ARCH Elective Options- Fall 2020

All ARCH electives require sophomore-standing or higher. Some courses may have additional pre-requisites; see description for pre-requisite information. All meeting days/time are subject to change; please double-check listing in UCDAccess.

Effective Fall 2020, all classes listed in this guide will earn 3 credits toward the “Architecture Elective” degree requirement; please make special note of the additional departments included in this list: Landscape Architecture and Urban & Regional Planning.

- **ARCH 3600.001 – Special Topics Cultural: The Classical Elements**
  - *Classical Elements* provides skills for the *Classical Studio* (optional) and prepares students to apply for Certificate in Classical Architecture from the Institute of Classical Architecture and Art (optional). The basic vocabulary, proportional systems, and theory of classical architecture with reference to treatises and precedents from Vitruvius through the Beaux-Arts will be introduced. Exploring the Tuscan and Doric orders through descriptive geometry is emphasized while referring to selected foundational texts of classical architecture.
    - We, 2:00 – 4:45 pm

- **ARCH 3602.001 - Architecture Photography**
  - Architecture Photography is an introduction to making and critically analyzing photographs in general, as well as architectural images specifically. Students will be challenged to create compelling imagery and to think critically about the ways in which images communicate. Students will complete a number of in-class mini assignments, four photographic assignments, and a final photographic project. Throughout the semester students will learn:
    - How to operate a DSLR/mirrorless system camera
    - Photographic composition
    - Adobe Lightroom Classic CC, and components of Adobe Photoshop
    - Approaches to photographing architectural exteriors and interiors
    - How to use photography to capture design inspiration
    - About photographic artists and their work
    - In order to successfully complete this course students will need:
      - Access to a DSLR or mirrorless system camera
      - Can be purchased or borrowed from a friend or family member
      - A *limited* pool of cameras will be available through the college
      - An external hard drive or laptop
    - Th 5:00- 7:50 PM

- **ARCH 3700.001 - Special Topics Design: Cartographic Architectures**
  - Cartographic Architectures explores the productive intersections of GIS technology, computational design, and architectural fabrication. Students will learn techniques and workflows bridging these digital tools. We will work with 2D maps, 3D cartographic environments, and physical fabrications and
installations. Projects completed in this course will align with typical analytical and pre-design work done at the formative stages of most architectural projects.

The primary software platforms used in this class will be QGIS, Rhino, and Grasshopper. We will also make exploratory trips into the world of Unreal Engine, a powerful video game development software.

While there are no prerequisites for this course, students are strongly encouraged to have completed ARCH 3801. Students should have at least a moderate ability with Rhino and Adobe Suite. Finally, students should be comfortable exploring new software and generating work experimentally and iteratively.

- Mo/We 2:00 pm – 3:15 pm

**ARCH 3700.001 - Special Topics Design: Narrative Representation**

- “Once upon an architecture...” This course will explore the narrative possibilities of representation within the framework of architecture. A current trend of architectural representation employs a slick smoothness that overly relies on photorealism and animation to narrate hurried, shallow experiences of the project. This seminar will dive deeper. It will use story telling to represent and explore architecture in a new and critical way. We will study examples of narrative strategies in art history, pop culture and architectural representation that require and stimulate a deeper reading of the subject matter. The class will interrogate and reexamine architectural precedent and student architectural projects using alternative drawing and projection techniques. The end product will be a merging of a critical examination of architecture with a greater possibility to express meaning and narrative within its fabric. See attached course flyer.

- Mo/We 3:30 pm – 4:45 pm

- **ARCH 3703.001- International: Design in Context**

- ARCH 3703 International Design in Context is the first of a two course series, that provides a Design Build opportunity for Undergraduate Architecture Students.

In the Fall course, students research and learn about the project context, produce a design response to the project community needs and context, and run a fundraising campaign for the costs of construction materials. It is scheduled to meet TR 2:00-3:15. It is intended to meet in the classroom, however, it can be run remotely if needed. There will be group work and attendance is mandatory, whether in class or through video meetings.

The second course in the series is a Study Abroad over the winter break (this year scheduled for Jan 1 - Jan 15, 2021). This is the opportunity for students to participate in the build of their designs.

Both courses are each a 3 credit Architecture Elective, and the Study Abroad also counts as an International Perspective course.

Students may take either course or both! If you take the fall course, you get “first dibs” on the spots in the Study Abroad, but there has always been enough spots for everyone that wants to go.
The Study Abroad will be Jan 1-15 of 2021, it goes on your Spring transcript and Spring tuition bill. However, it has a higher tuition. The cost is projected to be $3400 for the tuition + lodging + in country transportation + some construction supplies + lunch provided on the construction site + excursions + evacuation insurance. Students have to purchase their own airfare and the rest of the meals.

Our project this year will be in Puerto Rico, in the small city of Yauco, but we will be staying in Ponce. The purpose of the project will be to design and build outdoor living spaces for a demonstration FEMA container home. Students may design shade structures, roof garden and stair for access, vertical gardens, outdoor furniture, and other components. The students will have to generate construction documents and assembly instructions for Yauco residents who wish to build similar modifications to their own FEMA homes. A number of the modifications will be built onto the single FEMA demonstration home, which will function as an Idea and Resilience Center for the residents of Yauco, Puerto Rico. Our non-profit partner is Americas for Conservation and the Arts, AFC+A, based in Boulder, Colorado and Yauco, Puerto Rico.

