University of Colorado Anschutz Medical Campus

School of Dental Medicine

2020-2021 Course Book

Doctor of Dental Surgery Program

(The Dental curriculum is subject to change without notice.)

FIRST YEAR FALL SEMESTER

DSBS 5502 Microanatomy Variable 0.1-5.0 credits
This course will cover initially the structure and function of cells and tissues and progress to study the normal structural features of the organs of the body, as the basis for understanding pathologic conditions and disturbances of function.

DSBS 5504 Human Anatomy Variable 0.1-5.0 credits
This course covers the anatomy of major body systems with emphasis on head and neck structures.

DSBS 5507 Molecular Biosciences Variable 0.1-5.0 credits
This course provides in-depth consideration of the biochemical, molecular biology and genetic mechanisms that control protein synthesis, gene expression and cellular function.

DSBS 5508 Physiology Variable 0.1-5.0 credits
Deals with fundamentals of human physiology from basic cellular processes, such as membrane transport, to the organization and control of organ systems.

DSCD 5501 Community Public Health 1 Variable 0.1-5.0 credits
This course will introduce students to an array of topics that will jump-start the dental school experience. In addition to didactic work, students will visit off-campus care delivery settings, especially those serving under-served or special populations. A major focus will be risk-based, prevention using a management of disease approach.

DSRE 5001 Introduction to Dentistry Variable 0.1-5.0 credits
To introduce the beginning dental students to the program with an overview of dental concepts and procedures.

DSRE 5500 Dental Anatomy Variable 0.1-5.0 credits
Anatomical characteristics of the primary and permanent teeth in the human dentition, intra-arch relationships are considered in detail.

DSRE 5501 Dental Anatomy Laboratory Variable 0.1-5.0 credits
Waxing full crowns of each tooth type to correct anatomical form, emphasizing intra-arch relationships.

DSRE 5504 Dental Materials Science 1 Variable 0.1-5.0 credits
Basic information about materials science includes physical, chemical, mechanical, and biological properties. This information provides the background for the study of specific materials used in dentistry.

DSRE 5520 Introduction to Clinical Dentistry 1 Variable 0.1-5.0 credits
Provide students with the foundational knowledge to learn/work in the school's clinical environment. Students will develop and demonstrate a competent understanding of HIPAA and the school's Infection Control rules/policies. Students will also develop an understanding of the role quality and safety in patient care and the use of aXUm.

DSSD 5501 Clinical Correlations Variable 0.1-5.0 credits
This course provides an overview of the major pathologies associated with each human body system, and possible oral manifestations and dental treatment considerations associated with these pathologies.

SECOND YEAR FALL SEMESTER

DSBS 6600 Pharmacology Variable 0.1-5.0 credits
Part one of a two-course sequence. Intensive study of drugs used in dental practice with emphasis on the basic principles of drug action. Lectures and clinical correlations are employed.

DSBS 6604 Advanced Head and Neck Anatomy Variable 0.1-5.0 credits
This course will review concepts initially introduced in DSBS 5504 Human Anatomy (DS1 Fall) and provide more detail through prosections of cadavers with a focus on the anatomy of the head and neck.

**DSCD 6601**  
**Community Public Health 2**  
Variable 0.1-5.0 credits  
This course will build upon Community Public Health I course and amalgamates public health principles and community engagement experiences.

**DSCD 6622**  
**Managing Your Student Practice 1**  
Variable 0.1-5.0 credits  
Course provides students with knowledge/skills to make the transition from pre-clinic to clinical patient. Competencies established in infection control, documentation/record keeping, patient management, medico-legal implications, ethical implications, professionalism, organization skills, communication skills, auxiliary utilization, and equipment/instrument utilization.

**DSON 6610**  
**Oral Pathology 1**  
Variable 0.1-5.0 credits  
This course is a comprehensive review of the fundamental mechanisms and general principles of oral pathology, including developmental disturbances of oral and para-oral structures, benign and malignant tumors and cysts.

**DSOT 6610**  
**Orthodontics 1**  
Variable 0.1-5.0 credits  
Early physical and emotional development of the child is presented, emphasizing prenatal and neonatal influences on the craniofacial complex. The etiology and classification of malocclusion along with the development of disturbances of hard and soft tissues are introduced.

**DSPE 6601**  
**Periodontology 2**  
Variable 0.1-5.0 credits  
This course provides the information needed to successfully complete a comprehensive periodontal evaluation and correctly interpret radiographs.

**DSPE 6605**  
**Periodontology 2 Laboratory**  
Variable 0.1-5.0 credits  
This course runs parallel with Periodontology 2. It is devoted to teaching the clinical skills necessary for the practice of periodontics within the context of a general dental practice.

**DSRE 6600**  
**Transition Clinic 1**  
Variable 0.1-5.0 credits  
This course will provide second year dental students with methods and techniques for diagnosis, treatment planning, and record keeping for general dental practice and will also serve as a platform to train students in the correct use of the Axium software.

