

**F A 3500 - Modeling and Casting the Figure.**

**F A 3505 - Sculpture Topics.**

**F A 3510 - Installation Art.**

**F A 3515 - Public Art.**

**F A 3520 - Sculpture: Contemporary Artists and Concepts.**

**F A 3525 - Environmental Sculpture.**

**F A 3530 - Iron Casting.**

**F A 3535 - Sculpture Rendering.**

**F A 3600 - Art History Survey III: Non-Western Art.**

**F A 3630 - History of Photography.**

**F A 3635 - Photography Now.**

**F A 3640 - Topics in Art History.**

**F A 3644 - Topics in Art History.**

**F A 3645 - Aesthetics.**

**F A 3650 - Criticism.**

**F A 3720 - Native American Art.**

**F A 3800 - Law and the Visual Arts.**

**F A 3810 - Digital Animation Studio: Set/Environment Production.**

**F A 3820 - Digital Animation Techniques: Rigging and Animation.**

**F A 3830 - Digital Animation Technique: Character Animation.**

**F A 3845 - Digital Animation Discovery and Preproduction Seminar.**

**F A 3850 - Digital Animation Techniques: Dynamic Simulation.**

**F A 3939 - Internship/Cooperative Education.**

**F A 3995 - Travel Study Topics.**

**F A 4000 - Advanced Drawing I.**

**F A 4010 - Advanced Drawing II.**

**F A 4020 - Anatomy for the Artist.**

**F A 4100 - Painting and Drawing Theory.**

**F A 4140 - Topics in Photography.**

**F A 4195 - Advanced Photography I/Creating a Personal Vision.**

**F A 4196 - Advanced Photography II.**

**F A 4200 - Advanced Painting I.**

**F A 4210 - Advanced Painting II.**

**F A 4340 - Topics in Studio Art.**

**F A 4350 - Topics in Multimedia.**

**F A 4400 - Design Studio III.**

**F A 4434 - Virtual Landscapes.**

**F A 4480 - The Practice of Design.**

**F A 4495 - Design Studio IV.**

**F A 4500 - Kinetic Sculpture.**

**F A 4505 - Performance Art.**

**F A 4510 - Advanced Sculpture.**

**F A 4520 - Performance/Installation in Fine Art.**

**F A 4522 - Interdisciplinary Art in Ireland.**

**F A 4524 - Topics in Art History.**

**F A 4525 - Museum Studies.**

**F A 4526 - Appraisal and Auction Studies.**

**F A 4527 - The Business of Art.**

**F A 4610 - Pre-Columbian Art.**

**F A 4620 - American Art.**

**F A 4625 - Studio Creative Process.**

**F A 4630 - Photography: Theory and Criticism.**

**F A 4632 - Media History and Aesthetics.**

**F A 4650 - Nineteenth-Century Art.**

**F A 4660 - Twentieth-Century Art.**

**F A 4670 - Greek and Roman Art.**

**F A 4680 - Art of the Middle Ages.**

**F A 4690 - Renaissance Art.**

**F A 4710 - Baroque and Rococo Art.**

**F A 4712 - Applied Digital Media.**

**F A 4720 - Art of Native America.**

**F A 4730 - Arts of Japan.**

**F A 4740 - African Visual, Verbal and Musical Metaphors.**

**F A 4745 - African American Visual Culture.**

**F A 4750 - Arts of China.**

**F A 4760 - Art of the Ancient Near East.**

**F A 4770 - Art of India and Southeast Asia.**

**F A 4780 - Art of Islam.**

**F A 4785 - Chicano/Chicana Art.**

**F A 4787 - Oceanic Art.**

**F A 4790 - Methods in Art History.**

**F A 4800 - Senior Art Seminar.**

**F A 4810 - Digital Animation Studio: Animation Production I.**

**F A 4820 - Digital Animation Studio: Animation Production II.**

**F A 4840 - Independent Study.**

**F A 4950 - BFA Thesis.**

**F A 4951 - Bachelor of Art Thesis.**

**F A 4990 - Contemporary Art - 1945 To the Present.**

**F A 4995 - Travel Study Topics.**

**F A 5000 - Graduate Drawing.**

**F A 5020 - Graduate Anatomy for Artists.**

**F A 5190 - Graduate Photography.**

**F A 5200 - Graduate Painting I.**

**F A 5210 - Graduate Painting II.**

**F A 5340 - Topics in Studio Art.**

**F A 5350 - Topics in Multimedia.**

**F A 5500 - Graduate Sculpture I.**

**F A 5510 - Graduate Sculpture II.**

**F A 5522 - Interdisciplinary Art in Ireland.**

**F A 5525 - Museum Studies.**

**F A 5526 - Appraisal and Auction Studies.**

**F A 5527 - The Business of Art.**

**F A 5610 - Pre-Columbian Art.**

**F A 5620 - American Art.**

**F A 5625 - Studio Creative Process.**

**F A 5632 - History of Digital Music Media.**

**F A 5644 - Topics in Art History.**

**F A 5650 - Nineteenth-Century Art.**

**F A 5660 - Twentieth-Century Art.**

**F A 5670 - Greek and Roman Art.**

**F A 5680 - Art of the Middle Ages.**

**F A 5690 - Renaissance Art.**

**F A 5710 - Baroque and Rococo Art.**

**F A 5720 - Art of Native America.**

**F A 5730 - Arts of Japan.**

**F A 5740 - African Visual, Verbal and Musical Metaphors.**

**F A 5745 - African American Visual Culture.**

**F A 5750 - Arts of China.**

**F A 5760 - Art of the Ancient Near East.**

**F A 5770 - Art of India and Southeast Asia.**

**F A 5780 - Art of Islam.**

**F A 5785 - Chicano/Chicana Art.**

**F A 5787 - Oceanic Art.**

**F A 5790 - Methods in Art History.**

**F A 5800 - Art Seminar.**

**F A 5840 - Independent Study.**

**F A 5939 - Internship/Cooperative Education.**

**F A 5995 - Travel Study Topics.**

**FILM 1050 - Video Production/Post-Production I.**

**FILM 1060 - Camera/Multi-Media Production.**

**FILM 1100 - Introduction to Theatre, Film and Television.**

**FILM 1550 - Scriptwriting I.**

**FILM 1611 - Acting Lab I.**

**FILM 2000 - Film/Video Production II.**

**FILM 2060 - Film and Video Lighting and Grip.**

**FILM 2090 - Production Management Techniques.**

**FILM 2150 - Film and Video Post-Production II.**

**FILM 2500 - Introduction to Screenwriting for Film and Television.**

**FILM 2640 - Introduction to Digital Editing.**

**FILM 3100 - History of Film Production I.**

**FILM 3111 - Shooting Action and Physical Effects.**

**FILM 3150 - History of Film Production II.**

**FILM 3207 - Directing Workshop.**

**FILM 3222 - The Film and Video Business.**

**FILM 3264 - Advanced Digital Effects.**

**FILM 3270 - Film/Video Production III.**

**FILM 3275 - Film and Video Postproduction III.**

**FILM 3300 - Advanced Lighting for Film and Video.**

**FILM 3350 - Editing Aesthetics.**

**FILM 3400 - Intermediate Screenwriting.**

**FILM 3820 - Production Process.**

**FILM 3838 - Applications Seminar.**

**FILM 3910 - BA Junior Project.**

**FILM 3939 - Cooperative Education.**

**FILM 4209 - Advanced Production Management.**

**FILM 4270 - Film and Video Production IV.**

**FILM 4280 - Film and Video Postproduction IV.**

**FILM 4350 - Analysis of Contemporary Motion Picture Editing Techniques.**

**FILM 4400 - Advanced Screenwriting.**

**FILM 4500 - Writing for Episodic Television.**

**FILM 4600 - Topics in Film.**

**FILM 4720 - Reel Prep.**

**FILM 4840 - Independent Study: Film.**

**FILM 4910 - BA Senior Project.**

**FILM 5350 - Analysis of Contemporary Motion Picture Editing Techniques.**

**FILM 5500 - Writing for Episodic Television.**

**FILM 5600 - Topics in Film.**

**FILM 5840 - Independent Study: Film.**

**FNCE 3000 - Principles of Finance.**

**FNCE 3500 - Management of Business Capital.**

**FNCE 3939 - Internship/Cooperative Education.**

**FNCE 4330 - Investment and Portfolio Management.**

**FNCE 4350 - Financial Markets and Institutions.**

**FNCE 4370 - International Financial Management.**

**FNCE 4500 - Corporate Financial Decisions.**

**FNCE 4750 - Business Intelligence and Financial Modeling.**

**FNCE 4840 - Independent Study.**

**FNCE 4950 - Special Topics.**

**FNCE 5939 - Internship or Cooperative Education.**

**FNCE 6290 - Quantitative Methods for Finance.**

**FNCE 6300 - Macroeconomics and Financial Markets.**

**FNCE 6310 - Financial Decisions and Policies.**

**FNCE 6330 - Investment Management Analysis.**

**FNCE 6340 - Security Analysis and Firm Valuation.**

**FNCE 6350 - Financial Innovations.**

**FNCE 6360 - Management of Financial Institutions.**

**FNCE 6365 - Banking Principles and Practices.**

**FNCE 6370 - International Financial Management.**

**FNCE 6372 - Business Forecasting.**

**FNCE 6380 - Futures and Options.**

**FNCE 6382 - Survey of Financial Derivatives: Futures, Options and Swaps.**

**FNCE 6410 - Real Options and Investment Decisions Under Uncertainty.**

**FNCE 6411 - International Corporate Governance.**

**FNCE 6420 - Mergers and Acquisitions.**

**FNCE 6430 - Practical Equity Analysis & Portfolio Management.**

**FNCE 6450 - Short-Term Financial Management.**

**FNCE 6480 - Financial Modeling.**

**FNCE 6800 - Special Topics.**

**FNCE 6840 - Independent Study.**

**FNDS 5000 - Teaching as a Profession.**

**FNDS 5050 - Critical Issues in American Education.**

**FNDS 5100 - Education in Other Countries.**

**FNDS 5410 - History and Philosophy of Modern Education.**

**FNDS 5420 - History and Philosophy of Education: Twentieth Century America.**

**FNDS 5500 - Contemporary Philosophies of Education.**

**FNDS 5800 - Seminar: Foundations of Education.**

**FNDS 5810-5814 - Special Topics.**

**FNDS 5840 - Independent Study.**

**FNDS 5920 - Readings in Foundations of Education.**

**FNDS 6350 - Seminar: Foundations of Education.**

**FNDS 6600 - Special Topics: Laboratory in Educational Leadership and Innovation.**

**FNDS 6920 - Readings in Foundations of Education.**

**FNDS 6950 - Master's Thesis.**

**FNDS 7370 - Dissertation Seminar.**

**FNDS 7420 - History and Philosophy of Education: Twentieth Century America.**

**FNDS 7500 - Contemporary Philosophies of Education.**

**FNDS 7600 - Special Topics: Laboratory in Educational Leadership and Innovation.**

**FNDS 7840 - Independent Study.**

**FNDS 7930 - Teaching Internship in Foundations of Education.**

**FNDS 8990 - Doctor of Philosophy Dissertation.**

**FNDS 8991 - Doctor of Education Dissertation.**

**FR 1000 - Introduction to Cultures of the French- Speaking World: AH1.**

**FR 1010 - Beginning French I.**

**FR 1020 - Beginning French II.**

**FR 1111 - Freshman Seminar.**

**FR 2110 - Intermediate French I: Grammar Review, Reading and Composition.**

**FR 2120 - Intermediate French II: Grammar Review and Conversation.**

**FR 2939 - Internship/Cooperative Education.**

**FR 2995 - Travel Study: Amiens, France.**

**FR 3010 - French Phonetics and Pronunciation.**

**FR 3020 - Oral Practice.**

**FR 3050 - Advanced Grammar and Composition.**

**FR 3060 - Advanced French Language Skills.**

**FR 3082 - Introduction To Translation.**

**FR 3112 - Survey of French Literature I.**

**FR 3120 - French Cultural Identities: Myths and Realities.**

**FR 3122 - Survey of French Literature II.**

**FR 3130 - Current Topics of the French-Speaking World.**

**FR 3140 - Contemporary Francophone Cultures.**

**FR 3840 - Independent Study.**

**FR 3939 - Internship/Cooperative Education.**

**FR 3970 - Special Topics.**

**FR 3995 - Travel Study: Amiens, France.**

**FR 4010 - Advanced Composition: Stylistics.**

**FR 4050 - Advanced French for Business.**

**FR 4200 - French Civilization Through the Nineteenth Century.**

**FR 4210 - French Civilization - Twentieth and Twenty-First Centuries.**

**FR 4310 - Seventeenth Century Literature.**

**FR 4360 - Eighteenth Century Novel, Theater and Poetry.**

**FR 4430 - Nineteenth Century French Novel.**

**FR 4480 - Twentieth Century French Novel.**

**FR 4490 - Twentieth Century French Theater.**

**FR 4500 - Black Literature of the French-Speaking World.**

**FR 4510 - French Women Writers.**

**FR 4600 - History of the French Language.**

**FR 4840 - Independent Study.**

**FR 4970 - Special Topics.**

**FR 4995 - Travel Study Topics.**

**FR 5200 - French Civilization Through the Nineteenth Century.**

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**FR 5430 - Nineteenth Century French Novel.**

**FR 5480 - Twentieth Century French Novel.**

**FR 5510 - French Women Writers.**

**FR 5600 - History of the French Language.**

**FR 5840 - Independent Study.**

**FR 5995 - Travel Study Topics.**

**GEMM 6000 - 21st Century Global Energy Issues and Realities.**

**GEMM 6100 - Global Energy Economics and Geography.**

**GEMM 6200 - Environmental, Regulatory, Legal & Political Environment in the Energy Industry.**

**GEMM 6210 - Land Management and Energy Contracts.**

**GEMM 6300 - Renewable and Alternative Energy: Opportunities & Challenges.**

**GEMM 6400 - Leadership and Decision Making in the Global Energy Environment.**

**GEMM 6410 - People Management in the Global Energy Environment.**

**GEMM 6430 - Organizational Behavior in the Energy Industry.**

**GEMM 6450 - Strategic Management of the Energy Industry.**

**GEMM 6460 - Integrated Information Management for Energy Firms.**

**GEMM 6470 - Energy Marketing.**

**GEMM 6500 - Energy Accounting in Global Markets.**

**GEMM 6600 - Financial Management and Hedging in the Global Energy Markets.**

**GEMM 6610 - Advanced Financial Management in the Energy Industry.**

**GEMM 6620 - Energy Asset Management.**

**GEMM 6630 - Production and Supply Chain Management for the Energy Industry.**

**GEOG 1102 - World Regional Geography: SS2.**

**GEOG 1111 - Freshman Seminar.**

**GEOG 1202 - Introduction to Physical Geography: SC2.**

**GEOG 1302 - Introduction to Human Geography.**

**GEOG 1332 - Topics in Science.**

**GEOG 1602 - Introduction to Urban Studies: SS2.**

**GEOG 2202 - Natural Hazards: SS2.**

**GEOG 2939 - Internship/Cooperative Education.**

**GEOG 3080 - Introduction to Mapping and Map Analysis.**

**GEOG 3100 - Geography of Colorado.**

**GEOG 3120 - Geography of Europe.**

**GEOG 3130 - Central America and the Caribbean.**

**GEOG 3140 - Geography of South America.**

**GEOG 3150 - Middle East.**

**GEOG 3160 - Geography of China.**

**GEOG 3232 - Weather and Climate.**

**GEOG 3240 - Colorado Climates.**

**GEOG 3302 - Water Resources.**

**GEOG 3411 - Globalization and Regional Development.**

**GEOG 3430 - Geography of Tourism.**

**GEOG 3501 - Geography of Health.**

**GEOG 3770 - Geography and Film.**

**GEOG 3840 - Independent Study.**

**GEOG 3939 - Internship/Cooperative Education.**

**GEOG 3990 - Special Topics.**

**GEOG 4000 - Planning Methods I.**

**GEOG 4010 - Biogeochemical Cycles.**

**GEOG 4020 - Earth Environments and Human Impacts.**

**GEOG 4060 - Remote Sensing I: Introduction to Environmental Remote Sensing.**

**GEOG 4070 - Remote Sensing II: Advanced Remote Sensing.**

**GEOG 4080 - Introduction to GIS.**

**GEOG 4081 - Introduction to Cartography and Computer Mapping.**

**GEOG 4085 - GIS Applications for the Urban Environment.**

**GEOG 4090 - Environmental Modeling with Geographic Information Systems.**

**GEOG 4095 - Deploying GIS Functionality on the Web.**

**GEOG 4220 - Environmental Impact Assessment.**

**GEOG 4230 - Hazard Mitigation and Vulnerability Assessment.**

**GEOG 4235 - GIS Applications in the Health Sciences.**

**GEOG 4240 - Principles of Geomorphology.**

**GEOG 4260 - Natural Resource Planning and Management.**

**GEOG 4265 - Sustainability in Resources Management.**

**GEOG 4270 - Glacial Geomorphology.**

**GEOG 4335 - Contemporary Environmental Issues.**

**GEOG 4350 - Environment and Society in the American Past.**

**GEOG 4400 - Regional Economic Development.**

**GEOG 4630 - Transportation Planning I: Transport Network Analysis.**

**GEOG 4640 - Urban Geography: Denver and the U.S..**

**GEOG 4670 - Transportation Planning II: Urban Transportation Planning.**

**GEOG 4770 - Applied Statistics for the Natural Sciences.**

**GEOG 4840 - Independent Study.**

**GEOG 4940 - Senior Seminar.**

**GEOG 4950 - Honors Thesis.**

**GEOG 4990 - Special Topics.**

**GEOG 4995 - Travel Study.**

**GEOG 5060 - Remote Sensing I: Introduction to Environmental Remote Sensing.**

**GEOG 5070 - Remote Sensing II: Advanced Remote Sensing.**

**GEOG 5080 - Introduction to GIS.**

**GEOG 5081 - Introduction to Cartography and Computer Mapping.**

**GEOG 5085 - GIS Applications for the Urban Environment.**

**GEOG 5090 - Environmental Modeling with Geographic Information Systems.**

**GEOG 5095 - Deploying GIS Functionality on the Web.**

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**GEOG 5335 - Contemporary Environmental Issues.**