- **Tu/Th, 2:00 pm – 3:15 pm**

  - **ARCH 3705.001 – Human Centered Design, Innovation, & Prototyping**
    - Introduces collaborative interdisciplinary design and innovation from a human perspective. Using the wide array of InWorks prototyping facilities, teams of students will design and implement human-oriented projects of increasing scale and complexity, in the process acquiring essential innovation and problem-solving skills. No previous design or prototyping experience is expected or required! *This course is taught by InWorks faculty, and does not focus on architectural design; it counts as Architecture Elective credit for the BS ARCH program.*
      - Tu/Th, 2:00 pm – 3:15 pm

  - **ARCH 3801.001 – Introduction to Digital Media**
    - Introduction to Digital Media is a workshop-based project-oriented skills course that is specifically constructed to provide each student with the vital tools and methods that they will need to excel in the studio environment. The course teaches software workflows that will be supplemental and critical to their success. The course is structured into three mini-projects that will reinforce increasingly complex workflows in drawing, digital modeling, rendering. The course representation outcomes parallel design concepts that will complement the early studio sequence. As such, students are strongly encouraged to enroll in Digital Media I as they enroll in Studios 1 and 2.
      - Tutorials will be given in each class that will be accompanied by comprehensive assignment worksheets. Students will turn in progress work each week leading up to three successive assignments. At the end of the semester, a design review will be held to display the three assignments together and give students a chance to present their work in a gallery format.
      - Students will be asked to use Rhino 3D, Adobe Photoshop, Adobe Illustrator, and Adobe Indesign outside of class. Access to this software will be available in the computer labs.
      - Mo/We, 2:00pm – 3:15 pm
- ARCH 3805.001 - Beginning Revit
  
  o **Course Description:** This course covers the fundamental operation and use of Autodesk’s Revit Architecture software. In this course, students will learn how to operate and navigate the program and will produce drawing sets and renderings for a simple building. The course will closely follow the “Revit Architecture 2019 Essential Training (Imperial)” and other tutorials available on Lynda.com. To access Lynda.com, students will need to purchase a subscription for the duration of the class or obtain free access through the Denver Public Library. This will be in lieu of purchasing a text book. Students who work for the university may have access to a free Lynda.com subscription.
  
  o **Course Objective:** By the end of the course, students will be capable of producing full architectural drawing sets including title blocks, floor plans, elevations, sections, details, renderings, and 3D models. The course will cover basic rendering techniques and a limited amount of Adobe Photoshop skills so that students can apply their knowledge of Revit to produce materials for their studio courses as well as in their careers as architects.

    - Prereq: ARCH 3110 and 3130
    - Tu/Th, 5:00 pm – 6:15 pm

- LDAR 4421.002 – History of Landscape Architecture
  
  o Intro survey course fosters workable understanding of landscape architecture design history and theory and offers a base for understanding trends and ideas influencing contemporary practice. Emphasizes Western Europe and the United States from antiquity to early twentieth century. 3 credits ARCH ELECTIVE.

    - We 9:30 am – 12:15 pm

- LDAR 4470.002 – Plants in Design
  
  o Explores the challenges, opportunities and responsibilities of designing with living, growing, and ever-changing organisms. Students learn to identify plants that are commonly used in the Colorado region and the principles, theories, methods, and techniques for planting design. Restriction: Restricted to undergraduate students at a junior standing or higher. 3 credits ARCH ELECTIVE.

    - We 2:00 pm – 4:45 pm

- LDAR 4486.EO1 – Special Topics in Landscape Architecture: Living Architecture
  
  o This online class will give you an introductory understanding of the technical requirements for green roof, green wall, and living building systems. This includes: waterproofing, growing media, plants, and irrigation BMP’s, as well as general requirements, such as: structural capacity, access, building sequence, and general care for the life of the project. It will introduce you to important design (SD, DD, and CD level), implementation and maintenance BMP’s for green roof projects, and introduce you to ways living infrastructures contribute to Nature Based Solution (NBS) strategies, maximizing urban health and livability in cities.

  This class will furthermore teach you current living architecture policies (such as the newly adapted [Green Building Ordinance for Denver](#)), general green roof and green wall benefits, and
current living architecture case studies and research - both locally (semi-arid/arid climates), nationally, and globally. If you are considering becoming a GRP* accredited professional, this is a good class to attend, as it will help prepare you for the online exam. *Similar to LEED AP, our national Green Roof Association: Green Roof for Healthy Cities have a Green Roof Professional (GRP) accreditation. 3 credits ARCH ELECTIVE.

- **Online, asynchronous format.**

- **URPL 300.001 – Planning the Built Environment**
  - This course is an introduction to the multidisciplinary practice of urban planning and its influence on the built environment. Students learn key topics and methods in planning such as land use regulation, transportation, green infrastructure, community engagement, and plan making. These topics are explored through the thematic lenses of sustainability, resiliency, social equity, and health. Counts as an elective for undergraduate Architecture majors. Open to juniors and seniors or by instructor permission. Questions? Contact Rocky Piro, rocky.piro@ucdenver.edu; see attached course flyer. 3 credits ARCH ELECTIVE.
  - Tu/Th 2:00 pm – 3:15 pm