**DSRE 6606**  
**Indirect Single Tooth Restoration 2**  
Variable 0.1-5.0 credits  
Course teaches fundamental concepts, preparation, provisionalization, and restoration of single teeth with full gold crowns. Fundamental concepts, preparation and restoration of single teeth with cast gold onlays. Two onlay designs, a maxillary onlay design and a mandibular onlay design taught.

**DSRE 6607**  
**Indirect Single Tooth Restoration 2 Laboratory**  
Variable 0.1-5.0 credits  
Course provides practical simulated clinical experience in preparation, provisionalization, and restoration of single teeth with full gold crowns. Two onlay designs, a maxillary onlay design, and a mandibular onlay design are practiced.

**DSRE 6645**  
**Cariology**  
Variable 0.1-5.0 credits  
The course explores the etiology and microbiology of caries, patterns of disease progression, and approaches to prevention and treatment. Didactic instruction and clinical exercises will be offered in identifying caries and methods of detection.

**DSRP 6600**  
**Combined Removable Prosthodontics**  
Variable 0.1-5.0 credits  
Acquaints the student with principles of removable partial and complete prosthetics. Includes principles of partial denture design and fabrication as they relate to preventive dentistry and diagnosis/treatment of endentulous patients. Problems of treating geriatric patients are discussed.

**DSRP 6601**  
**Combined Removable Prosthodontics Laboratory**  
Variable 0.1-5.0 credits  
Laboratory exercises following lectures of principles of partial and complete removable prosthetics. Students instructed in impressions, mounting casts, arrangement of artificial teeth, final waxing and familiarized with necessary steps in completing mandibular removable partial denture.

**DSSD 6612**  
**Orofacial Pain**  
Variable 0.1-5.0 credits  
This course is designed to acquaint the student with the evaluation, diagnosis, management, and pathology of the temporomandibular joint. Emphasis is on the multidisciplinary nature of treating disorders of the TMJ.

**IPED 6001**  
**Interprofessional Education II**  
Variable 0.1-5.0 credits  
This course develops core competencies in teamwork and collaboration, values and ethics, and quality and safety for first-year health professions students. The course will be taught in a team-based format requiring individual preparation before each session followed by the application of that learning in through team-based activities.
THIRD YEAR FALL SEMESTER

DSCD 7704  Community Health Education Practicum  Variable 0.1-5.0 credits
This course will provide students with guidance in completing the following Applied Dentistry competency: Plan and implementation a community health education intervention.

DSCD 7705  Clinical Transformations: Interprofessional Education  Variable 0.1-5.0 credits
This course, taught in a team-based format in a simulated clinical environment, evaluates campus-wide competencies in teamwork, collaborative interprofessional practice, quality and safety. Students explore health care professional roles, and build communication skills with members of the health care team/patient/family.

DSCD 7720  Behavioral Health, Gerontology, and Geriatrics  Variable 0.1-5.0 credits
Developing foundational knowledge in mental health/illness (mental health literacy), geriatrics and care for adult patients with developmental disabilities. Additionally at enhancing skills in building rapport/motivating patients for adoption of health behaviors, through lecture and two standardized patient interview experiences.

DSCD 7730  Dentistry for Adults with Special Health Care Needs  Variable 0.1-5.0 credits
To introduce students to medical problems/disabilities affecting patients who will be treated in the School's Special Care Clinic. This includes foundational knowledge in the features of common congenital disabilities, proper communication techniques, and assessment of the oral health treatment strategies most compatible for the patient.

DSEN 7011  Clinical Endodontics 1  Variable 0.1-5.0 credits
Clinical rotation in endodontics.

DSFD 7011  Clinical Fixed Prosthodontics 2  Variable 0.1-5.0 credits
Clinical rotation in fixed prosthodontics.

DSOD 7011  Clinical Oral Diagnosis 2  Variable 0.1-5.0 credits
Clinical rotation in oral diagnosis.

DSOP 7011  Clinical Operative Dentistry 2  Variable 0.1-5.0 credits
Clinical rotation in operative dentistry.

DSOS 7011  Oral and Maxillofacial Surgery 2  Variable 0.1-5.0 credits
The diagnosis and treatment of oral and maxillofacial surgical problems including techniques for extraction of teeth alveoplasty, biopsy, management of infection, treatment of maxillary and mandibular fractures, and suturing techniques.

DSPD 7011  Clinical Pediatric Dentistry 1  Variable 0.1-5.0 credits
Clinical rotation in pediatric dentistry.

DSPD 7700  Pediatric Dentistry 3  Variable 0.1-5.0 credits
Course emphasizes diagnostic and treatment considerations for pediatric patients, including lecture materials and case presentations to facilitate a good working knowledge of treatment planning/procedures covering sedation techniques as well as traumatic injuries, hospital dentistry and medically compromised patients.

DSPE 7011  Clinical Periodontics 2  Variable 0.1-5.0 credits
Clinical rotation in periodontics.

DSRE 7708  Dental Materials Seminar  Variable 0.1-5.0 credits
The course is aimed to be an interactive session where the students will be divided into teams and will be asked to create presentations on clinical applications of dental materials.