**GEOG 5350 - Environment and Society in the American Past.**

**GEOG 5640 - Urban Geography: Denver and the U.S..**

**GEOG 5840 - Independent Study.**

**GEOG 5939 - Internship/Cooperative Education.**

**GEOG 5990 - Special Topics In Geography.**

**GEOG 5995 - Travel Study.**

**GEOG 6840 - Independent Study.**

**GEOG 6950 - Master's Thesis.**

**GEOG 8990 - Doctor's Thesis.**

**GEOL 1022 - History of Life.**

**GEOL 1072 - Physical Geology: Surface Processes: SC1.**

**GEOL 1082 - Physical Geology: Internal Processes: SC1.**

**GEOL 1111 - Freshman Seminar.**

**GEOL 1115 - Earth Sciences Content.**

**GEOL 1202 - Introduction to Oceanography.**

**GEOL 1302 - Introduction to Astrogeology.**

**GEOL 1400 - Geology of the National Parks.**

**GEOL 1402 - Introduction to the Ice Ages.**

**GEOL 1840 - Independent Study.**

**GEOL 2939 - Internship/Cooperative Education.**

**GEOL 3011 - Mineralogy.**

**GEOL 3032 - Geology of Colorado.**

**GEOL 3100 - Current Perspectives on the Evolution of Consciousness and Culture.**

**GEOL 3102 - Dinosaurs Past and Present.**

**GEOL 3231 - Introductory Petrology.**

**GEOL 3411 - Introductory Paleontology.**

**GEOL 3415 - Museum Studies in Paleontology.**

**GEOL 3418 - Field Paleontology.**

**GEOL 3421 - Sedimentation and Stratigraphy.**

**GEOL 3840 - Independent Study.**

**GEOL 3939 - Internship/Cooperative Education.**

**GEOL 4000 - Biogeochemical Cycles.**

**GEOL 4020 - Earth Environments and Human Impacts.**

**GEOL 4030 - Environmental Geology.**

**GEOL 4060 - Remote Sensing I: Introduction to Environmental Remote Sensing.**

**GEOL 4111 - Field Geology.**

**GEOL 4270 - Glacial Geomorphology.**

**GEOL 4402 - Unsaturated Zone Hydrology.**

**GEOL 4460 - Vertebrate Paleontology and Evolution.**

**GEOL 4513 - Geology of the Grand Canyon.**

**GEOL 4630 - Principles of Geomorphology.**

**GEOL 4770 - Applied Statistics for the Natural Sciences.**

**GEOL 4780 - Engineering Geology.**

**GEOL 4840 - Independent Study.**

**GEOL 5001 - RM-MSMSP: Earth Processes I.**

**GEOL 5002 - RM-MSMSP: Earth Sciences II - Sedimentology and Paleontology.**

**GEOL 5030 - Environmental Geology.**

**GEOL 5060 - Remote Sensing I: Introduction to Environmental Remote Sensing.**

**GEOL 5770 - Applied Statistics for the Natural Sciences.**

**GEOL 5780 - Engineering Geology.**

**GEOL 5939 - Internship/Cooperative Education.**

**GEOL 5950 - Master's Thesis.**

**GEOL 6840 - Independent Study.**

**GEOL 6950 - Master's Thesis.**

**GEOL 6960 - Master's Project.**

**GER 1000 - Germany and the Germans: AH1.**

**GER 1010 - Beginning German I.**

**GER 1020 - Beginning German II.**

**GER 1111 - Freshman Seminar.**

**GER 2110 - Intermediate German I.**

**GER 2130 - Intermediate German II.**

**GER 2150 - Intermediate German II: Grammar Review and Oral Practice.**

**GER 2210 - Readings and Translation.**

**GER 2240 - Intermediate Composition and Vocabulary Building.**

**GER 2840 - Independent Study.**

**GER 2939 - Internship/Cooperative Education.**

**GER 2995 - Travel Study Topics.**

**GER 3030 - Advanced Conversation: Idioms and Vocabulary Building.**

**GER 3050 - Phonetics and Pronunciation of German.**

**GER 3060 - Advanced German Language Skills I.**

**GER 3070 - Advanced German Language Skills II.**

**GER 3080 - Advanced German Language Skills III.**

**GER 3090 - Advanced German Language Skills IV.**

**GER 3110 - Introduction to German Literature I.**

**GER 3130 - Current Topics of the German-Speaking World.**

**GER 3200 - Current German Society and Culture.**

**GER 3230 - German Civilization I: From Medieval Through Age of Idealism.**

**GER 3240 - German Civilization II: The Modern Age.**

**GER 3310 - Techniques of Translation.**

**GER 3512 - Faust in Literature and Music.**

**GER 3540 - German Cinema and Society.**

**GER 3840 - Independent Study.**

**GER 3939 - Internship/Cooperative Education.**

**GER 3995 - Travel Study Topics.**

**GER 4050 - Advanced German Phonetics and Language History.**

**GER 4840 - Independent Study.**

**GER 4995 - Travel Study Topics.**

**GER 5995 - Travel Study Topics.**

**HBSC 1111 - Freshman Seminar.**

**HBSC 2001 - Introduction to Community and Population Health Science: SS3.**

**HBSC 2051 - Introduction to Population Studies.**

**HBSC 3002 - Ethnicity, Health and Social Justice.**

**HBSC 3010 - Evolution of Human Sexuality.**

**HBSC 3021 - Fundamentals of Health Promotion.**

**HBSC 3031 - Health, Human Biology and Behavior.**

**HBSC 3041 - Health, Culture and Society.**

**HBSC 3200 - Human Migration: Nomads, Sojourners, and Settlers.**

**HBSC 3939 - Cooperative Education.**

**HBSC 4001 - Introduction to Epidemiology.**

**HBSC 4010 - Global Health Studies I: The Biocultural Basis of Health.**

**HBSC 4020 - Global Health Studies II: Comparative Health Systems.**

**HBSC 4021 - Community Health Assessment.**

**HBSC 4031 - Ethnographic Research in Public Health.**

**HBSC 4060 - Evolutionary Medicine.**

**HBSC 4080 - Global Health Practice.**

**HBSC 4090 - Political Economy of Drug Culture.**

**HBSC 4110 - Public Health Perspectives on Family Violence.**

**HBSC 4200 - The Global HIV/AIDS Epidemic.**

**HBSC 4620 - Health Risk Communication.**

**HBSC 4999 - Topics in the Health and Behavioral Sciences.**

**HBSC 5001 - Introduction to Epidemiology.**

**HBSC 5010 - Global Health Studies I: The Biocultural Basis of Health.**

**HBSC 5020 - Global Health Studies II: Comparative Health Systems.**

**HBSC 5021 - Community Health Assessment.**

**HBSC 5031 - Ethnographic Research in Public Health.**

**HBSC 5060 - Evolutionary Medicine.**

**HBSC 5080 - Global Health Practice.**

**HBSC 5090 - Political Economy of Drug Culture.**

**HBSC 5110 - Public Health Perspectives on Family Violence.**

**HBSC 5200 - The Global HIV/AIDS Epidemic.**

**HBSC 5620 - Health Risk Communication.**

**HBSC 5939 - Cooperative Education.**

**HBSC 5999 - Topics in the Health and Behavioral Sciences.**

**HBSC 6320 - Human Genetics: Legal, Ethical and Social Issues.**

**HBSC 6840 - Independent Study.**

**HBSC 7001 - Colloquium Series in the Health and Behavioral Sciences.**

**HBSC 7011 - Theoretical Perspectives in Health and Behavioral Science I.**

**HBSC 7021 - Theoretical Perspectives in Health and Behavioral Science II.**

**HBSC 7031 - Human Ecology and Environmental Adaptation.**

**HBSC 7041 - Research Design and Methods in the Health and Behavioral Sciences I.**

**HBSC 7051 - Qualitative Research Design and Methods.**

**HBSC 7071 - Social and Behavioral Determinants of Health and Disease.**

**HBSC 7111 - Applications of the Health and Behavioral Sciences.**

**HBSC 7121 - Dissertation Proposal and Research.**

**HBSC 7210 - Human Health and Environmental Pollution.**

**HBSC 7235 - GIS Applications in the Health Sciences.**

**HBSC 7310 - Environmental Epidemiology.**

**HBSC 7320 - Human Genetics: Legal, Ethical and Social Issues.**

**HBSC 7340 - Risk Assessment.**

**HBSC 7360 - Toxicology.**

**HBSC 7400 - Topics in the Health and Behavioral Sciences.**

**HBSC 8990 - Doctoral Dissertation.**

**HIST 1016 - World History to 1500.**

**HIST 1026 - World History Since 1500.**

**HIST 1111 - Freshman Seminar.**

**HIST 1211 - Western Civilization I.**

**HIST 1212 - Western Civilization II.**

**HIST 1361 - U.S. History to 1876: HI1.**

**HIST 1362 - U.S. History Since 1876: HI1.**

**HIST 1381 - Paths to the Present I: HI1.**

**HIST 1382 - Getting Here: Paths to the Present II: HI1.**

**HIST 2939 - Internship/Cooperative Education.**

**HIST 3031 - Theory and Practice of History: An Introduction to the Major.**

**HIST 3121 - The World at War, 1914-1945.**

**HIST 3230 - The American Presidency.**

**HIST 3231 - Famous U.S. Trials.**

**HIST 3232 - The American Colonies to 1750.**

**HIST 3235 - U.S. Labor History, 1800 to the Present.**

**HIST 3343 - Women in U.S. History.**

**HIST 3345 - Immigration and Ethnicity in American History.**

**HIST 3347 - African-American History, 1619-Present.**

**HIST 3348 - The African-American Protest Tradition, 1865 - Present.**

**HIST 3350 - Colonial Latin America.**

**HIST 3360 - Denver History.**

**HIST 3364 - Native Americans and Spaniards in North America.**

**HIST 3365 - Aztlan in the United States: Chicano History from 1821.**

**HIST 3366 - Environmental History of North America.**

**HIST 3396 - History of the American Indian.**

**HIST 3451 - Introduction to African History.**

**HIST 3460 - Introduction to Latin American History.**

**HIST 3470 - Introduction to Asian History.**

**HIST 3480 - Introduction to European History.**

**HIST 3481 - Greece and the Hellenistic World.**

**HIST 3482 - Rome: City and Empire.**

**HIST 3483 - Introduction to Modern South Asia.**

**HIST 3484 - British Isles To 1714.**

**HIST 3485 - British Isles Since 1714.**

**HIST 3500 - African History in Novels and Films.**

**HIST 3601 - Colorado History.**

**HIST 3606 - Science, Technology, and Society in the Modern World.**

**HIST 3706 - The Age of Revolution.**

**HIST 3810 - Topics.**

**HIST 3840 - Independent Study.**

**HIST 3939 - Internship/Cooperative Education.**

**HIST 3995 - Travel Study Topics.**

**HIST 4020 - Medieval Europe.**

**HIST 4021 - Renaissance Europe.**

**HIST 4022 - Reformation Europe.**

**HIST 4024 - Nineteenth Century Europe.**

**HIST 4025 - Twentieth Century Europe.**

**HIST 4027 - The Enlightenment: Eighteenth Century Intellectual History.**

**HIST 4028 - After the Revolution: Nineteenth Century Intellectual History.**

**HIST 4029 - Fin de Siecle: Late Nineteenth and Early Twentieth Century Intellectual History.**

**HIST 4030 - Europe During the World Wars.**

**HIST 4031 - Contemporary Europe.**

**HIST 4032 - Globalization in World History Since 1945.**

**HIST 4034 - Core Themes in European History.**

**HIST 4045 - Tudor-Stuart England.**

**HIST 4046 - Victorians and Victorianism.**

**HIST 4051 - Great Britain: 1760-1914.**

**HIST 4053 - British Empire.**

**HIST 4055 - The Atlantic Slave Trade: Africa, Caribbean and U.S..**

**HIST 4061 - French Revolution and Napoleon.**

**HIST 4062 - Modern France, 1789 to the Present.**

**HIST 4071 - Modern Germany.**

**HIST 4074 - Post-War Germany.**

**HIST 4075 - Travel Stories and Origins of Cultural Anthropology.**

**HIST 4076 - History of Modern Science.**

**HIST 4082 - Reform and Revolution in Russia: The 1860s to 1917.**

**HIST 4083 - Russia Since 1917.**

**HIST 4086 - Eastern Europe.**

**HIST 4133 - Management of Material Culture and Museum Collections.**

**HIST 4201 - Core Themes in U.S. History.**

**HIST 4210 - The American Revolution.**

**HIST 4212 - U.S. Civil War and Reunion.**

**HIST 4213 - The Gilded Age and Early 20th Century Challenges: U.S. History, 1865-1932.**

**HIST 4216 - History of American Popular Culture.**

**HIST 4217 - Consumer Culture.**

**HIST 4219 - Depression, Affluence and Anxiety: U.S. History, 1929 to the Present.**

**HIST 4220 - U.S. Foreign Policy Since 1912.**

**HIST 4222 - U.S. Society and Thought to 1860.**

**HIST 4223 - U.S. Society and Thought Since 1860.**

**HIST 4225 - Urban America: Colonial Times to the Present.**

**HIST 4226 - U.S. Business History.**

**HIST 4227 - American West.**

**HIST 4228 - Western Art and Architecture.**

**HIST 4229 - Colorado Historic Places.**

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**HIST 4234 - Introduction to Public History.**

**HIST 4235 - Sports and American Society.**

**HIST 4236 - Colorado Mining and Railroads.**

**HIST 4238 - U.S. History Through Fiction.**

**HIST 4240 - National Parks History.**

**HIST 4242 - Oral History.**

**HIST 4243 - Public History Administration.**

**HIST 4244 - Interpretation of History in Museums: Exhibits and Education.**

**HIST 4245 - Heritage Tourism.**

**HIST 4303 - Sex and Gender in Modern Britain.**

**HIST 4306 - Survey of Feminist Thought.**

**HIST 4307 - History of Sexuality.**

**HIST 4308 - Crime, Policing, and Justice in American History.**

**HIST 4345 - Gender, Science, and Medicine: 1600 to the Present.**

**HIST 4346 - Medicine and Society: the Ancients to the Present.**

**HIST 4411 - Modern Mexico.**

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**HIST 4414 - Nationalism and State Building in Latin America, 1750-1850.**

**HIST 4415 - Social Revolutions in Latin America.**

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**HIST 4417 - Commodities and Globalization: Dessert in World History.**

**HIST 4418 - Textiles and Trade, Culture and Cloth: The Fabric of Premodern World History.**

**HIST 4420 - Traditional China: China to 1600.**

**HIST 4421 - Modern China.**

**HIST 4431 - Modern Japan.**

**HIST 4451 - Southern Africa.**

**HIST 4455 - African Struggle for Independence.**

**HIST 4460 - The Islamic Golden Age.**

**HIST 4461 - The Modern Middle East.**

**HIST 4471 - The Second World War.**

**HIST 4472 - The 1950s: Korean War, the Cold War and Social Transformation.**

**HIST 4475 - The Vietnam War.**

**HIST 4501 - World History for Educators.**

**HIST 4503 - Topics in History of Science.**

**HIST 4504 - Animals in U.S. History.**

**HIST 4621 - Explorers and Exploration.**

**HIST 4810 - Special Topics.**

**HIST 4839 - History Seminar.**

**HIST 4840 - Independent Study.**

**HIST 4849 - Independent Study History Honors Research Paper.**

**HIST 5020 - Medieval Europe.**

**HIST 5021 - Renaissance Europe.**

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**HIST 5455 - African Struggle for Independence.**