DSRE 7712  Implant Dentistry  Variable 0.1-5.0 credits
Concepts and applications of tissue integrated prostheses are presented and discussed. Topics include prosthetic techniques, diagnosis and treatment planning, analysis of current systems, qualifications and consent and clinical applications.

DSRE 7717  Comprehensive Patient Care Clinic "B"  Variable 0.1-5.0 credits
Continuation of Comprehensive Patient Care Clinic A with additional emphasis on the treatment of pediatric, orthodontic, geriatric, and endodontics cases.

DSRE 7718  Critical Thinking and Patient Care Seminar  Variable 0.1-5.0 credits
This course will provide the student with a practical application of the practice of evidence-based dentistry, critical thinking, formulation of clinical questions, critical appraisal of the literature and the translation of the biologic and social sciences to clinical patient care.

**DSRE 7935**  
**Treatment Planning and Case Presentation I**  
Treatment planning concepts and presentation formats, focused on multidisciplinary approach, key tooth analysis, phased treatment plans and case presentation format and technique.

**DSRP 7011**  
**Clinical Removable Prosthodontics 2**  
Clinical rotation in removable prosthodontics.

**DSSD 7712**  
**Dental Pain and Emergencies**  
This course covers the diagnostic and treatment consideration for the management of the patient in pain and other emergency problems encountered in general dentistry. Independent study assigned by course director.

**FOURTH YEAR FALL SEMESTER**

**DSCD 8892**  
**Community-Based Clinical Dentistry 2**  
Students complete six weeks (may elect an additional eighteen weeks) in a non-metropolitan community-based educational site. Objectives of clinical experiences vary according to site assignment and include rural community health centers, psychiatric hospitals, migrant health care, or private practice locations.

**DSCD 8896**  
**Special Care Clinic C**  
This course is designed to introduce dental students to provide dental treatment to the special needs population.

**DSEN 8011**  
**Clinical Endodontics 4**  
Clinical rotation in endodontics.

**DSFD 8011**  
**Clinical Fixed Prosthodontics 5**  
Clinical rotation in fixed prosthodontics.

**DSFD 8861**  
**Advanced Implant Prosthodontics Seminar**  
A single unit full crown procedure on a patient is performed by the student with specific time restraints and evaluation criteria. The purpose of this is to demonstrate clinical proficiency in this specific technique.

**DSOD 8010**  
**Clinical Oral Radiology**  
The purpose of this course is to provide students with experience in exposing radiographs and by completing written interpretations of all radiographs. Evaluation will be on a pass/fail basis.

**DSOD 8011**  
**Clinical Oral Diagnosis 5**  
Clinical rotation in oral diagnosis.

**DSOP 8011**  
**Clinical Operative Dentistry 5**  
Clinical rotation in operative dentistry.

**DSOS 8011**  
**Clinical Oral Maxillofacial Surgery 1**  
This is a clinical oral surgery experience including routine and surgical removal of erupted and impacted teeth and use of intravenous sedation techniques.

**DSPE 8011**  
**Clinical Periodontics 5**  
Clinical rotation in periodontics.

**DSRE 8806**  
**Critical Appraisal of Translational Literature II**  
The purpose of this course is to develop proficiency in critical thinking and problem solving as it pertains to scientific inquiry and research methodology in translational research. It provides a continued foundation for discussion of clinical events occurring in the student's clinical practice w/ emphasis on evidence-based dentistry.

**DSRE 8810**  
**Restorative Dentistry Advanced Clin Training Service Seminar**  
This seminar-type course is a broad discussion of advanced restorative techniques for complex prosthodontic rehabilitation or reconstruction cases. Specific topics such as aesthetics, TMJ considerations and materials application will be included.

**DSRE 8817**  
**Comprehensive Patient Care Clinic "E"**  
Variable 0.1-5.0 credits
Advanced comprehensive patient care including applied principles of practice management.

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<tr>
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<td>DSRE 8945</td>
<td>Treatment Planning and Case Presentation</td>
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<tr>
<td>DSRP 8011</td>
<td>Clinical Removable Prosthodontics 5</td>
<td>Variable 0.1-5.0</td>
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</table>

Treatment planning concepts and presentation formats, focused on multidisciplinary approach, key tooth analysis, phased treatment plans and case presentation format and technique.

Clinical rotation in removable prosthodontics.

The patient who presents with oral pain is evaluated and relief of discomfort is provided by the student under the supervision of the dental faculty.

Continuation of advanced comprehensive patient care activities for DS 4 dental students not registered for Integrated Care Clinical Dentistry.