**HIST 5460 - The Islamic Golden Age.**

**HIST 5461 - The Modern Middle East.**

**HIST 5464 - Problems and Methods in Teaching History and Social Studies I.**

**HIST 5465 - Problems and Methods in Teaching History and Social Studies II.**

**HIST 5466 - Teaching About Ethnicity, Race, and Prejudice.**

**HIST 5471 - The Second World War.**

**HIST 5472 - The 1950s: Korean War, the Cold War and Social Transformation.**

**HIST 5475 - The Vietnam War.**

**HIST 5501 - World History for Educators.**

**HIST 5502 - World History For Educators Workshops.**

**HIST 5503 - Topics in History of Science.**

**HIST 5504 - Animals in U.S. History.**

**HIST 5621 - Explorers and Exploration.**

**HIST 5810 - Special Topics.**

**HIST 5840 - Independent Study.**

**HIST 5850 - History in the Community: History Day Mentoring.**

**HIST 5939 - Internship/Cooperative Education.**

**HIST 5995 - Travel Study Topics.**

**HIST 6013 - Introduction to the Professional Study of History.**

**HIST 6645 - Archival Management.**

**HIST 6840 - Independent Study.**

**HIST 6920 - Readings in European History.**

**HIST 6925 - Readings in Early U.S. History.**

**HIST 6926 - Readings in Later U.S. History, 1865-1932.**

**HIST 6927 - Readings in Public History.**

**HIST 6929 - Readings in Later U.S. History, 1929 to the Present.**

**HIST 6931 - Readings: Special Subjects in History.**

**HIST 6939 - Cooperative Education.**

**HIST 6950 - Master's Thesis.**

**HIST 6951 - Masters Project: Advanced History Curriculum Development.**

**HIST 6980 - Seminar in European History.**

**HIST 6981 - Seminar in British History.**

**HIST 6986 - Seminar in Later U.S. History.**

**HIST 6989 - Seminar: Special Subjects in History.**

**HIST 6992 - Seminar: Colorado Studies.**

**HIST 6993 - Seminar: History of Technology.**

**HLTH 6010 - Health Care Systems.**

**HLTH 6040 - Health Care Financial Management.**

**HLTH 6055 - Transformational Leadership/Metaphysical Management.**

**HLTH 6070 - International Health Policy and Management.**

**HLTH 6071 - Introduction To Health Information Technology.**

**HLTH 6072 - Fundamentals of Health Information Technology Management.**

**HLTH 6075 - International Health Travel Study.**

**HLTH 6740 - Profiles in Health Care.**

**HLTH 6800 - Special Topics.**

**HLTH 6840 - Independent Study.**

**HLTH 6911 - Health Field Studies.**

**HON 1111 - Honors Gateway Freshman Seminar.**

**HUM 1012 - The Humanistic Tradition: Modes of Expression.**

**HUM 3250 - Introduction to Law Studies.**

**HUM 5000 - 19th Century Philosophy.**

**HUM 5013 - Philosophical Problems in the Social Sciences and the Humanities.**

**HUM 5020 - Elements of Social Thought.**

**HUM 5025 - Methods and Texts of the Humanities.**

**HUM 5101 - Pragmatism: Classical American Philosophy.**

**HUM 5220 - Aesthetics and the Philosophy of Art.**

**HUM 5242 - Bioethics.**

**HUM 5250 - Environmental Ethics.**

**HUM 5520 - The City Beautiful: Art, Architecture and Theory in Urban History.**

**HUM 5550 - Paris 1910: Art, Philosophy and Psychology.**

**HUM 5600 - Philosophy of Religion.**

**HUM 5650 - Reflections on Modernity.**

**HUM 5660 - Visual Arts: Interpretations and Contexts.**

**HUM 5720 - Sexuality, Gender and Their Visual Representation.**

**HUM 5750 - Philosophical Psychology.**

**HUM 5833 - Existentialism.**

**HUM 5840 - Independent Study.**

**HUM 5920 - Philosophy of Media and Technology.**

**HUM 5924 - Directed Research and Reading in Interdisciplinary Humanities.**

**HUM 5933 - Philosophy of Eros.**

**HUM 5939 - Internship/Cooperative Education.**

**HUM 5950 - Master's Thesis.**

**HUM 5960 - Master's Project.**

**HUM 5984 - Topics: Interdisciplinary Humanities.**

**I T 5110 - Instructional Development and Production.**

**I T 5120 - Instructional Models, Strategies and Tactics.**

**I T 5130 - Instructional Message Design.**

**I T 5140 - Performance Technology.**

**I T 5160 - Managing Information and Learning Technology Programs.**

**I T 5310 - Producing Educational Materials.**

**I T 5330 - Digital Storytelling.**

**I T 5340 - Digital Storytelling in the Curriculum.**

**I T 5350 - Leadership for Digital Storytelling.**

**I T 5370 - Digital Video For Interactivity.**

**I T 5410 - Designing Text and Graphics for Instruction.**

**I T 5510 - Integrating Technology In The Curriculum.**

**I T 5520 - Technologies for Learning and Productivity.**

**I T 5600 - Multimedia Authoring.**

**I T 5610 - Principles for Designing Multimedia.**

**I T 5640 - Technology of Student-Centered Learning Environments.**

**I T 5650 - Policies and Planning for eLearning Programs.**

**I T 5660 - Designing and Teaching in eLearning Environments.**

**I T 5670 - Developing eLearning Instruction.**

**I T 5680 - Integrating Media in eLearning Environments.**

**I T 5690 - Enhancing Web-based Learning Environments With JavaScript and PHP Programming.**

**I T 5710 - Telecommunications and Networking in Education.**

**I T 5830 - Information and Learning Technologies Workshop.**

**I T 5840 - Independent Study.**

**I T 5990 - Special Topics in Instructional Technology.**

**I T 5998 - Professional Development Activities.**

**I T 6110 - Managing Instructional Development.**

**I T 6120 - Design Studio For Project Management and Collaboration.**

**I T 6130 - Implementing and Evaluating Instruction.**

**I T 6515 - Leadership for Learning Technologies Integration.**

**I T 6530 - Development Projects in Information and Learning Technologies.**

**I T 6720 - Research in Information and Learning Technologies.**

**I T 6730 - Comparative Models of Instructional Design.**

**I T 6740 - Learning Processes Applied to Instructional Technology.**

**I T 6750 - Current Trends and Issues in Instructional Technology.**

**I T 6760 - Advanced Seminar in Instructional Design and Development.**

**I T 6840 - Independent Study.**

**I T 6930 - Internship in Information and Learning Technologies.**

**I T 6950 - Master's Thesis.**

**I T 6960 - Master's Project.**

**I T 6999 - Leadership and Practice in Information and Learning Technologies.**

**INTB 3000 - Global Perspectives.**

**INTB 3901 - The Construction of the European Union.**

**INTB 3902 - Intercultural Management: European Values and Behavior.**

**INTB 3903 - International Business Law.**

**INTB 3904 - International Negotiation.**

**INTB 3905 - International Marketing and Distribution.**

**INTB 3906 - International Communication and Consumer Behavior.**

**INTB 3907 - European Marketing and Management of a Product Line.**

**INTB 3908 - Organizations and Culture.**

**INTB 3909 - Single Market, European Law and Euroland.**

**INTB 3910 - International Corporate Finance.**

**INTB 3911 - The United States Of Europe.**

**INTB 3939 - Internship/Cooperative Education.**

**INTB 4400 - Environments of International Business.**

**INTB 4950 - Special Topics in International Business.**

**INTB 5800 - Special Topics in International Business.**

**INTB 5939 - Internship/Cooperative Education.**

**INTB 6000 - Introduction to International Business.**

**INTB 6020 - Cross-Cultural Management.**

**INTB 6022 - International Business Negotiations.**

**INTB 6024 - International Trade Finance and Management.**

**INTB 6026 - International Marketing.**

**INTB 6040 - International Human Resources Management.**

**INTB 6060 - The Legal Aspects of International Business.**

**INTB 6080 - Global Competition.**

**INTB 6082 - Marketing in Emerging Markets.**

**INTB 6094 - Marketing Issues in the Chinese Environment.**

**INTB 6200 - International Business Policy.**

**INTB 6370 - International Accounting.**

**INTB 6372 - International Financial Management.**

**INTB 6411 - International Corporate Governance.**

**INTB 6750 - Research Methods in International Business.**

**INTB 6800 - Special Topics in International Business.**

**INTB 6840 - Independent Study.**

**INTB 6950 - Master's Thesis.**

**IPTE 4000 - Elementary Literacy Instruction and Assessment.**

**IPTE 4001 - Elementary Literacy Assessment and Instruction Teaching Lab.**

**IPTE 4002 - Math Instruction and Assessment.**

**IPTE 4004 - Science In the Elementary Curriculum.**

**IPTE 4005 - Social Studies In the Elementary Curriculum.**

**IPTE 4006 - Integrated Science and Social Studies in the Elementary Curriculum.**

**IPTE 4020 - Exploring Diversity in Content and Pedagogy I.**

**IPTE 4025 - Secondary Literacy Instruction and Assessment.**

**IPTE 4026 - Content Literacy Assessment and Instruction Teaching Lab.**

**IPTE 4050 - Planning for the First Year of Teaching.**

**IPTE 4120 - Negotiating the Classroom Culture with Children.**

**IPTE 4121 - Negotiating the Classroom Culture with Adolescents.**

**IPTE 4130 - Democratic Schooling: Issues of Laws and Ethics.**

**IPTE 4300 - Curriculum and Methods in Secondary Math.**

**IPTE 4350 - Modern Trends in Science Education.**

**IPTE 4351 - Inquiry Science Methods.**

**IPTE 4401 - Assessment In Math Education.**

**IPTE 4460 - Thoughtful Inquiry In Teaching Social Studies: Culture, People and Change.**

**IPTE 4465 - Thoughtful Inquiry In Teaching Social Studies: Power, Technology and Society.**

**IPTE 4740 - Adolescent Literature.**

**IPTE 4760 - Theory and Methods Of Teaching Secondary English.**

**IPTE 4910 - Internship and Site Seminar I.**

**IPTE 4911 - Internship and Site Seminar II.**

**IPTE 4912 - Internship and Site Seminar III.**

**IPTE 4913 - Internship and Site Seminar IV.**

**IPTE 4915 - Internship and Seminar I.**

**IPTE 4916 - Internship and Seminar II.**

**IPTE 4917 - Internship and Seminar III.**

**IPTE 4918 - Internship and Seminar IV.**

**IPTE 5000 - Elementary Literacy Instruction and Assessment.**

**IPTE 5001 - Elementary Literacy Assessment and Instruction Teaching Lab.**

**IPTE 5002 - Math Instruction and Assessment.**

**IPTE 5004 - Science In the Elementary Curriculum.**

**IPTE 5005 - Social Studies In the Elementary Curriculum.**

**IPTE 5006 - Integrated Science and Social Studies in the Elementary Curriculum.**

**IPTE 5020 - Exploring Diversity in Content and Pedagogy I.**

**IPTE 5025 - Secondary Literacy Instruction and Assessment.**

**IPTE 5026 - Content Literacy Assessment and Instruction Teaching Lab.**

**IPTE 5050 - Planning for the First Year of Teaching.**

**IPTE 5070 - Teacher Inquiry I.**

**IPTE 5071 - Teacher Inquiry II.**

**IPTE 5080 - Principles and Practice of Change.**

**IPTE 5120 - Negotiating the Classroom Culture with Children.**

**IPTE 5121 - Negotiating the Classroom Culture with Adolescents.**

**IPTE 5130 - Democratic Schooling: Issues of Laws and Ethics.**

**IPTE 5300 - Curriculum and Methods in Secondary Math.**

**IPTE 5350 - Modern Trends in Science Education.**

**IPTE 5351 - Inquiry Science Methods.**

**IPTE 5401 - Assessment In Math Education.**

**IPTE 5460 - Thoughtful Inquiry In Teaching Social Studies: Culture, People and Change.**

**IPTE 5465 - Thoughtful Inquiry In Teaching Social Studies: Power, Technology and Society.**

**IPTE 5690 - Curriculum and Methods in Foreign Language.**

**IPTE 5691 - Curriculum and Methods in Foreign Language II.**

**IPTE 5740 - Adolescent Literature.**

**IPTE 5760 - Theory and Methods Of Teaching Secondary English.**

**IPTE 5840 - Independent Study.**

**IPTE 5910 - Internship and Site Seminar I.**

**IPTE 5911 - Internship and Site Seminar II.**

**IPTE 5912 - Internship and Site Seminar III.**

**IPTE 5913 - Internship and Site Seminar IV.**

**IPTE 5915 - Internship and Seminar I.**

**IPTE 5916 - Internship and Seminar II.**

**IPTE 5917 - Internship and Seminar III.**

**IPTE 5918 - Internship and Seminar IV.**

**IPTE 5919 - Second Endorsement Internship or Guest Student Teaching.**

**ISMG 2050 - Introduction to Business Problem Solving.**

**ISMG 2075 - Introduction to Microsoft Access.**

**ISMG 2200 - Introduction to Business Programming.**

**ISMG 2800 - Designing for the Web.**

**ISMG 3000 - Principles of Information Systems.**

**ISMG 3100 - Information Technology Hardware and Software.**

**ISMG 3200 - Programming, Data, File and Object Structures.**

**ISMG 3500 - Enterprise Data and Content Management.**

**ISMG 3600 - System Strategy, Architecture and Design.**

**ISMG 3939 - Internship/Cooperative Education.**

**ISMG 4200 - Building Business Applications.**

**ISMG 4300 - Information Security and Compliance.**

**ISMG 4500 - Database Management and Applications.**

**ISMG 4600 - System Analysis and Design.**

**ISMG 4700 - Business Data Communications and Networking.**

**ISMG 4750 - Business Intelligence and Financial Modeling.**

**ISMG 4760 - Customer Relationship Management.**

**ISMG 4780 - Accounting IS Processes and Control.**

**ISMG 4800 - eBusiness Systems Development.**

**ISMG 4840 - Independent Study.**

**ISMG 4900 - Project Management and Practice.**

**ISMG 4950 - Special Topics.**

**ISMG 5939 - Internship/Cooperative Education.**

**ISMG 6020 - Net Programming Fundamentals.**

**ISMG 6040 - Business Process Management.**

**ISMG 6060 - Analysis, Modeling and Design.**

**ISMG 6080 - Database Management Systems.**

**ISMG 6120 - Internet and Mobile Technologies.**

**ISMG 6140 - Distributed Object Systems Development.**

**ISMG 6180 - Information Systems Management and Strategy.**

**ISMG 6220 - Business Intelligence Systems.**

**ISMG 6240 - Website Development Practice and Technologies.**

**ISMG 6260 - Software Project Management.**

**ISMG 6280 - Service Oriented Architecture.**

**ISMG 6400 - Global eBusiness.**

**ISMG 6420 - Global Enterprise Systems.**

**ISMG 6430 - Information Systems Security and Privacy.**

**ISMG 6440 - Knowledge Management.**

**ISMG 6450 - IT Project Management.**

**ISMG 6460 - Emerging Technologies.**

**ISMG 6480 - Data Warehousing and Administration.**

**ISMG 6510 - Accounting and Information Systems Processes and Controls.**

**ISMG 6800 - Special Topics.**

**ISMG 6810 - Business Intelligence in Healthcare.**

**ISMG 6820 - Business Intelligence and Financial Modeling.**

**ISMG 6840 - Independent Study.**

**ISMG 6950 - Master's Thesis.**

**ISMG 7001 - AI-Based Decision Making.**

**ISMG 7002 - Computer Security.**

**ISMG 7200 - Advances In Management Information Systems.**

**ISMG 7210 - Topics In Analytical Research In Management Information Systems.**

**ISMG 7211 - Topics In Behavioral and Organizational Research In Management Information Systems.**

**ISMG 7220 - Research methods: Design and Analysis.**

**ISMG 7654 - Algorithms For Communication Networks.**

**ISMG 7800 - Special Topics.**

**ISMG 7840 - Independent Study: Pre-Dissertation Research.**

**ISMG 8990 - Dissertation Development.**

**ITE 4700 - Instructional Teamwork Academy.**

**ITE 4710 - Student Supervision Academy.**

**ITE 4720 - Interpersonal Skills Academy.**

**ITE 4730 - Personal Growth and Development Academy.**

**ITE 4740 - Behavior Management Academy.**

**ITE 4750 - Instructional Strategies Academy.**

**ITE 4760 - Instructional Technology Academy.**

**ITE 4770 - Vocabulary and Comprehension.**

**ITE 4780 - Assisting with Phonemic Awareness and Phonics in the Classroom.**

**ITE 4790 - Assisting with Reading Fluency in the Classroom.**

**ITE 4800 - Grades K-4 Mathematics.**

**ITE 4810 - Number Theory and Rational Numbers.