**FIRST YEAR SPRING SEMESTER**

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<th>Course Code</th>
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<td>Embryology and Craniofacial Biology</td>
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<td>DSBS 5506</td>
<td>Oral Histology</td>
<td>Variable 0.1-5.0</td>
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<tr>
<td>DSBS 5511</td>
<td>Invaders and Protectors</td>
<td>Variable 0.1-5.0</td>
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<td>DSOD 5502</td>
<td>Oral Radiology Lecture</td>
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<td>DSOD 5503</td>
<td>Oral Radiology Laboratory</td>
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<td>DSOP 5504</td>
<td>Principles of Operative Dentistry - Direct Restoration 1 Lecture</td>
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<tr>
<td>DSOP 5505</td>
<td>Principles of Operative Dentistry - Direct Restoration 1 Lab</td>
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<td>DSRE 5506</td>
<td>Occlusion 1 Lecture</td>
<td>Variable 0.1-5.0</td>
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<tr>
<td>DSRE 5507</td>
<td>Occlusion 1 Laboratory</td>
<td>Variable 0.1-5.0</td>
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<tr>
<td>DSRE 5521</td>
<td>Introduction to Clinical Dentistry 2</td>
<td>Variable 0.1-5.0</td>
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<tr>
<td>IPED 5002</td>
<td>Interprofessional Education and Development I</td>
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Deals with the chemical basis of biological organization and function. Emphasis is given to topics most directly relevant to oral health and disease.

This course will cover the details of tooth development and the histological features of the oral tissues, to include: salivary glands, oral epithelia, oral lymphatic tissue, enamel, dentin, cementum, oral bone and the periodontal ligament.

This course covers basic principles of general and medical microbiology with emphasis on oral microorganisms while integrating the response of the immune system to fight these invaders.

Designed to introduce the students to basic radiology and to provide them with the necessary practical skills in preparation for clinical dentistry.

The laboratory is designed to provide students with the necessary practical skills in preparation for clinical dentistry.

This course is designed to teach students the principles of operative dentistry and the direct restoration of teeth from a problem specific approach.

This course integrates the principles of operative dentistry and direct restoration in a case-based laboratory environment.

This introductory course in articulation and occlusion deals with the principles of mandibular movement and reproducing these movements on an articulator. The various types of occlusions are considered as well as different treatment theories pertaining to occlusal philosophies.

The laboratory course includes waxing opposing dentitions to proper occlusion, obtaining intra-oral records on patient and mounting patient models on an articulator.

This course will continue to prepare students for clinic. Topics covered provide a foundation for the practice of dentistry including Oral Health Literacy, Resiliency, Ergonomics and Training in 4-handed Dentistry including a Clinical Assist Session.

This course develops core competencies in teamwork and collaboration, values and ethics, and quality and safety for first-year health professions students. The course will be taught in a team-based format requiring individual preparation before each session followed by the application of that learning in through team-based activities.
SECOND YEAR SPRING SEMESTER

DSBS 6603  Applied Clinical Pharmacology  Variable 0.1-5.0 credits
Part two of a two-course sequence. Intensive study of drugs used in dental practice with emphasis on the basic principles of drug action. Lectures and clinical correlations are employed.

DSCD 6623  Managing Your Student Practice 2  Variable 0.1-5.0 credits
Course provides students with knowledge/skills to make the transition from pre-clinic to clinical patient. Competencies established in infection control, documentation/record keeping, patient management, medico-legal implications, ethical implications, professionalism, organization skills, communication skills, auxiliary utilization, and

DSEN 6610  Endodontics 1 Lecture  Variable 0.1-5.0 credits
Course is an introduction to basic endodontics therapy. The philosophy of endodontics treatment and therapeutic techniques is discussed. Mechanisms of inflammation and repair are related to decisions in clinical practice.

DSEN 6611  Endodontics 1 Lab  Variable 0.1-5.0 credits
This is a laboratory course in basic endodontic techniques that utilizes simulated human teeth as models for providing clinical treatment.

DSFD 6610  Fixed Prosthodontics  Variable 0.1-5.0 credits
Advanced pre-clinical lecture course. Ceramic restorations are included with discussion of pontic design and manipulation of gold solder. Dowel-core fabrication for endodontically treated teeth is covered. Clinical application is stressed and study of diagnosis and treatment planning is expanded.

DSFD 6611  Fixed Prosthodontics Laboratory  Variable 0.1-5.0 credits
Continuation of Fixed Prosthodontics with emphasis on ceramic restorations and the procedures involved in fabricating fixed bridges in the anterior of appearance zone. Restorations include direct pattern fabrication of dowel-cores to build up badly broken-down or fractured teeth.

DSOD 6658  Diagnosis of Orofacial Lesions  Variable 0.1-5.0 credits
Presentations of oral and maxillofacial lesions and anomalies from the comprehensive patient care program will be made by the students and critiqued by the faculty. Clinical history, detailed description, differential diagnosis and treatment/prognosis will form the basis of this interactive discussion.

DSON 6612  Oral Pathology 2  Variable 0.1-5.0 credits
This course is a continuation of Oral Pathology 1.

DSOP 6600  Pre-Clinical Operative Dentistry Workshop  Variable 0.1-5.0 credits
Practical restorative exercises in extracted natural teeth.

DSPD 6620  Pediatric Dentistry 1  Variable 0.1-5.0 credits
Basic principles of clinical diagnosis and treatment of the child patient are introduced. Developmental aspects of the formation of the craniofacial complex are applied to clinical management of space maintenance, pupal, restorative, and behavior management problems.

DSPE 6606  Periodontology 3 Laboratory  Variable 0.1-5.0 credits
This course runs parallel with Periodontology 2. It is devoted to teaching the clinical skills necessary for the practice of periodontics within the context of a general dental practice.