**

**ITE 4820 - Algebraic Concepts and Spatial Reasoning.**

**ITE 5022 - Learning and Classroom Management Strategies for Secondary Schools.**

**ITE 5023 - Literacy Strategies for Secondary Schools.**

**ITE 5025 - Reading Instruction and Assessment K-5.**

**ITE 5800 thru 5805 - Special Topics in Education.**

**ITE 5840 - Independent Study.**

**L A 5501 - Landscape Architecture Design Studio 1.**

**L A 5502 - Landscape Architecture Design Studio 2.**

**L A 5503 - Landscape Architecture Design Studio 3.**

**L A 5510 - Graphic Media in Landscape Architecture.**

**L A 5521 - History of Landscape Architecture.**

**L A 5532 - Landform Manipulation.**

**L A 5572 - Landscape Ecology.**

**L A 5573 - Applied Advanced Landscape Ecology Workshop.**

**L A 6520 - Landscape Architecture in Other Cultures.**

**L A 6604 - Landscape Architecture Design Studio 4.**

**L A 6605 - Landscape Architecture Design Studio 5.**

**L A 6606 - Landscape Architecture Design Studio 6.**

**L A 6607 - Landscape Architecture Design Studio 7.**

**L A 6608 - Landscape Architecture Design Studio 8.**

**L A 6620 - Landscape Architecture Theory and Criticism.**

**L A 6622 - Visual Quality Analysis.**

**L A 6624 - The Built Environment in Other Cultures I: Research Design.**

**L A 6625 - Landscape Architecture Field Studies.**

**L A 6631 - Landscape Construction Materials and Methods.**

**L A 6632 - Site Planning.**

**L A 6641 - Computer Applications in Landscape Architecture.**

**L A 6642 - Landscape Architecture Digital Design Workshop.**

**L A 6670 - Plants in Design.**

**L A 6671 - Plant Material Identification.**

**L A 6686 - Special Topics in Landscape Architecture.**

**L A 6710 - Landscape Representation.**

**L A 6711 - Advanced Landscape Architectural Graphics Workshop.**

**L A 6712 - Green Roof-Design.**

**L A 6720 - Finding Common Ground.**

**L A 6721 - Regionalism.**

**L A 6722 - Contested Terrains.**

**L A 6723 - Cinema and the Landscape.**

**L A 6724 - American Landscape Arch.**

**L A 6750 - Professional Practice.**

**L A 6840 - Independent Study.**

**L A 6910 - Teaching Assistantship.**

**L A 6930 - Landscape Architecture Internship.**

**L A 6949 - Research Tools, Strategies and Methods.**

**L A 6950 - Thesis Research.**

**L A 6951 - Landscape Architecture Thesis.**

**LATN 1010 - Elementary Latin I.**

**LATN 1020 - Beginning Latin II.**

**LATN 1050 - Vocabulary for Professionals.**

**LATN 1100 - Building Vocabulary From Greek and Latin Words.**

**LATN 2010 - Intermediate Latin I.**

**LATN 2020 - Intermediate Latin II.**

**LATN 2840 - Independent Study.**

**LLC 1111 - Introduction to College Literacy for Migrant Populations.**

**LLC 4810 - Orientation to Bilingual Education.**

**LLC 4820 - Language Development and Acquisition.**

**LLC 4825 - Techniques in Teaching English as a Second Language.**

**LLC 4830 - Instructional Delivery Methods for Second Language Learners.**

**LLC 4910 - CO-TOP Practicum.**

**LLC 5020 - Workshop in Literacy and Language Teaching.**

**LLC 5028 - Adolescent Literacy, Part I.**

**LLC 5029 - Adolescent Literacy, Part II.**

**LLC 5030 - Language/Literacy Acquisition Part I.**

**LLC 5035 - Language and Literacy: Acquisition, Processes, and Cognition, Part II.**

**LLC 5040 - Multicultural Education.**

**LLC 5050 - Linguistic and Cultural Issues in Linking Assessment and Instruction.**

**LLC 5055 - Linking Assessment and Instruction in Language and Literacy, Part I.**

**LLC 5060 - Linking Assessment and Instruction in Language and Literacy, Part II.**

**LLC 5070 - Linguistic Analysis of English: Implications for Teaching.**

**LLC 5080 - Teachers as Readers and Writers.**

**LLC 5100 - Theories and Methods of Second Language Teaching.**

**LLC 5140 - Multicultural Education.**

**LLC 5150 - Culture of the Classroom.**

**LLC 5160 - Historical and Legal Foundations of Bilingual Education.**

**LLC 5170 - Race, Class and Culture in Public Schools.**

**LLC 5180 - Working with Communities and Families.**

**LLC 5190 - Culturally Responsive Pedagogy and Practices.**

**LLC 5210 - Literacy Development PreK-3rd Grade.**

**LLC 5220 - Literacy Routines and Assessment, PreK-3rd Grade.**

**LLC 5230 - Early Literacy Instruction.**

**LLC 5430 - Gender as Culture.**

**LLC 5700 - Language and Literacy Portfolios: Development, Reflection and Empowerment.**

**LLC 5710 - Primary Literacy: Pre-3rd Grade.**

**LLC 5720 - Writing: Process, Development, and Teaching Grades 3-12.**

**LLC 5730 - Language and Literacy Across the Curriculum.**

**LLC 5740 - Adolescent Literature.**

**LLC 5750 - Children's Literature in Spanish.**

**LLC 5760 - Theory and Methods of English Education.**

**LLC 5770 - Effective Literacy Instruction for Second Language Learners.**

**LLC 5780 - Connecting Cultures Through Literature.**

**LLC 5790 - Children's Literature Through the Ages.**

**LLC 5795 - Current Children's Literature.**

**LLC 5800 - Sociolinguistics: Language Variation and its Implications for Teaching.**

**LLC 5810 - Workshop in Language Acquisition and Development.**

**LLC 5820 - Techniques in Teaching English as a Second Language.**

**LLC 5821 - English Phonology for TESOL.**

**LLC 5822 - Internet for ESL Teachers.**

**LLC 5825 - Methods and Materials of Language Teaching.**

**LLC 5826 - Language Teaching Lab.**

**LLC 5830 - Workshop in Multicultural Education.**

**LLC 5831 - Reading Recovery: Observation Survey.**

**LLC 5835 - Special Topics in Literacy and Language.**

**LLC 5840 - Independent Study.**

**LLC 5910 - Foundations of Language, Literacy and Culture.**

**LLC 5911 - Reading Recovery Practicum: Early Intervention (Theory, Procedures and Practice).**

**LLC 5920 - Readings in Multicultural Education.**

**LLC 5925 - Selected Readings: Advanced Study in Literacy and Language.**

**LLC 6090 - Research Seminar.**

**LLC 6713 - Introduction To Language Policy.**

**LLC 6840 - Independent Study.**

**LLC 6910 - Seminar and Practicum in Literacy and Language, K-6.**

**LLC 6911 - Seminar and Practicum in Literacy and Language, 7-12+.**

**LLC 6912 - Seminar and Practicum in Literacy and Language, ESL and Bilingual Education.**

**LLC 6913 - Reading Recovery: Practicum.**

**LLC 6915 - Seminar and Practicum in Literacy Professional Development.**

**LLC 6950 - Master's Thesis.**

**LLC 7410 - Communication and Control in Systems Change.**

**M E 1208-12X8 - Special Topics.**

**M E 2023 - Statics.**

**M E 2030 - Analysis Techniques in Mechanical Engineering.**

**M E 2033 - Dynamics.**

**M E 2208-22X8 - Special Topics.**

**M E 3010 - Elementary Numerical Methods and Programming.**

**M E 3021 - Introduction to Fluid Mechanics.**

**M E 3022 - Thermodynamics II.**

**M E 3023 - System Dynamics I: Vibrations.**

**M E 3024 - Introduction to Materials Science.**

**M E 3027 - Measurements.**

**M E 3028 - Laboratory of Mechanical Measurements.**

**M E 3030 - Electric Circuits and Systems.**

**M E 3031 - Fluids/Thermal Laboratory.**

**M E 3032 - Electric Circuits and Systems Lab.**

**M E 3034 - Properties of Engineering Materials.**

**M E 3035 - Design of Mechanical Elements.**

**M E 3042 - Heat Transfer.**

**M E 3043 - Strength of Materials.**

**M E 3065 - Intermediate Dynamics.**

**M E 3145 - Manufacturing Processes Design.**

**M E 3147 - Bioengineering.**

**M E 3208-32X8 - Special Topics.**

**M E 3840 - Independent Study.**

**M E 4023 - System Dynamics II: Controls.**

**M E 4024 - Mechanical Behavior of Materials.**

**M E 4035 - Senior Design I.**

**M E 4045 - Senior Design II.**

**M E 4110 - Numerical Methods for Engineers.**

**M E 4112 - Internal Combustion Engines.**

**M E 4114 - Designing with Composites.**

**M E 4115 - Applied Plasticity and Creep.**

**M E 4116 - Robotics.**

**M E 4120 - Methods of Engineering Analysis.**

**M E 4132 - Power Plant Systems Design.**

**M E 4135 - Mechanical Systems Design.**

**M E 4136 - Control Systems Design.**

**M E 4141 - Fluid Mechanics.**

**M E 4142 - Thermal Systems Design.**

**M E 4147 - Engineering Economy.**

**M E 4155 - Air Conditioning Design.**

**M E 4160 - Introduction to Operations Research.**

**M E 4163 - Rigid-body Dynamics.**

**M E 4166 - Computerized Numerical Control (CNC) Manufacturing.**

**M E 4175 - Finite Element Analysis in Machine Design.**

**M E 4195 - Solid Modeling.**

**M E 4208-42X8 - Special Topics.**

**M E 4840 - Independent Study.**

**M E 5110 - Numerical Methods for Engineers.**

**M E 5114 - Designing with Composites.**

**M E 5115 - Applied Plasticity and Creep.**

**M E 5120 - Methods of Engineering Analysis.**

**M E 5121 - Introduction to Fluid Dynamics.**

**M E 5122 - Macroscopic Thermodynamics.**

**M E 5123 - Introduction to Continuum Mechanics.**

**M E 5124 - Yield-Limited Behavior of Materials.**

**M E 5133 - Theory of Inelastic Materials.**

**M E 5141 - Viscous Flow.**

**M E 5142 - Statistical Thermodynamics.**

**M E 5143 - Theory of Elasticity.**

**M E 5144 - Plasticity and Creep.**

**M E 5161 - Compressible Flow.**

**M E 5162 - Heat Transfer I.**

**M E 5163 - Dynamics.**

**M E 5166 - Computerized Numerical Control (CNC) Manufacturing.**

**M E 5172 - Heat Transfer II.**

**M E 5175 - Finite Element Stress Analysis.**

**M E 5208-52X8 - Special Topics.**

**M E 5238 - Special Topics**

**M E 5840 - Independent Study.**

**M E 5950 - Master's Thesis.**

**M E 5960 - Master's Report.**

**M E 5970 - Graduate Problem Course.**

**MATH 1009 - Computer-Based Algebraic Problem Solving.**

**MATH 1010 - Mathematics for the Liberal Arts: MA1.**

**MATH 1070 - Algebra for Social Sciences and Business: MA1.**

**MATH 1075 - Linear Programming and Probability.**

**MATH 1080 - Polynomial Calculus: MA1.**

**MATH 1110 - College Algebra: MA1.**

**MATH 1111 - Freshman Seminar.**

**MATH 1120 - College Trigonometry: MA1.**

**MATH 1130 - Precalculus Mathematics: MA1.**

**MATH 1401 - Calculus I: MA1.**

**MATH 2411 - Calculus II: MA1.**

**MATH 2421 - Calculus III: MA1.**

**MATH 2511 - Discrete Structures.**

**MATH 2810 - Topics.**

**MATH 2830 - Introductory Statistics: MA1.**

**MATH 2939 - Internship/Cooperative Education.**

**MATH 3000 - Introduction to Abstract Mathematics.**

**MATH 3040 - Mathematics for Elementary Teachers.**

**MATH 3140 - Introduction to Modern Algebra.**

**MATH 3191 - Applied Linear Algebra.**

**MATH 3195 - Linear Algebra and Differential Equations.**

**MATH 3200 - Elementary Differential Equations.**

**MATH 3210 - Higher Geometry I.**

**MATH 3250 - Problem Solving Tools.**

**MATH 3301 - Introduction to Operations Research I - Deterministic Systems.**

**MATH 3302 - Operations Research II.**

**MATH 3440 - Introduction to Symbolic Logic.**

**MATH 3511 - Mathematics of Chemistry.**

**MATH 3800 - Probability and Statistics for Engineers.**

**MATH 3939 - Internship/Cooperative Education.**

**MATH 4010 - History of Mathematics.**

**MATH 4027 - Topics in Mathematics.**

**MATH 4101 - Applied Statistics Using SAS and SPSS I.**

**MATH 4102 - Applied Statistics Using SAS and SPSS II.**

**MATH 4110 - Theory of Numbers.**

**MATH 4201 - Topology.**

**MATH 4220 - Higher Geometry II.**

**MATH 4310 - Introduction to Real Analysis I.**

**MATH 4320 - Introduction to Real Analysis II.**

**MATH 4387 - Regression Analysis, Modeling and Time Series.**

**MATH 4390 - Game Theory.**

**MATH 4394 - Experimental Designs.**

**MATH 4408 - Applied Graph Theory.**

**MATH 4409 - Applied Combinatorics.**

**MATH 4410 - Mathematics of Coding Theory.**

**MATH 4450 - Complex Variables.**

**MATH 4576 - Mathematical Foundations of Artificial Intelligence I.**

**MATH 4650 - Numerical Analysis I.**

**MATH 4660 - Numerical Analysis II.**

**MATH 4674 - Parallel Computing and Architectures.**

**MATH 4733 - Partial Differential Equations.**

**MATH 4779 - Math Clinic.**

**MATH 4788 - Bioinformatics.**

**MATH 4791 - Continuous Modeling.**

**MATH 4792 - Probabilistic Modeling.**

**MATH 4793 - Discrete Math Modeling.**

**MATH 4794 - Optimization Modeling.**

**MATH 4810 - Probability.**

**MATH 4820 - Statistics.**

**MATH 4830 - Applied Statistics.**

**MATH 4840 - Independent Study.**

**MATH 5000 - RM-MSMSP: Algebraic Patterns and Functions I.**

**MATH 5002 - RM-MSMSP: Algebraic Patterns and Functions II.**

**MATH 5004 - RM-MSMSP: Statistics and Probability.**

**MATH 5005 - RM-MSMSP: Geometry.**

**MATH 5006 - RM-MSMSP: Mathematics of Change.**

**MATH 5007 - RM-MSMSP: Discrete Math--Counting the Possibilities.**

**MATH 5008 - RM-MSMSP: Discovery and Use of the History of Math.**

**MATH 5009 - RM-MSMSP: Math Modeling--Using and Applying Math.**

**MATH 5010 - History of Mathematics.**

**MATH 5011 - RM-MSMSP: Mathematics and Science of Musical Instruments.**

**MATH 5017 - Topics in Mathematics for Teachers.**

**MATH 5027 - Topics in Applied Mathematics.**

**MATH 5070 - Applied Analysis.**

**MATH 5110 - Theory of Numbers.**

**MATH 5135 - Functions of a Complex Variable.**

**MATH 5198 - Mathematics for Bioscientists.**

**MATH 5250 - Problem Solving Tools.**

**MATH 5310 - Probability.**

**MATH 5320 - Statistics.**

**MATH 5350 - Mathematical Theory of Interest.**

**MATH 5387 - Regression Analysis, Modeling and Time Series.**

**MATH 5390 - Game Theory.**

**MATH 5394 - Experimental Designs.**

**MATH 5410 - Modern Cryptology.**

**MATH 5432 - Computational Graph Theory.**

**MATH 5446 - Theory of Automata.**

**MATH 5490 - Network Flows.**

**MATH 5576 - Mathematical Foundations of Artificial Intelligence I.**

**MATH 5593 - Linear Programming.**

**MATH 5610 - Computational Biology.**

**MATH 5660 - Numerical Analysis I.**

**MATH 5661 - Numerical Analysis II.**

**MATH 5674 - Parallel Computing and Architectures.**

**MATH 5718 - Applied Linear Algebra.**

**MATH 5733 - Partial Differential Equations.**

**MATH 5779 - Math Clinic.**

**MATH 5791 - Continuous Modeling.**

**MATH 5792 - Probabilistic Modeling.**

**MATH 5793 - Discrete Math Modeling.**

**MATH 5794 - Optimization Modeling.**

**MATH 5830 - Applied Statistics.**

**MATH 5840 - Independent Study.**

**MATH 5939 - Internship/Cooperative Education.**

**MATH 5950 - Master's Thesis.**

**MATH 5960 - Master's Project.**

**MATH 6023 - Topics in Discrete Math.**

**MATH 6131 - Real Analysis.**

**MATH 6330 - Workshop in Statistical Consulting.**

**MATH 6360 - Exploratory Data Analysis.**

**MATH 6376 - Statistical Computing.**

**MATH 6380 - Stochastic Processes.**

**MATH 6384 - Analysis of Dependent Data.**

**MATH 6388 - Advanced Statistical Methods for Research.**

**MATH 6393 - Introduction to Bayesian Statistics.**

**MATH 6395 - Multivariate Methods.**

**MATH 6398 - Calculus of Variations and Optimal Control.**

**MATH 6404 - Applied Graph Theory.**

**MATH 6595 - Computational Methods in Nonlinear Programming.**

**MATH 6653 - Introduction to Finite Element Methods.**

**MATH 6735 - Continuum Mechanics.**

**MATH 6840 - Independent Study.**

**MATH 7101 - Topology.**

**MATH 7132 - Functional Analysis.**

**MATH 7376 - Statistical Computing.**

**MATH 7381 - Mathematical Statistics I.**

**MATH 7382 - Mathematical Statistics II.**

**MATH 7384 - Mathematical Probability.**

**MATH 7385 - Stochastic Differential Equations.**

**MATH 7397 - Nonparametric Statistics.