DSPE 6607  Periodontology 3  Variable 0.1-5.0 credits
This course deals with the prevention, treatment and control of periodontal disease. Currently accepted therapies are discussed in detail. In addition, the student is taught how to evaluate new therapies which periodically become available

DSRE 6601  Transition Clinic 2  Variable 0.1-5.0 credits
Provide techniques for diagnosis, treatment planning and record keeping for general dental practice. Axiom software training. Perform simple oral diagnosis appointments, periodic oral evaluations and basic operative procedures. Students will be paired together rotating between assistant and operator.

DSRE 6609  Treatment Planning  Variable 0.1-5.0 credits
Course will bridge the concepts learned in oral diagnosis, periodontics, restorative dentistry, radiology and transition clinic to help the students assimilate clinical information into clinically acceptable treatment plans that best meet patient needs.
DSRE 6610  Clinical Dental Materials  Variable 0.1-5.0 credits
This course integrates knowledge of dental materials with clinical dental practice.

DSRE 6611  Occlusion II Lecture 1  Variable 0.1-5.0 credits
Theory and indications treating mandibular instability with splints and equilibration. The etiology, diagnosis and treatment of occlusal trauma and mandibular dysfunction are introduced.

DSRE 6613  Occlusion II Laboratory 1  Variable 0.1-5.0 credits
The laboratory portion of this course includes fabrication of different splint types. It also introduces the principles of equilibration and applying these principles to models.

DSSD 6600  Clinical Dental Pharmacology  Variable 0.1-5.0 credits
Integration of basic drug mechanisms with fundamentals of clinical pharmacology and patient care.

DSSD 6604  Pain Control 1 (Local Anesthesia)  Variable 0.1-5.0 credits
The anatomy of the nerve supply to the teeth and associated structures is covered. The techniques for administration of local anesthesia to the maxilla and mandible are demonstrated by the faculty and performed by the student.

DSSD 6608  Prevention and Management of Medical Emergencies  Variable 0.1-5.0 credits
The prevention, diagnosis, and management of medical emergencies are presented.

THIRD YEAR SPRING SEMESTER

DSCD 7706  Clinical Transformations: Interprofessional Education  Variable 0.1-5.0 credits
This course, taught in a team-based format in a simulated clinical environment, evaluates campus-wide competencies in teamwork, collaborative interprofessional practice, quality and safety. Students explore health care professional roles, and build communication skills with members of the health care team/patient/family.

DSCD 7709  Public Health and Community Dentistry  Variable 0.1-5.0 credits
This course exposes students to the public aspects of oral health care. It identifies the significance and scope of public health programs at all levels of government and relates the public activities to the private practice of dentistry.

DSCD 7726  Dental Practice Planning  Variable 0.1-5.0 credits
Teaches students to make basic decisions relating to planning/implementation of private practice. Primary focus on practice arrangements, business formats, dental associationships, buying a practice, designing and equipping dental office, financing practice, leases, debt management, personal/professional insurance, and selecting professional advisors.

DSCD 7796  Special Care Clinic A  Variable 0.1-5.0 credits
This course is designed to introduce dental students to provide dental treatment to the special needs population.

DSDD 7702  Hospital Dentistry  Variable 0.1-5.0 credits
This course provides an introduction to the hospital environment and the dental treatment of patients within that environment.

DSEN 7022  Clinical Endodontics 2  Variable 0.1-5.0 credits
Clinical rotation in endodontics.

DSEN 7712  Endodontics 3  Variable 0.1-5.0 credits
Course addresses topics of diagnosis and management of a variety of endodontic treatment problems such as periapical pathosis, traumatic injuries, surgical intervention, and bleeding.

DSFD 7022  Clinical Fixed Prosthodontics 3  Variable 0.1-5.0 credits
Clinical rotation in fixed prosthodontics.

DSOD 7022  Clinical Oral Diagnosis 3  Variable 0.1-5.0 credits
Clinical rotation in oral diagnosis.

DSOD 7724  Diagnostic Radiology  Variable 0.1-5.0 credits
Basic concepts and interpretative principles for panoramic radiography, TMJ radiography, sialography, xeroradiography, and extraoral views will be presented. Additionally, advanced imaging modalities that have been made available to assist in radiologic diagnoses in dentistry will be introduced.

DSON 7755  Clinical Oncology  Variable 0.1-5.0 credits
One week course including lectures, seminars, tumor boards, surgery rounds, and radiation therapy conferences dealing with prevention, diagnosis, and treatment of head and neck neoplasia.

**DSOP 7022 Clinical Operative Dentistry 3**  
Clinical rotation in operative dentistry.  
Variable 0.1-5.0 credits

**DSOT 7021 Clinical Orthodontics 1**  
Clinical rotation in orthodontics.  
Variable 0.1-5.0 credits

**DSOT 7720 Orthodontics 2**  
Covers Cephalometric analysis laboratory, fabrication of fixed and removable appliances for interceptive and corrective orthodontic treatment. Utilizes acquired knowledge from the previous orthodontic course to synthesize a general and orthodontic diagnosis; and preventive, restorative, and orthodontic treatment plan.

**DSOP 7022 Clinical Pediatric Dentistry 2**  
Clinical rotation in pediatric dentistry.  
Variable 0.1-5.0 credits

**DSOT 7721 Clinical Periodontics 3**  
Clinical rotation in periodontics.  
Variable 0.1-5.0 credits

**DSRE 7706 Critical Appraisal of Translational Literature**  
The purpose of this course is to develop proficiency in critical thinking and problem solving as it pertains to scientific inquiry and research methodology in translational research.  
Variable 0.1-5.0 credits

**DSRE 7711 Advance Prosthodontics**  
This course will address various Advance Prosthodontic topics; beginning with CAD/CAM dentistry and digital workflow, then removable partial denture designs, occlusal concepts, diagnosis and treatment planning, esthetics, and cementation for fixed prosthodontics restorations.  
Variable 0.1-5.0 credits

**DSRE 7719 Comprehensive Patient Care Clinic "C"**  
Comprehensive patient care activities with a focus on independence, student preparedness, technical skills, patient management and professionalism.  
Variable 0.1-5.0 credits

**DSRE 7936 Treatment Planning and Case Presentation 2**  
Treatment planning concepts and presentation formats, focused on multidisciplinary approach, key tooth analysis, phased treatment plans and case presentation format and technique.  Requisite:  
Variable 0.1-5.0 credits

**DSRE 7702 Clinical Removable Prosthodontics 3**  
Clinical rotation in removable prosthodontics.  
Variable 0.1-5.0 credits

**FOURTH YEAR SPRING SEMESTER**

**DSCD 8812 Dental Ethics and Jurisprudence**  
This course prepares students for appropriate conduct consistent with the legal and ethical principles of the dental profession. It lays the foundations for each student's continued growth with respect to the legal and ethical obligations of professionalism.  
Variable 0.1-5.0 credits

**DSCD 8822 Practice Management**  
Primary focus is on financial records, billing and collections, professional insurance, fees, clinical records, third party relations, case presentation, practice analysis, dental practice marketing, and personnel management.  
Variable 0.1-5.0 credits

**DSCD 8893 Community - Based Clinical Dentistry 3**  
Students complete six weeks (may elect an additional eighteen weeks) in a non-metropolitan community-based educational site. Objectives of clinical experiences vary according to site assignment and include rural community health centers, psychiatric hospitals, migrant health care, or private practice locations.  
Variable 0.1-5.0 credits

**DSEN 8022 Clinical Endodontics 5**  
Clinical rotation in endodontics.  
Variable 0.1-5.0 credits

**DSFD 8022 Clinical Fixed Prosthodontics 6**  
Clinical rotation in fixed prosthodontics.  
Variable 0.1-5.0 credits

**DSOD 8022 Clinical Oral Diagnosis 6**  
Clinical rotation in oral diagnosis.  
Variable 0.1-5.0 credits
Clinical rotation in oral diagnosis.

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<tr>
<td>DSOP 8022</td>
<td>Clinical Operative Dentistry 6</td>
<td>Variable 0.1-5.0 credits</td>
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<td>DSPE 8022</td>
<td>Clinical Periodontics 6</td>
<td>Variable 0.1-5.0 credits</td>
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<td>DSRE 8827</td>
<td>Comprehensive Patient Care Clinic &quot;F&quot;</td>
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<td>DSRE 8946</td>
<td>Treatment Planning and Case Presentation 4</td>
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<td>DSRP 8022</td>
<td>Clinical Removable Prosthodontics 6</td>
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**FIRST YEAR SUMMER SEMESTER**

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<td>Pathology</td>
<td>Variable 0.1-5.0 credits</td>
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<td>DSCD 5502</td>
<td>Nutrition</td>
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<td>DSCD 5503</td>
<td>Person Centered Care</td>
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<td>DSOD 5500</td>
<td>Assessment of the Dental Patient</td>
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<tr>
<td>DSOP 5506</td>
<td>Principles of Operative Dentistry - Direct Restorations 2</td>
<td>Variable 0.1-5.0 credits</td>
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<tr>
<td>DSOP 5507</td>
<td>Principles of Operative Dentistry - Direct Restorations 2 Lab</td>
<td>Variable 0.1-5.0 credits</td>
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<tr>
<td>DSPE 5500</td>
<td>Periodontics 1</td>
<td>Variable 0.1-5.0 credits</td>
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<tr>
<td>DSRE 5503</td>
<td>Dental Materials 2</td>
<td>Variable 0.1-5.0 credits</td>
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<tr>
<td>DSRE 5508</td>
<td>Indirect Single Tooth Restoration 1</td>
<td>Variable 0.1-5.0 credits</td>
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<tr>
<td>DSRE 5522</td>
<td>Introduction to Clinical Dentistry 3</td>
<td>Variable 0.1-5.0 credits</td>
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</table>
This course will continue to prepare students for the clinic. Topics covered include a review and testing of head/neck and intraoral anatomy knowledge, clinical application of this knowledge, an all-day 8 hour Kaplan NBDE Part I practice exam, 4 handed dentistry, clinical assist session and introduction to clinic.