**

**MATH 7405 - Advanced Graph Theory.**

**MATH 7409 - Applied Combinatorics.**

**MATH 7410 - Combinatorial Structures.**

**MATH 7413 - Modern Algebra I.**

**MATH 7414 - Modern Algebra II.**

**MATH 7419 - Mathematical Coding Theory.**

**MATH 7421 - Projective Geometry.**

**MATH 7593 - Advanced Linear Programming.**

**MATH 7594 - Integer Programming.**

**MATH 7595 - Advanced Nonlinear Programming.**

**MATH 7663 - Finite Difference Methods for Partial Differential Equations.**

**MATH 7665 - Numerical Linear Algebra.**

**MATH 7667 - Introduction to Approximation Theory.**

**MATH 7821 - Topics in Projective Geometry.**

**MATH 7822 - Topics in Linear Algebra.**

**MATH 7823 - Topics in Discrete Math.**

**MATH 7824 - Topics in Computational Mathematics.**

**MATH 7825 - Topics in Optimization.**

**MATH 7826 - Topics in Probability and Statistics.**

**MATH 7827 - Topics in Applied Mathematics.**

**MATH 7840 - Independent Study.**

**MATH 7921 to 7927 - Readings in Mathematics.**

**MATH 8660 - Mathematical Foundations of Finite Element Methods.**

**MATH 8664 - Iterative Methods in Numerical Linear Algebra.**

**MATH 8990 - Doctoral Dissertation.**

**MGMT 1000 - Introduction to Business.**

**MGMT 1111 - Business Freshman Seminar.**

**MGMT 3000 - Managing Individuals and Teams.**

**MGMT 3010 - Managing People for a Competitive Advantage.**

**MGMT 3939 - Internship/Cooperative Education.**

**MGMT 4100 - Managing Cultural Diversity.**

**MGMT 4330 - Mastering Management.**

**MGMT 4350 - Leading Organizational Change.**

**MGMT 4370 - Organization Design.**

**MGMT 4400 - Environments of International Business.**

**MGMT 4410 - Operations of International Business.**

**MGMT 4420 - Human Resources Management: Staffing.**

**MGMT 4430 - Human Resources Management: Training.**

**MGMT 4440 - Human Resource Management: Performance Management.**

**MGMT 4450 - Human Resources Management: Compensation.**

**MGMT 4500 - Business Policy and Strategic Management.**

**MGMT 4770 - Human Resource Information Systems.**

**MGMT 4780 - Managing Entrepreneurial Ventures.**

**MGMT 4830 - Business and Sustainability.**

**MGMT 4834 - Global Sports & Entertainment Management.**

**MGMT 4840 - Independent Study.**

**MGMT 4900 - Project Management and Practice.**

**MGMT 4950 - Special Topics in Management.**

**MGMT 5800 - Special Topics in Management.**

**MGMT 5939 - Internship or Cooperative Education.**

**MGMT 6020 - Leadership in Difficult Times.**

**MGMT 6040 - International Human Resources Management.**

**MGMT 6320 - Organizational Development.**

**MGMT 6360 - Designing Effective Organizations.**

**MGMT 6380 - Managing People for Competitive Advantage.**

**MGMT 6710 - Human Resources Management: Staffing.**

**MGMT 6720 - Human Resources Management: Training.**

**MGMT 6730 - Human Resources Management: Performance Management.**

**MGMT 6740 - Human Resources Management: Compensation.**

**MGMT 6780 - Small Business Management.**

**MGMT 6800 - Special Topics in Management.**

**MGMT 6801 - Career Strategies.**

**MGMT 6803 - Visionary Leadership.**

**MGMT 6804 - Bargaining and Negotiation.**

**MGMT 6805 - Entrepreneurship and Venture Capital.**

**MGMT 6806 - Corporate Entrepreneurship.**

**MGMT 6820 - Management Field Studies.**

**MGMT 6821 - Managing for Sustainability.**

**MGMT 6822 - Business Ethics and Corporate Social Responsibility.**

**MGMT 6830 - Sports and Entertainment Management.**

**MGMT 6832 - Law and Negotiation in the Sports/ Entertainment Industries.**

**MGMT 6834 - London Calling: Global Sports and Entertainment Management.**

**MGMT 6840 - Independent Study.**

**MGMT 6950 - Master's Thesis.**

**MILR 1011 - Adventures in Leadership.**

**MILR 1021 - Adventures in Leadership II.**

**MILR 2031 - Leadership and Management I.**

**MILR 2041 - Leadership and Management II.**

**MILR 3062 - Leadership and Development II.**

**MINS 5000 - Topics.**

**MINS 5840 - Independent Study.**

**MINS 5939 - Internship/Cooperative Education.**

**MINS 5950 - Master's Thesis.**

**MINS 5960 - Master's Project.**

**MKTG 1000 - Introduction to Marketing.**

**MKTG 2939 - Internship/Cooperative Education.**

**MKTG 3000 - Principles of Marketing.**

**MKTG 3100 - Marketing Research.**

**MKTG 3200 - Buyer Behavior.**

**MKTG 3939 - Internship/Cooperative Education.**

**MKTG 4000 - Advertising.**

**MKTG 4050 - Applied Marketing Management.**

**MKTG 4051 - Honors Applied Marketing Management.**

**MKTG 4200 - International Marketing.**

**MKTG 4220 - Asian Business Development and Marketing.**

**MKTG 4580 - International Transportation.**

**MKTG 4700 - Personal Selling and Sales Management.**

**MKTG 4720 - Internet Marketing.**

**MKTG 4760 - Customer Relationship Management.**

**MKTG 4800 - Marketing Seminar.**

**MKTG 4840 - Independent Study.**

**MKTG 4950 - Special Topics.**

**MKTG 5939 - Internship/Cooperative Education.**

**MKTG 6010 - Marketing Strategy, Evaluation and Development.**

**MKTG 6020 - International Marketing.**

**MKTG 6030 - Sales and Sales Force Management.**

**MKTG 6040 - Services Marketing.**

**MKTG 6050 - Marketing Research.**

**MKTG 6060 - Buyer Behavior.**

**MKTG 6070 - Integrated Marketing Communications and Brand Identity.**

**MKTG 6080 - Marketing in Emerging Markets.**

**MKTG 6090 - Customer Relationship Management.**

**MKTG 6091 - Strategic Product Marketing.**

**MKTG 6092 - Internet Marketing.**

**MKTG 6094 - Marketing Issues in the Chinese Environment.**

**MKTG 6120 - Non-Profit and Social Marketing.**

**MKTG 6200 - Marketing Dashboards & Scorecards.**

**MKTG 6700 - Marketing Travel Study.**

**MKTG 6800 - Topics in Marketing.**

**MKTG 6820 - Sports & Entertainment Marketing.**

**MKTG 6840 - Independent Study.**

**MLNG 1111 - Freshman Seminar.**

**MLNG 2939 - Cooperative Education.**

**MLNG 4690 - Methods of Teaching Modern Languages.**

**MLNG 4691 - Methods of Teaching Modern Languages II.**

**MLNG 5690 - Methods of Teaching Modern Languages.**

**MLNG 5691 - Methods of Teaching Modern Languages II.**

**MSRA 5000 - Introduction to Graduate Studies.**

**MSRA 5500 - Topics in Professional Audio.**

**MSRA 5505 - Graduate Audio Sweetening.**

**MSRA 5550 - Audio Production III.**

**MSRA 5575 - Graduate Surround Sound.**

**MSRA 5576 - Surround Sound II.**

**MSRA 5580 - Graduate Audio Seminar.**

**MSRA 5590 - Graduate Audio Production.**

**MSRA 5600 - Topics in Music.**

**MSRA 5840 - Independent Study for MSRA.**

**MSRA 6510 - Graduate Audio Studies Pedagogy.**

**MSRA 6530 - Graduate Audio Forensics.**

**MSRA 6550 - Sound Design.**

**MSRA 6950 - Thesis in Professional Audio.**

**MSRA 6951 - Professional Audio Portfolio Thesis.**

**MUS 1550 - Introduction to Guitar Effects and Electronic Theory.**

**MUS 2220 - Commercial Electronic Music Composition.**

**MUS 2300 - Introduction to Songwriting.**

**MUS 2450 - Introduction to Performing Arts and Events Management.**

**MUS 2470 - Music Applications on the Computer.**

**MUS 2500 - Performance Art and Experimental Music.**

**MUS 2540 - Audio Production I.**

**MUS 2560 - Audio Production II.**

**MUS 2700 - Introduction to Music Business.**

**MUS 3120 - Music in Film: Altered Reality.**

**MUS 3125 - Sound and Music for Video Games.**

**MUS 3310 - Songwriting II.**

**MUS 3530 - Live Sound Reinforcement.**

**MUS 3540 - Recording Studio Maintenance and Calibration.**

**MUS 3550 - Critical Listening for Recording Arts.**

**MUS 3710 - Music and the Media.**

**MUS 3715 - Concert Venue Management.**

**MUS 3720 - Law and the Music Industry.**

**MUS 3745 - CAM Records Label Operations.**

**MUS 3755 - Music Publishing.**

**MUS 3760 - Music Intermediaries: Agents, Managers, Producers and Others.**

**MUS 3770 - Recording Studio Management.**

**MUS 3780 - Current Issues in Music Business**

**MUS 3790 - Video Production in the Arts: Music.**

**MUS 3820 - Digital Music Techniques.**

**MUS 3939 - Internship/Cooperative Education.**

**MUS 4500 - Topics in Professional Audio.**

**MUS 4501 - Music Business Senior Seminar.**

**MUS 4505 - Audio Sweetening.**

**MUS 4550 - Audio Production III.**

**MUS 4575 - Surround Sound.**

**MUS 4576 - Surround Sound II.**

**MUS 4580 - Audio Production Seminar.**

**MUS 4600 - Topics in Music.**

**MUS 4720 - Music Management.**

**MUS 4740 - Music Business Analysis.**

**MUS 4745 - CAM Records Label Operations.**

**MUS 4750 - Music and Entertainment Marketing.**

**MUS 4760 - Music Journalism.**

**MUS 4770 - Concert Promotion, Tour and Venue Management.**

**MUS 4775 - Music and Entertainment Business in the Digital Age.**

**MUS 4780 - Current Issues in Music Business.**

**MUS 4840 - Independent Study.**

**MUS 5840 - Independent Study.**

**MUS 5939 - Cooperative Education.**

**P AD 5001 - Introduction to Public Administration and Public Service.**

**P AD 5002 - Organizational Management and Change.**

**P AD 5003 - Research and Analytic Methods.**

**P AD 5004 - Economics and Public Finance.**

**P AD 5005 - The Policy Process and Democracy.**

**P AD 5006 - Leadership and Professional Ethics.**

**P AD 5110 - Seminar in Nonprofit Management.**

**P AD 5115 - Effective Grant Writing for Nonprofit and Public Sector Managers.**

**P AD 5120 - Nonprofits and Public Policy.**

**P AD 5125 - Civil Society and Nongovernmental Organizations.**

**P AD 5130 - Collaboration Across Sectors.**

**P AD 5140 - Nonprofit Financial Management.**

**P AD 5150 - Understanding and Achieving Funding Diversity.**

**P AD 5160 - Nonprofit Boards and Executive Leadership.**

**P AD 5170 - Strategic Management for Nonprofit and Public Managers.**

**P AD 5180 - Social Entrepreneurship.**

**P AD 5220 - Managing People in Public and Nonprofit Organizations.**

**P AD 5250 - Intergovernmental Management.**

**P AD 5260 - Managing in a Multicultural Society.**

**P AD 5271 - Managing Conflict and Change.**

**P AD 5280 - American Public Service Environment.**

**P AD 5310 - Policy Formulation & Implementation.**

**P AD 5320 - Public Policy Analysis.**

**P AD 5330 - Intermediate Statistical Analysis.**

**P AD 5350 - Program Evaluation.**

**P AD 5361 - Advanced Seminar in Public Policy and Management.**

**P AD 5370 - Media and Public Policy.**

**P AD 5380 - Citizen Participation: Theory and Practice.**

**P AD 5410 - Administrative Law.**

**P AD 5420 - Law and Public Policy.**

**P AD 5430 - Seminar in Legal Research Methods and Public Law Scholarship.**

**P AD 5440 - Negotiation and Conflict Resolution.**

**P AD 5450 - Law of All-Hazards Management.**

**P AD 5460 - Political Advocacy.**

**P AD 5502 - Public Financial Management and Policy.**

**P AD 5503 - Governmental Budgeting.**

**P AD 5540 - Organization Development.**

**P AD 5615 - Health Policy.**

**P AD 5617 - Health Economics.**

**P AD 5618 - Cost-Benefit Analysis.**

**P AD 5625 - Local Government Management.**

**P AD 5626 - Local Government Politics and Policy.**

**P AD 5628 - Urban Social Problems.**

**P AD 5631 - Seminar in Environmental Politics and Policy.**

**P AD 5632 - Seminar in Environmental Management.**

**P AD 5633 - Seminar in Natural Resource and Environmental Health Law.**

**P AD 5650 - Disaster and Emergency Management Policies.**

**P AD 5710 - Public Sector Technology.**

**P AD 5910 - Women and Violence: A Sociological Perspective.**

**P AD 5920 - Psychology of Violence Against Women.**

**P AD 5930 - Battered Women and the Legal System.**

**P AD 5940 - Domestic Violence Social Change and Advocacy.**

**P AD 5950 - Interpersonal Violence and Health.**

**P AD 5960 - Interpersonal Violence and Health Interpersonal violence is a major health issue.**

**P AD 5961 - Interpersonal Violence, Health Advocacy and Systems Change.**

**P AD 6600 - Special Topics in Public Administration.**

**P AD 6840 - Independent Study.**

**P AD 6910 - Field Study in Public Administration.**

**P AD 6950 - Master's Thesis.**

**P AD 7007 - Qualitative Research Methods.**

**P AD 7110 - Seminar in Nonprofit Management.**

**P AD 7115 - Effective Grant Writing for Nonprofit and Public Sector Managers.**

**P AD 7120 - Nonprofits and Public Policy.**

**P AD 7125 - Civil Society and Nongovernmental Organizations.**

**P AD 7130 - Collaboration Across Sectors.**

**P AD 7140 - Nonprofit Financial Management.**

**P AD 7150 - Understanding and Achieving Funding Diversity.**

**P AD 7160 - Nonprofit Boards and Executive Leadership.**

**P AD 7170 - Strategic Management for Nonprofit and Public Managers.**

**P AD 7180 - Social Entrepreneurship.**

**P AD 7220 - Managing People in Public and Nonprofit Organizations.**

**P AD 7250 - Intergovernmental Management.**

**P AD 7260 - Managing in a Multicultural Society.**

**P AD 7271 - Managing Conflict and Change.**

**P AD 7310 - Policy Formulation & Implementation.**

**P AD 7320 - Public Policy Analysis.**

**P AD 7330 - Intermediate Statistics.**

**P AD 7350 - Program Evaluation.**

**P AD 7361 - Advanced Seminar in Public Policy and Management.**

**P AD 7370 - Media and Public Policy.**

**P AD 7380 - Citizen Participation: Theory and Practice.**

**P AD 7410 - Administrative Law.**

**P AD 7420 - Law and Public Policy.**

**P AD 7430 - Seminar in Legal Research Methods and Public Law Scholarship.**

**P AD 7440 - Negotiation and Conflict Resolution.**

**P AD 7450 - Law of All-Hazards Management.**

**P AD 7460 - Political Advocacy.**

**P AD 7502 - Public Financial Management and Policy.**

**P AD 7503 - Governmental Budgeting.**

**P AD 7540 - Organization Development.**

**P AD 7600 - Special Topics in Public Administration.**

**P AD 7615 - Health Policy.**

**P AD 7617 - Health Economics.**

**P AD 7618 - Cost-Benefit Analysis.**

**P AD 7625 - Local Government Management.**

**P AD 7626 - Local Government Politics and Policy.**

**P AD 7628 - Urban Social Problems.**

**P AD 7631 - Seminar in Environmental Politics and Policy.**

**P AD 7632 - Seminar in Environmental Management.**

**P AD 7633 - Seminar in Natural Resource and Environmental Health Law.**

**P AD 7650 - Disaster and Emergency Management Policies.**

**P AD 7710 - Public Sector Technology.**

**P AD 7910 - Women and Violence: A Sociological Perspective.**

**P AD 7920 - Psychology of Violence Against Women.**

**P AD 7930 - Battered Women and the Legal System.**

**P AD 7940 - Domestic Violence Social Change and Advocacy.**

**P AD 8010 - Historical and Comparative Foundations of Public Administration.**

**P AD 8020 - Seminar in Public Management.**

**P AD 8030 - Seminar in Public Policy.**

**P AD 8040 - Critical Issues in Public Affairs.**

**P AD 8060 - Seminar on Conduct of Empirical Inquiry.**

**P AD 8070 - Advanced Seminar in Research Methods.**

**P AD 8840 - Independent Study.**

**P AD 8990 - Doctoral Dissertation.**

**P SC 1001 - Introduction to Political Science: The Quest for Freedom and Justice: SS1.**

**P SC 1101 - American Political System: SS1.**

**P SC 1111 - Freshman Seminar.**

**P SC 2001 - Topics in Political Science.**

**P SC 2006 - Global Political Issues.**

**P SC 2840 - Independent Study.**

**P SC 2939 - Internship/Cooperative Education.**

**P SC 3000 - Topics: Conference Participation.**

**P SC 3002 - Topics in Political Science.**

**P SC 3011 - Research Methods.**

**P SC 3022 - Introduction to Comparative Politics.**

**P SC 3034 - Race, Gender, Law and Public Policy.**

**P SC 3035 - Political Movements: Race and Gender.**

**P SC 3042 - Introduction to International Relations.**

**P SC 3064 - Power and Empowerment in the United States.**

**P SC 3125 - Introduction to Latin American Society.**

**P SC 3214 - Federal Law and American Indians.**

**P SC 3333 - Utopian Transformations.**

**P SC 3347 - Film and Politics.**

**P SC 3840 - Independent Study.**

**P SC 3914 - The Urban Citizen.**

**P SC 3939 - Internship/Cooperative Education.**

**P SC 4002 - Topics in Political Science.**

**P SC 4009 - Politics of the Budgetary Process.**

**P SC 4011 - GIS in Political Science.**

**P SC 4014 - Media and Politics.**

**P SC 4024 - Legislatures and Legislation.**

**P SC 4025 - Local Governance and Globalization.**

**P SC 4034 - Political Parties and Pressure Groups.**

**P SC 4044 - The Presidency.**

**P SC 4057 - Religion and Politics.**

**P SC 4074 - Urban Politics.**

**P SC 4084 - Local Government and Administration.**

**P SC 4085 - Comparative Public Policy.**

**P SC 4094 - Seminar: American Politics.**

**P SC 4105 - Comparative Politics: Europe.**

**P SC 4115 - Third World Politics.**

**P SC 4124 - Denver Politics.**

**P SC 4126 - Introduction to International Political Economy.**

**P SC 4144 - Indigenous Political Systems.**

**P SC 4146 - Indigenous Politics.**

**P SC 4155 - Political Systems of the Middle East and North Africa.**

**P SC 4156 - The Arab-Israeli Peace Process.**

**P SC 4165 - Islamic Politics and Culture.**

**P SC 4175 - Politics and Governments of the Pacific Rim.**

**P SC 4185 - Corruption in the U.S. and Abroad.**

**P SC 4186 - East Asia in World Affairs.**

**P SC 4195 - Political Systems of Sub-Saharan Africa.**

**P SC 4206 - Social Movements, NGOs and Global Politics.**

**P SC 4207 - Theories of Social and Political Change.**

**P SC 4215 - Women's Rights, Human Rights: Global Perspectives.**

**P SC 4216 - International Politics: Human Rights.**

**P SC 4217 - Human Rights in Theory and Practice.**

**P SC 4225 - Democracy and Democratization.**

**P SC 4226 - The United Nations in World Affairs.**

**P SC 4235 - Politics and Markets in Latin America.**

**P SC 4236 - American Foreign Policy.**

**P SC 4237 - American National Security.**

**P SC 4248 - Gender, Globalization and Development.**

**P SC 4266 - International Law.**

**P SC 4274 - Conflict Resolution and Public Consent Building.**

**P SC 4276 - Conflicts and Rights in International Law.**

**P SC 4286 - International Relations: War or Peace?**

**P SC 4324 - Politics, Public Policy and Leadership.**

**P SC 4326 - Advanced International Political Economy: Globalization.**

**P SC 4330 - U.S. Health Policy.**

**P SC 4354 - Environmental Politics.**

**P SC 4365 - Global Ecological Crises.**

**P SC 4374 - Public Priorities for the 21st Century.**

**P SC 4407 - Early Political Thought.**

**P SC 4414 - Organizational Change Agents.**

**P SC 4417 - Modern Political Thought.**

**P SC 4427 - Law, Politics and Justice.**

**P SC 4437 - Coercion and the State.**

**P SC 4444 - Contemporary Culture and Politics in America.**

**P SC 4446 - Advanced Indigenous Peoples' Politics.**

**P SC 4457 - American Political Thought.**

**P SC 4477 - Constitutional Law I.**

**P SC 4487 - Constitutional Law II.**

**P SC 4494 - Judicial Politics.**

**P SC 4505 - The Post-Soviet World: Origins and Present Condition.**

**P SC 4545 - Immigration Politics.**

**P SC 4554 - Chicano and Latino Politics.**

**P SC 4555 - International Women's Resistance.**

**P SC 4564 - Gender and Politics.**

**P SC 4605 - Politics and Governments of South Asia.**

**P SC 4615 - Politics and Government of China.**

**P SC 4644 - Ethical Responsibilities of Leaders.**

**P SC 4645 - Comparative Political Leadership.**

**P SC 4726 - Russian and Chinese Foreign Policy.**

**P SC 4736 - The Middle East in World Affairs.**

**P SC 4757 - Legal Reasoning and Writing.**

**P SC 4807 - Revolution and Political Violence.**

**P SC 4827 - Women and the Law.**

**P SC 4837 - Contemporary Issues in Civil Liberties.**

**P SC 4840 - Independent Study.**

**P SC 4934 - CU at the Capitol.**

**P SC 4995 - Travel Study Topics.**

**P SC 4996 - The Middle East at Hand.**

**P SC 5000 - State of the Discipline.**

**P SC 5005 - Political Theory After 9/11.**

**P SC 5007 - Beyond Political Correctness.**

**P SC 5008 - Graduate Topics in Political Science.**

**P SC 5009 - Politics of the Budgetary Process.**

**P SC 5011 - GIS in Political Science.**

**P SC 5013 - Philosophical Problems in the Social Sciences.**

**P SC 5014 - Seminar: American Politics.**

**P SC 5024 - State Politics: Focus on Colorado.**

**P SC 5025 - Local Governance and Globalization.**

**P SC 5044 - The Presidency.**

**P SC 5054 - The Legislative Process.**

**P SC 5057 - Religion and Politics.**

**P SC 5084 - Local Government and Administration.**

**P SC 5085 - Comparative Public Policy.**

**P SC 5094 - Seminar: Urban Politics.**

**P SC 5105 - Comparative Politics: Europe.**

**P SC 5135 - Seminar: Political Economy of Latin America.**

**P SC 5145 - Indigenous Politics.**

**P SC 5206 - Social Movements, NGOs and Global Politics.**

**P SC 5216 - Seminar: International Relations.**

**P SC 5217 - Human Rights in Theory and Practice.**

**P SC 5225 - Democracy and Democratization.**

**P SC 5236 - Seminar: American Foreign Policy.**

**P SC 5245 - Gender, Globalization and Development.**

**P SC 5256 - Seminar: National Question and Self-Determination.**

**P SC 5266 - International Law.**

**P SC 5274 - Conflict Resolution and Public Consent Building.**

**P SC 5276 - Conflicts and Rights in International Law.**

**P SC 5286 - International Relations: War or Peace?**

**P SC 5324 - Politics, Public Policy and Leadership.**

**P SC 5326 - Advanced International Political Economy: Globalization.**

**P SC 5354 - Seminar: Environmental Politics and Policy.**

**P SC 5374 - Public Priorities for the 21st Century.**

**P SC 5414 - Organizational Change Agents.**

**P SC 5417 - Seminar: Practical Utopias.**

**P SC 5446 - Advanced Indigenous Peoples' Politics.**

**P SC 5457 - Seminar: American Political Thought.**

**P SC 5468 - Research Methods in Political Science.**

**P SC 5477 - The U.S. Constitution: Law and Politics.**

**P SC 5545 - Immigration Politics.**

**P SC 5555 - International Women's Resistance.**

**P SC 5615 - Seminar: Chinese Development.**

**P SC 5644 - Ethical Responsibilities of Leaders.**

**P SC 5726 - Seminar on U.S. and China Relations.**

**P SC 5747 - Legal Reasoning and Writing.**

**P SC 5807 - Seminar: Conflict Behavior and the Politics of Violence.**

**P SC 5827 - Seminar: Political Psychology.**

**P SC 5830 - Grant Writing for Nonprofits.**

**P SC 5837 - Contemporary Issues in Civil Liberties.**

**P SC 5840 - Independent Study.**

**P SC 5914 - Community Development.**

**P SC 5939 - Cooperative Education.**

**P SC 5950 - Master's Thesis.**

**P SC 5960 - Master's Project.**

**P SC 5995 - Travel Study Topics.**

**P SC 5996 - The Middle East at Hand.**

**P SC 6840 - Independent Study.**

**PHIL 1012 - Introduction to Philosophy: Relationship of the Individual to the World: AH3.**

**PHIL 1020 - Introduction to Ethics and Society: The Person and the Community: AH3.**

**PHIL 1111 - Freshman Seminar.**

**PHIL 1700 - Philosophy and the Arts.**

**PHIL 2441 - Logic and Language: AH3.**

**PHIL 2939 - Internship/Cooperative Education.**

**PHIL 3000 - Ethics in Community Affairs.**

**PHIL 3002 - Ancient Greek Philosophy.**

**PHIL 3005 - Roman and Early Medieval Philosophy.**

**PHIL 3010 - Medieval Philosophy.**

**PHIL 3022 - Modern Philosophy.**

**PHIL 3032 - Twentieth Century Analytic Philosophy.**

**PHIL 3100 - Current Perspectives on the Evolution of Consciousness and Culture.**

**PHIL 3150 - History of Ethics.**

**PHIL 3200 - Social and Political Philosophy.**

**PHIL 3250 - Business Ethics.**

**PHIL 3280 - War and Morality.**

**PHIL 3300 - Special Topics in Philosophy.**

**PHIL 3350 - Metaphysics.**

**PHIL 3360 - Epistemology.**

**PHIL 3420 - Kosmos: Theories of the Universe.**

**PHIL 3440 - Introduction to Symbolic Logic.**

**PHIL 3500 - Ideology and Culture: Racism and Sexism.**

**PHIL 3550 - Philosophy of Death and Dying.**

**PHIL 3656 - Contemporary Religious Ethics: Jewish and Christian Traditions.**

**PHIL 3666 - Asian Philosophies and Religions.**

**PHIL 3840 - Independent Study.**

**PHIL 3939 - Internship/Cooperative Education.**

**PHIL 3981 - Chinese Philosophy and Culture.**

**PHIL 4000 - 19th Century Philosophy.**

**PHIL 4040 - Skeptic and Believer.**

**PHIL 4101 - Pragmatism: Classical American Philosophy.**

**PHIL 4150 - Twentieth Century Ethics.**

**PHIL 4200 - Philosophical Problems and Contemporary Culture.**

**PHIL 4220 - Aesthetics and the Philosophy of Art.**

**PHIL 4230 - Postmodernism and the Social Sciences.**

**PHIL 4242 - Bioethics.**

**PHIL 4250 - Environmental Ethics.**

**PHIL 4260 - Philosophy of Law.**

**PHIL 4270 - Philosophy of History.**

**PHIL 4300 - Philosophy of Mind.**

**PHIL 4360 - American Legal Process.**

**PHIL 4460 - Theories of Human Nature.**

**PHIL 4470 - Concepts of the Soul.**

**PHIL 4480 - Perspectives on Good and Evil.**

**PHIL 4510 - Philosophy of Nature.**

**PHIL 4600 - Philosophy of Religion.**

**PHIL 4650 - Differing Concepts of God.**

**PHIL 4700 - Seminar in a Major Philosopher (topics).**

**PHIL 4710 - Western Religious Thought.**

**PHIL 4720 - Eastern Religious Thought.**

**PHIL 4730 - Philosophy and Literature.**

**PHIL 4735 - Rationalism.**

**PHIL 4740 - Empiricism.**

**PHIL 4750 - Introduction to Phenomenology.**

**PHIL 4760 - Kant.**

**PHIL 4770 - Hegel.**

**PHIL 4780 - Heidegger.**

**PHIL 4790 - Nietzsche.**

**PHIL 4800 - Plato.**

**PHIL 4810 - Aristotle.**

**PHIL 4812 - Special Topics in Philosophy.**

**PHIL 4820 - Hume.**

**PHIL 4833 - Existentialism.**

**PHIL 4840 - Independent Study.**

**PHIL 4900 - John Dewey.**

**PHIL 4920 - Philosophy of Media and Technology.**

**PHIL 4933 - Philosophy of Eros.**

**PHIL 4950 - Honors Thesis.**

**PHIL 4980 - Special Topics in Philosophy.**

**PHIL 5000 - 19th Century Philosophy.**

**PHIL 5013 - Philosophical Problems in the Social Sciences and the Humanities.**

**PHIL 5020 - Elements of Social Thought.**

**PHIL 5040 - Skeptic and Believer.**

**PHIL 5100 - Topics in the History of Philosophy.**

**PHIL 5101 - Pragmatism: Classical American Philosophy.**

**PHIL 5220 - Aesthetics and the Philosophy of Art.**

**PHIL 5242 - Bioethics.**

**PHIL 5250 - Environmental Ethics.**

**PHIL 5260 - Philosophy of Law.**

**PHIL 5300 - Philosophy of Mind.**

**PHIL 5360 - American Legal Process.**

**PHIL 5470 - Concepts of the Soul.**

**PHIL 5550 - Paris 1910: Art, Philosophy and Psychology.**

**PHIL 5600 - Philosophy of Religion.**

**PHIL 5650 - Reflections on Modernity.**

**PHIL 5655 - Differing Concepts of God.**

**PHIL 5720 - Topics in Recent Philosophy.**

**PHIL 5730 - Philosophy and Literature.**

**PHIL 5735 - Rationalism.**

**PHIL 5740 - Empiricism.**

**PHIL 5750 - Introduction to Phenomenology.**

**PHIL 5755 - Philosophical Psychology.**

**PHIL 5770 - Hegel.**

**PHIL 5780 - Heidegger.**

**PHIL 5790 - Nietzsche.**

**PHIL 5800 - Plato.**

**PHIL 5810 - Aristotle.**

**PHIL 5812 - Special Topics in Philosophy.**

**PHIL 5820 - Hume.**

**PHIL 5830 - Kant.**

**PHIL 5833 - Existentialism.**

**PHIL 5840 - Independent Study.**

**PHIL 5900 - John Dewey.**

**PHIL 5920 - Philosophy of Media and Technology.**

**PHIL 5933 - Philosophy of Eros.**

**PHYS 1000 - Introduction to Physics.**

**PHYS 1052 - General Astronomy I: SC1.**

**PHYS 1100 - Foundations of Physics: SC2.**

**PHYS 1111 - Freshman Seminar.**

**PHYS 1115 - Physics Content.**

**PHYS 1332 - Explorations in Physics.**

**PHYS 1840 - Independent Study.**

**PHYS 2010 - College Physics I.**

**PHYS 2020 - College Physics II: SC1.**

**PHYS 2030 - College Physics Lab I: SC1.**

**PHYS 2040 - College Physics Lab II: SC1.**

**PHYS 2311 - General Physics I: Calculus-Based.**

**PHYS 2321 - General Physics Lab I.**

**PHYS 2331 - General Physics II: Calculus-Based.**

**PHYS 2341 - General Physics Lab II.**

**PHYS 2371 - Topic-Driven Physics Lab.**

**PHYS 2711 - Vibrations and Waves.**

**PHYS 2811 - Modern Physics I.**

**PHYS 2821 - Modern Physics II.**

**PHYS 2840 - Independent Study.**

**PHYS 2939 - Internship/Cooperative Education.**

**PHYS 3040 - Modern Cosmology.**

**PHYS 3050 - General Astronomy II.**

**PHYS 3060 - Astronomical Image Processing Lab.**

**PHYS 3082 - Energy and the Environment.**

**PHYS 3120 - Methods of Mathematical Physics.**

**PHYS 3151 - Biophysics Outlook I.**

**PHYS 3161 - Biophysics Outlook II.**

**PHYS 3211 - Analytical Mechanics.**

**PHYS 3251 - Biophysics of the Body.**

**PHYS 3411 - Thermal Physics.**

**PHYS 3620 - Sound and Music.**

**PHYS 3711 - Junior Laboratory I.**

**PHYS 3721 - Junior Laboratory II.**

**PHYS 3811 - Quantum Mechanics.**

**PHYS 3820 - Subatomic Physics.**

**PHYS 3840 - Independent Study.**

**PHYS 3939 - Internship/Cooperative Education.**

**PHYS 4331 - Principles of Electricity and Magnetism.**

**PHYS 4351 - Bioelectromagnetism.**

**PHYS 4400-4499 - Topics in Scientific Instrumentation and Laboratory Methods.**

**PHYS 4510 - Optics.**

**PHYS 4550 - Astrophysics.**

**PHYS 4610 - Computational Physics.**

**PHYS 4620 - Computational Physics II.**

**PHYS 4650 - Solid State Physics.**

**PHYS 4711 - Senior Laboratory I.**

**PHYS 4721 - Senior Laboratory II.**

**PHYS 4788 - Bioinformatics.**

**PHYS 4810 - Atomic and Molecular Structure.**

**PHYS 4840 - Independent Study.**

**PHYS 4850 - Physics for Design and Innovation I.**

**PHYS 4852 - Physics for Design and Innovation II.**

**PHYS 4920 - Advanced Undergraduate Seminar.**

**PHYS 4931 - Internship in Applied Physics.**

**PHYS 4980 - Advanced Physics Topics.**

**PHYS 5101 - RM-MSMSP: Forces and Motion.**

**PHYS 5102 - RM-MSMSP: Light, Color, and Geometrical Optics.**

**PHYS 5103 - Forms and Transfer of Energy.**

**PHYS 5400-5499 - Topics in Scientific Instrumentation and Laboratory Methods.**

**PHYS 5840 - Independent Study.**

**PHYS 5850 - Physics for Design and Innovation I.**

**PHYS 5852 - Physics for Design and Innovation II.**

**PHYS 5939 - Internship/Cooperative Education.**

**PHYS 5950 - Master's Thesis.**

**PHYS 5960 - Master's Project.**

**PHYS 5980 - Advanced Physics Topics.**

**PHYS 6840 - Independent Study.**

**PMUS 1001 - Music Appreciation: AH1.**

**PMUS 1020 - Beginning Musicianship.**

**PMUS 1023 - Piano Class.**

**PMUS 1040 - Class Guitar.**

**PMUS 1041 - Class Guitar II.**

**PMUS 1050 - Voice Class I.**

**PMUS 1060 - Voice Class II.**

**PMUS 1093 - Commercial Guitar Styles and Theory - Harmony.**

**PMUS 1094 - Commercial Guitar Styles and Theory - Melody.**

**PMUS 1100 - Music Theory I.**

**PMUS 1110 - Ear Training and Sight Singing I.**

**PMUS 1111 - Freshman Seminar.**

**PMUS 1200 - Music Theory II.**

**PMUS 1210 - Ear Training and Sight Singing II.**

**PMUS 1310 - Beginning Sight Reading and Improvisation.