SECOND YEAR SUMMER SEMESTER

DSEN 6612  Endodontics 2 Lecture  Variable 0.1-5.0 credits
Course is an introduction to basic endodontics therapy. The philosophy of endodontics treatment and therapeutic techniques is discussed. Mechanisms of inflammation and repair are related to decisions in clinical practice.

DSEN 6613  Endodontics 2 Laboratory  Variable 0.1-5.0 credits
This is a laboratory course in basic endodontic techniques that utilizes simulated human teeth as models for providing clinical treatment.

DSFD 6031  Clinical Fixed Prosthodontics 1  Variable 0.1-5.0 credits
Clinical rotation in fixed prosthodontics.

DSOD 6031  Clinical Oral Diagnosis 1  Variable 0.1-5.0 credits
Clinical rotation in oral diagnosis.

DSOP 6031  Clinical Operative Dentistry 1  Variable 0.1-5.0 credits
Clinical rotation in operative dentistry.

DSOP 6610  Seminars in Restorative Dentistry  Variable 0.1-5.0 credits
This course will present topics on operative dentistry relative to clinic patient care. Current materials and techniques as well as a review of fundamental concepts of operative dentistry will be taught.

DSOS 6031  Oral and Maxillofacial Surgery  Variable 0.1-5.0 credits
The diagnosis and treatment of oral and maxillofacial surgical problems including techniques for extraction of teeth, alveoplasty, biopsy, management of infection, treatment of maxillary and mandibular fractures, and suturing techniques.

DSPD 6630  Pediatric Dentistry  Variable 0.1-5.0 credits
Introductory courses in pediatric dentistry providing foundational knowledge for subsequent participation in pediatric dentistry clinical rotations. Laboratory and didactic components provide knowledge and skills for restorative treatment during the primary, transitional, and young permanent dentition phases.

DSPE 6031  Clinical Periodontics 1  Variable 0.1-5.0 credits
Clinical rotation in periodontics.

DSPE 6610  Periodontics 3  Variable 0.1-5.0 credits
Course is devoted to making the student familiar with the surgical management of periodontal disease. The indications and rationale for resection, reconstructive and mucogingival procedures are discussed.

DSRE 6602  Transition Clinic 3  Variable 0.1-5.0 credits
This is a follow on to T-Clinic 2. Students will be instructed how to complete very large amalgam and composite restorations, how to remove existing composite from natural teeth and other frequently encountered restorative issues that are seen in clinic. This will be a companion class to, but different from, previous operative courses.

DSRE 6604  Esthetic Dentistry  Variable 0.1-5.0 credits
This course is designed to present information to students about those clinical dentistry procedures or concepts which are performed primarily to enhance dental esthetics.

DSRE 6612  Occlusion II Lecture 2  Variable 0.1-5.0 credits
Theory and indications treating mandibular instability with splints and equilibration. The etiology, diagnosis and treatment of occlusal trauma and mandibular dysfunction are introduced.

DSRE 6615  Comprehensive Patient Care Clinic "A"  Variable 0.1-5.0 credits
An introductory clinic for dental students. Students will provide comprehensive dental care, refining technical skills, and learning patient management skills in a large group practice setting.

DSRE 6616  Occlusion II Laboratory 2  Variable 0.1-5.0 credits
The laboratory portion of this course includes fabrication of different splint types. It also introduces the principles of equilibration and applying these principles to models.
DSRP 6031  Clinical Removable Prosthodontics 1  Variable 0.1-5.0 credits
Clinical rotation in removable prosthodontics.

DSSD 6610  Pain Control 2 (Nitrous Oxide Analgesia)  Variable 0.1-5.0 credits
Pharmacological indications and contraindications and prevention and treatment of complications relating to use of nitrous oxide is presented.

DSSD 6612  Orofacial Pain (Temp Sum 2021 Course Due to Covid)  Variable 0.1-5.0 credits
This course is designed to acquaint the student with the evaluation, diagnosis, management, and pathology of the temporomandibular joint. Emphasis is on the multidisciplinary nature of treating disorders of the TMJ.

THIRD YEAR SUMMER SEMESTER

DSCD 7791  Community - Based Clinical Dentistry 1  Variable 0.1-5.0 credits
Students are required to complete assignments to practice in community-based ACTS Program sites. The specific objectives of these clinical assignments vary according to the site assigned each student. Sites include multi-disciplinary community health care centers, institution- or hospital-based treatment centers, & private practices.

DSCD 7797  Special Care Clinic B  Variable 0.1-5.0 credits
This course is designed to introduce dental students to provide dental treatment to the special needs population.

DSEN 7033  Clinical Endodontics 3  Variable 0.1-5.0 credits
Clinical rotation in endodontics.

DSFD 7033  Clinical Fixed Prosthodontics 4  Variable 0.1-5.0 credits
Clinical rotation in fixed prosthodontics.

DSOD 7033  Clinical Oral Diagnosis 4  Variable 0.1-5.0 credits
Clinical rotation in oral diagnosis.

DSOP 7033  Clinical Operative Dentistry 4  Variable 0.1-5.0 credits
Clinical rotation in operative dentistry.