**

**PMUS 1400 - Group Applied Lessons.**

**PMUS 1500 - General Recital.**

**PMUS 1501-1743 - Applied Music Instruction.**

**PMUS 1600 - Topics in Performance Music.**

**PMUS 1700 - Applied Music Instruction.**

**PMUS 1752 - Applied Music Instruction: Euphonium.**

**PMUS 1800 - Applied Music: Music Industry Studies.**

**PMUS 2000 - Music Ensembles.**

**PMUS 2100 - Music Theory III.**

**PMUS 2110 - Ear Training and Sight Singing III.**

**PMUS 2120 - Introduction to Arranging and Orchestration.**

**PMUS 2200 - Contemporary Styles.**

**PMUS 2750 - Functional Guitar Skills: Acoustic Guitar Styles.**

**PMUS 2751 - Functional Guitar Skills: Essential Studio Guitarist.**

**PMUS 2752 - Functional Guitar Skills: World Guitar Styles.**

**PMUS 2753 - Functional Guitar Skills: American Guitar Styles.**

**PMUS 3010 - Commercial Singing I.**

**PMUS 3020 - Commercial Singing II.**

**PMUS 3110 - Social and Political Implications of American Music.**

**PMUS 3210 - Introduction to Teaching Private Music Lessons.**

**PMUS 3300 - Advanced Sight Reading and Improvisation.**

**PMUS 3502-3743 - Applied Music Instruction.**

**PMUS 3753 - Applied Music Instruction: Euphonium.**

**PMUS 3810 - Music of the Popular Culture.**

**PMUS 3820 - Music History Modules.**

**PMUS 3825 - History of Rock 'N' Roll: 1950's to 1970's.**

**PMUS 3826 - History of Rock 'N' Roll: 1970's to Present.**

**PMUS 3830 - History and Literature of Music I.**

**PMUS 3831 - History and Literature of Music II.**

**PMUS 4000 - Music Ensembles.**

**PMUS 4060 - Analysis.**

**PMUS 4200 - Senior Recital.**

**PMUS 4600 - Topics in Music.**

**PMUS 5600 - Topics in Music.**

**PSY 1000 - Introduction to Psychology I: SS3.**

**PSY 1005 - Introduction to Psychology II: SS3.**

**PSY 1111 - Freshman Seminar.**

**PSY 2050 - Improving Memory.**

**PSY 2060 - Psychology Applied to Everyday Life.**

**PSY 2090 - Statistics and Research Methods.**

**PSY 2220 - Biological Basis of Behavior: SC2.**

**PSY 2939 - Internship/Cooperative Education.**

**PSY 2990 - Topics in Psychology.**

**PSY 3090 - Research Methods in Experimental Psychology.**

**PSY 3104 - Behavioral Genetics.**

**PSY 3135 - Organizational Psychology.**

**PSY 3205 - Human Development I: Child Psychology.**

**PSY 3215 - Human Development II: Adolescence and Adulthood.**

**PSY 3222 - Principles of Learning and Behavior.**

**PSY 3235 - Human Sexuality.**

**PSY 3254 - Introduction to Animal Behavior.**

**PSY 3262 - Health Psychology.**

**PSY 3263 - Hormones and Behavior.**

**PSY 3265 - Drugs, Brain and Behavior.**

**PSY 3305 - Abnormal Psychology.**

**PSY 3405 - Family Psychology.**

**PSY 3505 - Psychology and the Law.**

**PSY 3600 - Topics in Psychology.**

**PSY 3610 - Psychological Trauma.**

**PSY 3611 - Psychology of Women.**

**PSY 3612 - Domestic Abuse.**

**PSY 3724 - Developmental Psychobiology.**

**PSY 3810 - Neuropsychology.**

**PSY 3822 - Aging, Brain and Behavior.**

**PSY 3939 - Internship/Cooperative Education.**

**PSY 4054 - Behavioral Neuroscience.**

**PSY 4101 - Applied Statistics Using SAS and SPSS I.**

**PSY 4102 - Applied Statistics Using SAS and SPSS II.**

**PSY 4144 - Human Cognition.**

**PSY 4164 - Psychology of Perception.**

**PSY 4415 - Experimental Social Psychology.**

**PSY 4455 - Theories of Personality.**

**PSY 4485 - Psychology of Cultural Diversity.**

**PSY 4500 - Psychotherapy.**

**PSY 4511 - History of Psychology.**

**PSY 4645 - Industrial Psychology.**

**PSY 4730 - Clinical Psychology: Ethics and Issues.**

**PSY 4803 - Principles of Psychological Testing.**

**PSY 4840 - Independent Study.**

**PSY 4990 - Topics in Psychology.**

**PSY 5360 - Psychotherapy I.**

**PSY 5700 - Clinical Research Methods.**

**PSY 5713 - Advanced Statistics.**

**PSY 5730 - Clinical Psychology: Ethics and Issues.**

**PSY 5803 - Principles of Psychological Testing.**

**PSY 5840 - Independent Study.**

**PSY 5939 - Internship/Cooperative Education.**

**PSY 5990 - Topics in Psychology.**

**PSY 6200 - Developmental Psychopathology.**

**PSY 6410 - Theories of Assessment.**

**PSY 6420 - Applied Assessment.**

**PSY 6500 - Adult Psychopathology.**

**PSY 6840 - Independent Study.**

**PSY 6910 - Research Practicum.**

**PSY 6930 - Clinical Internship.**

**PSY 6950 - Master's Thesis.**

**PSY 7144 - Learning, Memory and Cognition.**

**PSY 7205 - Advanced Developmental Psychology.**

**PSY 7262 - Health Psychology I.**

**PSY 7360 - Psychotherapy II.**

**PSY 7400 - Child Assessment.**

**PSY 7485 - Diversity in Clinical Psychology.**

**PSY 7490 - Topics in Health Psychology Summer Lecture Series.**

**PSY 7511 - Historical and Philosophical Foundations of Psychology.**

**PSY 7520 - Experimental Psychopathology.**

**PSY 7710 - Multivariate Statistics.**

**PSY 7830 - Clinical Interviewing.**

**PSY 7910 - Clinical Practicum.**

**PSY 8100 - Clinical Behavioral Medicine.**

**PSY 8200 - Teaching Skills Seminar.**

**PSY 8262 - Health Psychology II.**

**PSY 8910 - Clinical Health Practicum.**

**PSY 8938 - Pre-Doctoral Internship.**

**PSY 8990 - Doctoral Dissertation.**

**REM 5000 - Orientation to Research and Measurement in Education.**

**REM 5050 - Assessment for Teachers.**

**REM 5080 - Research for Teachers.**

**REM 5100 - Basic Statistics.**

**REM 5200 - Introduction to Research Methods.**

**REM 5300 - Introduction to Measurement.**

**REM 5350 - Workshop in Instrument Development.**

**REM 5400 - Introduction to Evaluation of Programs and Persons.**

**REM 5800 - Workshop: Topics in Research and Evaluation Methodology.**

**REM 5840 - Independent Study.**

**REM 5910 - Practicum in Research and Evaluation Methodology.**

**REM 5920 - Readings in Educational Statistics.**

**REM 5921 - Readings in Educational Research.**

**REM 5923 - Readings in Educational Measurement.**

**REM 5924 - Readings in Program Evaluation.**

**REM 6050 - Seminar in Assessment Policy Issues.**

**REM 6100 - Methods of Qualitative Inquiry.**

**REM 7050 - Methods of Survey Research.**

**REM 7100 - Advanced Methods of Qualitative Inquiry.**

**REM 7110 - Intermediate Statistics.**

**REM 7120 - Advanced Methods in Quantitative Inquiry and Measurement.**

**REM 7150 - Mixed Methods Research.**

**REM 7240 - Patterned Inquiry for Educational Administrators.**

**REM 7500 - Special Topics in Research and Evaluation Methods.**

**RLST 1610 - Introduction to Religious Studies: AH3.**

**RLST 2660 - World Religions: AH3.**

**RLST 2680 - The American Indian Experience.**

**RLST 2700 - The Bible as Literature.**

**RLST 3000 - Judaism, Christianity and Islam: Affinity and Difference.**

**RLST 3060 - History of Early Christianity.**

**RLST 3080 - Reformation Europe.**

**RLST 3100 - Islamic Politics and Culture.**

**RLST 3300 - Shamanic Traditions.**

**RLST 3400 - Asian Philosophies and Religions.**

**RLST 3500 - Religions of India.**

**RLST 3660 - Chinese Philosophy and Culture.**

**RLST 3720 - Religious Narratives.**

**RLST 3740 - Biblical Traditions: Old Testament.**

**RLST 3760 - Biblical Studies: New Testament.**

**RLST 3770 - Archaeological Discoveries Relating to the Bible.**

**RLST 4000 - Religion and Cultural Diversity.**

**RLST 4010 - Comparative Religious Systems.**

**RLST 4020 - Sociology of Religion.**

**RLST 4040 - Psychology of Religion.**

**RLST 4060 - Philosophy of Religion.**

**RLST 4070 - Western Religious Thought.**

**RLST 4080 - Eastern Religious Thought.**

**RLST 4100 - Special Topics in Religion.**

**RLST 4160 - Mysticism.**

**RLST 4260 - Kosmos: Theories of the Universe.**

**RLST 4280 - Current Perspectives on the Evolution of Consciousness and Culture.**

**RLST 4300 - Myth and Symbol.**

**RLST 4320 - Spirituality in the Modern World.**

**RLST 4340 - The Hero's Journey.**

**RLST 4360 - Freudian and Jungian Perspectives in Dream Analysis.**

**RLST 4400 - Differing Concepts of God.**

**RLST 4420 - Goddess Traditions.**

**RLST 4440 - Concepts of the Soul.**

**RLST 4460 - Death and Concepts of Afterlife.**

**RLST 4480 - Perspectives on Good and Evil.**

**RLST 4500 - Religion and Politics.**

**RLST 4730 - Whores and Saints: Medieval Women.**

**RLST 4840 - Independent Study.**

**RLST 5010 - Comparative Religious Systems.**

**RLST 5020 - Sociology of Religion.**

**RLST 5040 - Psychology of Religion.**

**RLST 5060 - Philosophy of Religion.**

**RLST 5300 - Myth and Symbol.**

**RLST 5400 - Differing Concepts of God.**

**RLST 5420 - Goddess Traditions.**

**RLST 5440 - Concepts of the Soul.**

**RLST 5500 - Religion and Politics.**

**RLST 5730 - Whores and Saints: Medieval Women.**

**S SC 5000 - 19th Century Philosophy.**

**S SC 5013 - Philosophical Problems in the Social Sciences and Humanities.**

**S SC 5020 - Elements of Social Thought.**

**S SC 5023 - Research Perspectives in Social Science.**

**S SC 5050 - Topics in Social Science.**

**S SC 5101 - Pragmatism: Classical American Philosophy.**

**S SC 5242 - Bioethics.**

**S SC 5250 - Environmental Ethics.**

**S SC 5400 - Women and Violence.**

**S SC 5520 - The City Beautiful: Art, Architecture and Theory in Urban History.**

**S SC 5530 - Social Construction of the Self.**

**S SC 5550 - Paris 1910: Art, Philosophy and Psychology.**

**S SC 5600 - Philosophy of Religion.**

**S SC 5650 - Reflections on Modernity.**

**S SC 5720 - Sexuality, Gender and Their Visual Representation.**

**S SC 5750 - Philosophical Psychology.**

**S SC 5830 - Grant Writing for Nonprofits.**

**S SC 5833 - Existentialism.**

**S SC 5840 - Independent Study.**

**S SC 5920 - Philosophy of Media and Technology.**

**S SC 5933 - Philosophy of Eros.**

**S SC 5939 - Internship/Cooperative Education.**

**S SC 6010 - Methods and Theories of Feminism and Gender Studies.**

**S SC 6950 - Master's Thesis.**

**S SC 6960 - Master's Project or Report.**

**SECE 5060 - Improvement of Instruction.**

**SECE 5200 - Classroom Management.**

**SECE 5300 - Introductory Curriculum and Methods in Secondary Mathematics.**

**SECE 5340 - Multicultural Science Education.**

**SECE 5350 - Issues and Problems in Science Education.**

**SECE 5400 - Curriculum in Secondary Mathematics.**

**SECE 5401 - Assessment in Mathematics Education.**

**SECE 5410 - Advanced Methods and Strategies in Secondary Mathematics.**

**SECE 5411 - Mathematics Education and Gender.**

**SECE 5417 - Structure of Rational Numbers.**

**SECE 5418 - Mathematical Modeling.**

**SECE 5419 - Exploring the Structure of Geometry Using Technology.**

**SECE 5420 - Teaching Mathematics to Low Achievers.**

**SECE 5430 - Teaching Aids in Mathematics Education.**

**SECE 5440 - Topics in Mathematics Education.**

**SECE 5460 - Secondary Social Studies Methods and Curriculum Design.**

**SECE 5464 - Teaching About Ethnicity, Race and Prejudice.**

**SECE 5465 - Teaching Critical Issues in Social Studies: An Interdisciplinary Approach.**

**SECE 5480 - Museum Studies in Paleontology.**

**SECE 5490 - Middle School Curriculum.**

**SECE 5500 - The Nature of Science.**

**SECE 5510 - Teacher Leadership: Theory to Reality.**

**SECE 5520 - Teacher Leadership: Essential Knowledge.**

**SECE 5530 - Teacher Leadership: Vital Skills.**

**SECE 5650 - Environmental Education.**

**SECE 5660 - Energy Education.**

**SECE 5780 - Storytelling.**

**SECE 5800 - Curriculum Workshop for Secondary Teachers.**

**SECE 5840 - Independent Study.**

**SECE 5910 - Advanced Practicum in Teaching.**

**SECE 5920 - Readings in Secondary Education.**

**SECE 5930 - Internship in Secondary Education.**

**SECE 5950 - Master's Thesis.**

**SECE 6100 - Seminar in Secondary Education.**

**SECE 6110 - Curriculum Development and School Improvement.**

**SECE 6120 - International Perspectives on the Curriculum.**

**SECE 6840 - Independent Study.**

**SECE 6910 - Geology Field Study in Hawaii for Teachers.**

**SECE 6950 - Master's Thesis.**

**SJUS 2000 - Democratic Participation and Social Justice.**

**SJUS 2010 - Social Justice: Theories, Narratives, and Technologies.**

**SJUS 4000 - Social Justice Capstone.**

**SL 5020 - Collection Development.**

**SL 5030 - Information Literacy and Reference.**

**SL 5040 - Information Storage and Utilization.**

**SL 5110 - Integrating Instructional Technology Practices in School Libraries.**

**SL 5160 - Managing School Library Programs.**

**SL 5530 - Foundations of School Librarianship.**

**SL 5911 - School Library Field Experience-Elementary.**

**SL 5912 - School Library Field Experience-Secondary.**

**SL 6720 - Practitioner-Based Research in School Libraries.**

**SL 6999 - Leadership and Practice in School Libraries.**

**SOC 1001 - Introduction to Sociology: SS3.**

**SOC 1050 - Analysis of Modern Society.**

**SOC 1111 - Freshman Seminar.**

**SOC 2462 - Introduction to Social Psychology: SS3.**

**SOC 3001 - Urban Sociology.**

**SOC 3010 - Sociology of Human Sexuality.**

**SOC 3020 - Race and Ethnicity in the U.S..**

**SOC 3030 - Social Change.**

**SOC 3040 - Drugs, Alcohol & Society.**

**SOC 3050 - Sociology of Education.**

**SOC 3080 - Sex and Gender.**

**SOC 3111 - Research Methods.**

**SOC 3121 - Statistics.**

**SOC 3297 - Social History of Asian Americans.**

**SOC 3300 - Advanced Social Problems.**

**SOC 3460 - The Social Psychology of Intergroup Relations.**

**SOC 3480 - Global Issues.**

**SOC 3490 - Criminology.**

**SOC 3500-3550 - Topics in Sociology.**

**SOC 3560 - Death and Dying.**

**SOC 3600 - Social Relations.**

**SOC 3650 - Sociology of Music.**

**SOC 3700 - Sociology of the Family.**

**SOC 3840 - Independent Study.**

**SOC 3939 - Internship/Cooperative Education.**

**SOC 4101 - Applied Statistics Using SAS and SPSS I.**

**SOC 4102 - Applied Statistics Using SAS and SPSS II.**

**SOC 4110 - Sociology of Health Care.**

**SOC 4120 - Popular Culture and the American Family.**

**SOC 4150 - History of Sociological Theory.**

**SOC 4160 - Contemporary Sociological Theory.**

**SOC 4220 - Population Change and Analysis.**

**SOC 4280 - Urban Social Space.**

**SOC 4290 - Aging, Society and Social Policy.**

**SOC 4340 - Juvenile Delinquency.**

**SOC 4440 - Social Stratification.**

**SOC 4460 - Hate Groups and Group Violence.**

**SOC 4475 - Self and Identity.**

**SOC 4510 - Advanced Study of Social Change.**

**SOC 4520 - Collective Behavior.**

**SOC 4610 - Sociology of Religion.**

**SOC 4640 - Sociology of Childhood and Adolescence.**

**SOC 4650 - Sociology of Adulthood and Aging.**

**SOC 4700 - Sociology of Law.**

**SOC 4770 - Advanced Topics in Sociology.**

**SOC 4771 - Advanced Topics in Sociology.**

**SOC 4772 - Advanced Topics in Sociology.**

**SOC 4773 - Advanced Topics in Sociology.**

**SOC 4774 - Advanced Topics in Sociology.**

**SOC 4831 - Senior Seminar.**

**SOC 4840 - Independent Study.**

**SOC 4910 - Research Practicum.**

**SOC 5000 - Professional Seminar: Sociological Inquiry.**

**SOC 5014 - Classical Sociological Theory.**

**SOC 5015 - Contemporary Sociological Theory.**

**SOC 5024 - Seminar: Research Methods I.**

**SOC 5110 - Sociology of Health Care.**

**SOC 5120 - Popular Culture and the American Family.**

**SOC 5183 - Seminar: Quantitative Data Analysis.**

**SOC 5220 - Population Change and Analysis.**

**SOC 5430 - Societies in Transition.**

**SOC 5440 - Seminar: Social Stratification.**

**SOC 5475 - Self and Identity.**

**SOC 5550 - Seminar: Sociology of the Family.**

**SOC 5610 - Sociology of Religion.**

**SOC 5640 - Sociology of Childhood and Adolescence.**

**SOC 5650 - Sociology of Adulthood and Aging.**

**SOC 5660 - Seminar: Social Psychology.**

**SOC 5680 - Hate Groups and Group Violence.**

**SOC 5750 - Seminar: Criminology.**

**SOC 5770 - Advanced Topics in Sociology.**

**SOC 5771 - Advanced Topics in Sociology.**

**SOC 5772 - Advanced Topics in Sociology.**

**SOC 5773 - Advanced Topics in Sociology.**

**SOC 5774 - Advanced Topics in Sociology.**

**SOC 5840 - Independent Study.**

**SOC 5910 - Research Practicum.**

**SOC 5920 - Guided Readings in Sociology.**

**SOC 5930 - Internship in Sociology.**

**SOC 5939 - Cooperative Education.**

**SOC 5955 - Master's Thesis.**

**SOC 5964 - Master's Report.**

**SPAN 1000 - Introduction to Cultures of the Spanish Speaking World: AH4.**

**SPAN 1010 - Beginning Spanish I.**

**SPAN 1011 - Intensive Spanish.**

**SPAN 1020 - Beginning Spanish II.**

**SPAN 1021 - Intensive Spanish.**

**SPAN 1111 - Freshman Seminar.**

**SPAN 1995 - Travel Study Topics.**

**SPAN 2110 - Second Year Spanish I.**

**SPAN 2120 - Second Year Spanish II.**

**SPAN 2130 - Current Topics in the Spanish-speaking World.**

**SPAN 2939 - Internship/Cooperative Education.**

**SPAN 2995 - Travel Study Topics.**

**SPAN 3010 - Advanced Conversation and Composition I.**

**SPAN 3020 - Advanced Conversation and Composition II.**

**SPAN 3060 - Hispanic Phonetics: Theory and Practice.**

**SPAN 3070 - Bilingual Communities: Spanish as a Language of Contact.**

**SPAN 3073 - Bilingual Communities: Spanish in a Global Setting.**

**SPAN 3082 - Introduction to Translation I.**

**SPAN 3092 - Introduction to Translation II.**

**SPAN 3100 - Culture and Civilization of Spain.**

**SPAN 3212 - Spanish American Culture and Civilization.**

**SPAN 3221 - Culture and Civilization of Spain I.**

**SPAN 3222 - Culture and Civilization of Spain II.**

**SPAN 3230 - Ibero-American Cultures through Film.**

**SPAN 3252 - Introduction to the Study of Literature.**

**SPAN 3300 - Twentieth Century Spanish Literature.**

**SPAN 3310 - Spanish Writing and Grammar I.**

**SPAN 3400 - Survey of Spanish Literature I.**

**SPAN 3410 - Survey of Spanish Literature II.**

**SPAN 3510 - Survey of Spanish American Literature II.**

**SPAN 3550 - Spanish American Short Story.**

**SPAN 3700 - Spanish for International Business I.**

**SPAN 3710 - Spanish for International Business II.**

**SPAN 3730 - Special Topics in Spanish for International Business.**

**SPAN 3830 - Topics in Spanish Literature.**

**SPAN 3840 - Independent Study.**

**SPAN 3939 - Internship/Cooperative Education.**

**SPAN 3970 - Topics in Spanish Literature.**

**SPAN 3995 - Travel Study Topics.**

**SPAN 4010 - History of the Spanish Language.**

**SPAN 4020 - Spanish Sociolinguistics.**

**SPAN 4060 - Dialects of the Spanish-Speaking World.**

**SPAN 4080 - Spanish in the United States.**

**SPAN 4110 - Contemporary Spanish Literature.**

**SPAN 4130 - Medieval Spanish Literature.**

**SPAN 4150 - Masterpieces of Spanish Literature.**

**SPAN 4160 - Masterpieces of Spanish-American Literature.**

**SPAN 4220 - Mexican Literature.**

**SPAN 4230 - Modern Culture of Spain through Film and Narrative.**

**SPAN 4300 - Generation of 1898.**

**SPAN 4310 - Seminar in Spanish Creative Writing: Poetry and Short Fiction.**

**SPAN 4400 - Romanticism in Spain.**

**SPAN 4410 - Modernism.**

**SPAN 4500 - Nineteenth-Century Spanish Novel.**

**SPAN 4510 - Contemporary Spanish-American Novel.**

**SPAN 4520 - Golden Age Drama.**

**SPAN 4540 - Race, Class, and Gender in Spanish Golden Age Literature.**

**SPAN 4620 - Don Quijote.**

**SPAN 4840 - Independent Study.**

**SPAN 4970 - Special Topics in Literature.**

**SPAN 4980 - Special Topics in Linguistics.**

**SPAN 5000 - Introduction to Graduate Studies in Spanish.**

**SPAN 5010 - History of the Spanish Language.**

**SPAN 5020 - Spanish Sociolinguistics.**

**SPAN 5060 - Dialects of the Spanish-Speaking World.**

**SPAN 5080 - Spanish in the United States.**

**SPAN 5110 - Contemporary Spanish Literature.**

**SPAN 5130 - Medieval Spanish Literature.**

**SPAN 5150 - Masterpieces of Spanish Literature.**

**SPAN 5160 - Masterpieces of Spanish-American Literature.**

**SPAN 5220 - Mexican Literature.**

**SPAN 5230 - Modern Culture of Spain through Film and Narrative.**

**SPAN 5300 - Generation of 1898.**

**SPAN 5310 - Seminar in Spanish Creative Writing: Poetry and Short Fiction.**

**SPAN 5400 - Romanticism in Spain.**

**SPAN 5410 - Modernism.**

**SPAN 5500 - Nineteenth-Century Spanish Novel.**

**SPAN 5510 - Contemporary Spanish-American Novel.**

**SPAN 5520 - Golden Age Drama.**

**SPAN 5540 - Race, Class, and Gender in Spanish Golden Age Literature.**

**SPAN 5620 - Don Quijote.**

**SPAN 5840 - Independent Study.**

**SPAN 5939 - Internship/Cooperative Education.**

**SPAN 5970 - Special Topics in Literature.**

**SPAN 5980 - Special Topics in Linguistics.**

**SPED 4021 - Exploring Diversity in Content and Pedagogy II.**

**SPED 4111 - Teaching For the Success of All Adolescents.**

**SPED 4112 - Teaching for the Success of All Children.**

**SPED 4150 - Individualizing Instruction for Learners with Challenging Behaviors.**

**SPED 4200 - Autism Academy.**

**SPED 4710 - Significant Health Support Needs Academy.**

**SPED 4720 - Significant Supports for Challenging Behavior Academy.**

**SPED 4730 - Significant Communication Support Needs Academy.**

**SPED 4740 - Life Skills Academy.**

**SPED 4750 - Orientation to Special Education.**

**SPED 4910 - Special Education Generalist Internship and Site Seminar I.**

**SPED 4919 - CO-TOP Practicum.**

**SPED 5010 - Instructional Strategies for Students with Special Needs.**

**SPED 5021 - Exploring Diversity in Content and Pedagogy II.**

**SPED 5111 - Teaching For the Success of All Adolescents.**

**SPED 5112 - Teaching for the Success of All Children.**

**SPED 5130 - Speech/Language Characteristics of Students with Severe Communication Needs.**

**SPED 5140 - Advanced Assessment in Special Education.**

**SPED 5150 - Individualizing Instruction for Learners with Challenging Behaviors.**

**SPED 5151 - Positive Behavior Support.**

**SPED 5160 - Medical/Physical Challenges of Students with Special Needs.**

**SPED 5170 - Individualizing Instruction for Diverse Learners.**

**SPED 5180 - Curriculum Planning for Students with Special Needs.**

**SPED 5250 - Effective Practices for Young Children with Autism Spectrum Disorders.**

**SPED 5260 - Effective Practices for Elementary Children with Autism Spectrum Disorders.**

**SPED 5270 - Effective Practices for Teenagers/ Young Adults with Autism Spectrum Disorder (ASD).**

**SPED 5300 - Collaborating In Schools and Communities.**

**SPED 5310 - Collaboration with Families.**

**SPED 5320 - The Use of Technology in Special Education.**

**SPED 5400 - Seminar in Special Education.**

**SPED 5500 - Transition and Secondary Issues in Special Education.**

**SPED 5600 - Special Education for School Professionals.**

**SPED 5780 - Literacy Intervention for Students with Disabilities.**

**SPED 5800 - Workshop: Topics in Special Education.**

**SPED 5840 - Independent Study.**

**SPED 5910 - Special Education Generalist Internship and Site Seminar I.**

**SPED 5911 - Special Education Generalist Internship and Site Seminar II.**

**SPED 5912 - Special Education Generalist Internship and Site Seminar III.**

**SPED 5913 - Special Education Generalist Internship and Site Seminar IV.**

**SPED 6100 - Communication Development for Students with Severe to Profound Needs.**

**SPED 6300 - Teaching Methods for Students with Severe Communication Needs.**

**SPED 6950 - Master's Thesis.**

**SPSY 5600 - Functional Behavior Assessment and Planning.**

**SPSY 5800 - Workshop: Topics in School Psychology.**

**SPSY 5840 - Independent Study: SPSY.**

**SPSY 6000 - BrainSTARS: TBI-Strategies for Teams and Re-Educ.**

**SPSY 6020 - Consultation and Leadership in TBI.**

**SPSY 6040 - Applied Research in TBI for School Psychologists.**

**SPSY 6100 - School Psychology: Professional & Legal Foundations.**

**SPSY 6150 - Psychoeducational Assessment I.**

**SPSY 6160 - Psychoeducational Assessment II.**

**SPSY 6200 - Risk, Resilience, and Prevention in School Mental Health.**

**SPSY 6300 - Legal and Ethical Issues in School Psychology.**

**SPSY 6350 - School-Based Interventions: Children, Youth and Families.**

**SPSY 6400 - School-Based Interventions: Groups, Classrooms and Systems.**

**SPSY 6410 - Psychoeducational Services for Linguistically Diverse Students.**

**SPSY 6420 - Crisis Prevention, Planning and Intervention.**

**SPSY 6450 - School-Based Consultation for Mental Health Professionals.**

**SPSY 6500 - Identifying and Planning for the Mental Health Needs of Children and Adolescents.**

**SPSY 6911 - School Psychology Practicum.**

**SPSY 6930 - School Psychology Internship.**

**SPSY 6935 - Practicum in Evidence-Based Interventions: TBI.**

**SUST 3010 - The Non-Sustainable Past.**

**SUST 3011 - The Sustainable Present.**

**SUST 4960 - Capstone in Sustainability.**

**T ED 1111 - TEACH - Imagine the Possibilities.**

**T ED 2400 - Issues in Chicano/a Education.**

**T ED 4800 - Workshop: Teacher Education.**

**T ED 5000 - Special Topics: Teacher Education.**

**THTR 1001 - Introduction to Theatre: AH1.**

**THTR 1050 - Video Production/Post-Production I.**

**THTR 1100 - Introduction to Theatre, Film and Television.**

**THTR 1110 - Production Design: Theatre, Film and Video.**

**THTR 1550 - Scriptwriting I.**

**THTR 1611 - Acting Lab I.**

**THTR 2450 - Introduction to Performing Arts and Events Management.**

**THTR 2530 - Acting: Character and Staging.**

**THTR 2531 - Acting for Non-Theatre Majors.**

**THTR 2560 - Topics in Theatre.**

**THTR 2600 - Studio I: Dynamics of Content Creation.**

**THTR 2700 - Art for the Theatre.**

**THTR 2840 - Independent Study.**

**THTR 3010 - Stage and Production Management.**

**THTR 3530 - Acting: Character and Text.**

**THTR 3531 - Theatre of Social Responsibility.**

**THTR 3540 - Directing: Text and Analysis.**

**THTR 3560 - Topics in Theatre.**

**THTR 3610 - Performance: Theory/History/Criticism I.**

**THTR 3611 - Drama of Diversity.**

**THTR 3720 - Lighting Design.**

**THTR 3730 - Scene Design.**

**THTR 3740 - Costume Design.**

**THTR 3760 - Sound Design for the Theater.**

**THTR 3820 - Production Process.**

**THTR 3838 - Applications Seminar.**

**THTR 3840 - Independent Study.**

**THTR 3910 - BA Junior Project.**

**THTR 3939 - Internship/Cooperative Education.**

**THTR 4530 - Acting: Character and Media.**

**THTR 4540 - Directing: Staging and Process.**

**THTR 4550 - Playwriting: The Short Form.**

**THTR 4560 - Topics in Theatre.**

**THTR 4610 - Performance: Theory/History/Criticism II.**

**THTR 4730 - Advanced Scenic Design.**

**THTR 4760 - Topics in Design.**

**THTR 4840 - Independent Study.**

**THTR 4910 - BA Senior Project.**

**THTR 4999 - Senior Seminar & Project.**

**THTR 5530 - Acting: Character and Media.**

**THTR 5540 - Directing: Staging and Process.**

**THTR 5550 - Playwriting: The Short Form.**

**THTR 5560 - Topics in Theatre.**

**THTR 5840 - Independent Study.**

**U D 6610 - Infrastructure Studio.**

**U D 6611 - Regulatory Studio.**

**U D 6612 - Urban Synthesis Studio.**

**U D 6640 - History of the City.**

**U D 6641 - Design Process/Practice.**

**U D 6642 - Design Policy/Regulation.**

**U D 6643 - Graphics for Planners.**

**U D 6686 - Special Topics in Urban Design.**

**U D 6840 - Independent Study.**

**U D 6930 - Urban Design Internship.**

**UHL 1100 - Introduction to University Honors and Leadership.**

**UHL 3100 - Ethics & Leadership: An Introduction.**

**UHL 3501 - Love and Death in the Greek Classics.**

**UHL 3502 - The History and Literature of Science in the 19th Century.**

**URP 5500 - Graphics for Planners.**

**URP 5501 - Planning Issues and Processes.**

**URP 5510 - Planning Methods I.**

**URP 5511 - Planning Methods II.**

**URP 5520 - Urban Spatial Analysis.**

**URP 5530 - Planning Law.**

**URP 6612 - Geographic Information Systems for Planners.**

**URP 6630 - Planning Studio I.**

**URP 6631 - Planning Studio II.**

**URP 6632 - City Design Policy.**

**URP 6633 - Urban Form Theory.**

**URP 6634 - Preservation Theory and Practice.**

**URP 6635 - City Building.**

**URP 6636 - Design Policy/Regulation.**

**URP 6637 - Comprehensive Planning.**

**URP 6640 - Community Development Process.**

**URP 6641 - Social Planning.**

**URP 6649 - Environmental Planning I: Ecology.**

**URP 6650 - Environmental Planning II: Policy and Law.**

**URP 6651 - Environmental Impact Assessment.**

**URP 6652 - Growth Management.**

**URP 6653 - Natural Resource Planning and Management.**

**URP 6654 - STNBLE Land Use Planning.**

**URP 6656 - Regional Land Use Analysis and Planning.**

**URP 6660 - Real Estate Development Process.**

**URP 6661 - Real Estate Development Finance.**

**URP 6665 - Urban Market Analysis.**

**URP 6670 - Urban Economic Development.**

**URP 6671 - Regional Economic Development.**

**URP 6673 - Transportation Planning I: Land Use and Transport.**

**URP 6674 - Transportation Planning II.**

**URP 6676 - Urban Housing.**

**URP 6680 - Urbanization in Developing Countries.**

**URP 6686 - Special Topics in Urban and Regional Planning.**

**URP 6840 - Independent Study.**

**URP 6910 - Planning in Other Cultures II: Field Experience.**

**URP 6930 - Planning Internship.**

**URP 6950 - Thesis Research and Programming.**

**URP 6951 - Urban and Regional Planning Thesis.**

**WGST 1050 - Introduction to Women's and Gender Studies.**

**WGST 2900 - Smart Girl Leadership Training and Practicum.**

**WGST 3010 - Sociology of Human Sexuality.**

**WGST 3034 - Race, Gender, Law and Public Policy.**

**WGST 3035 - Political Movements: Race and Gender.**

**WGST 3080 - Sex and Gender.**

**WGST 3343 - Women in U.S. History.**

**WGST 3450 - Twentieth Century Women Writers.**

**WGST 3500 - Ideology and Culture: Racism and Sexism.**

**WGST 3700 - Sociology of the Family.**

**WGST 3840 - Independent Study.**

**WGST 3939 - Cooperative Education.**

**WGST 4215 - Women's Rights, Human Rights: Global Perspectives.**

**WGST 4230 - Women in the West.**

**WGST 4248 - Gender, Globalization and Development.**

**WGST 4303 - Sex and Gender in Modern Britain.**

**WGST 4306 - Survey of Feminist Thought.**

**WGST 4307 - History of Sexuality.**

**WGST 4345 - Gender, Science, and Medicine: 1600 to the Present.**

**WGST 4420 - Goddess Traditions.**

**WGST 4510 - Whores and Saints: Medieval Women.**

**WGST 4511 - French Women Writers.**

**WGST 4540 - Race, Class, and Gender in Spanish Golden Age Literature.**

**WGST 4555 - International Women's Resistance.**

**WGST 4564 - Gender and Politics.**

**WGST 4827 - Women and the Law.**

**WGST 4933 - Philosophy of Eros.**

**WGST 5306 - Survey of Feminist Thought.**

**WGST 5900 - Smart Girl Coaching Training and Practicum.**

**WGST 6010 - Methods and Theories of Feminism and Gender Studies.**