DSPD 7033  Clinical Pediatric Dentistry 3  Variable 0.1-5.0 credits
Clinical rotation in pediatric dentistry.

DSPE 7033  Clinical Periodontics 4  Variable 0.1-5.0 credits
Clinical rotation in periodontics.

DSRE 7721  Comprehensive Patient Care Clinic "D"  Variable 0.1-5.0 credits
Continuation of Comprehensive Patient Care C with emphasis on effective practice management.

DSRP 7033  Clinical Removable Prosthodontics 4  Variable 0.1-5.0 credits
Clinical rotation in removable prosthodontics.

ELECTIVE COURSES

DSEL 9100  Advanced Readings in Pediatric Dentistry  Variable 0.1-5.0 cr.
Elective seminar offered to interested DS3 students. Each week a different topic in pediatric dentistry will be covered. Students will be expected to read and discuss relevant, current, peer reviewed journal articles and to complete one final assignment.

DSEL 9101  Spanish Study Abroad Dental Elective  Variable 0.1-5.0 cr.
This is an elective course for eligible students that provides the opportunity for dental students to travel to Quetzaltenango, Guatemala to study Spanish intensively for 2 weeks at Celas Maya Spanish Language School. Department consent required.

DSEL 9102  Trifinio Guatemala Dental Elective  Variable 0.1-5.0 cr.
This course is offered to eligible students who wish to travel for one week to Trifinio, Guatemala to provide comprehensive dental care at the CU Center for Global Health's Trifinio Health Clinic. Department consent required.
DSEL 9104 Introduction to Global Health Elective  Variable 0.1-5.0 cr.
This course consists of 6 seminars covering various global health topics including: global oral health, building a sustainable global oral health program, safe drinking water and GI illnesses, child nutrition, global health policy making and system challenges, and cultural awareness.

DSEL 9106 Advanced Readings in Dental Public Health Elective  Variable 0.1-5.0 cr.
Elective seminar offered to interested DS2 and DS3 students. Different topics in dental public health will be covered. Students will be expected to read, present, discuss and review articles.

DSEL 9110 Refugee and Immigrant Health  Variable 0.1-5.0 cr.
This course addresses the very timely issue of refugees and immigrants. Students will learn the integration and screening process of refugees, the common physical (including oral) and mental health issues that are prevalent in the refugee community, the role of various players as well as opportunities to get involved.
ADVANCED STANDING INTERNATIONAL STUDENT PROGRAM
(The Dental curriculum is subject to change without notice.)

FIRST YEAR SPRING SEMESTER

DISP 7100  Restorative Preclinical Didactic  Variable 0.1-5.0 credits
This seminar-based course introduces the student to an overview of contemporary restorative procedures in an simulated clinical environment.

DISP 7101  Restorative Preclinical Simulation Lab  Variable 0.1-5.0 credits
This laboratory-based course provides students with an overview of restorative techniques in a simulated clinical environment.

DISP 7102  Occlusion  Variable 0.1-5.0 credits
Course covering principles of intra and inter-oral relationships. Course will also cover diagnosis and treatment regarding the occlusion relationship.

DISP 7103  Occlusion Laboratory  Variable 0.1-5.0 credits
The laboratory portion of this course includes fabrication of different splint types. It also introduces principles of equilibration and applying these principles to models.

DISP 7104  Clinical Practice Ethics  Variable 0.1-5.0 credits
Case-based ethics discussion.

DISP 7105  Clinical Dental Materials  Variable 0.1-5.0 credits
This course will provide knowledge on the science, properties, and manipulation of dental materials and their application in dental practice.

DISP 7106  Complete & Removable Prosthodontics 1  Variable 0.1-5.0 credits
The educational goal of this course is for the student to be able to collect information, diagnose, and develop a treatment plan for a completely edentulous patient that requires removable complete denture treatment, in order to restore them to good oral health and function as well as offer an accurate prognosis of treatment.

DISP 7107  Cariology  Variable 0.1-5.0 credits
Basic knowledge about dental caries and didactic instruction and exercises in identifying caries, learning and evaluating detection methods. Additionally, identifying and correlating factors that contribute to caries, and developing programs for prevention and management to reduce identified factors.

DISP 7108  Complete & Removable Prosthodontics Lab 1  Variable 0.1-5.0 credits
The laboratory part of the course includes the design and fabrication of a removable complete denture.

DISP 7109  Endodontics 1 and 2  Variable 0.1-5.0 credits
Course is an introduction to basic endodontics therapy. The philosophy of endodontics treatment and therapeuic techniques is discussed. Mechanisms of inflammation and repair are related to decisions in clinical practice.

DISP 7110  Periodontology 3  Variable 0.1-5.0 credits
This course deals with the prevention, treatment and control of periodontal disease. Currently accepted therapies are discussed in detail. In addition, the student is taught how to evaluate new therapies which periodically become available.

DISP 7111  Periodontology 3 Laboratory - Section 1  Variable 0.1-5.0 credits
This course is devoted to teaching the clinical skills necessary for the practice of periodontics within the context of a general dental practice.

DISP 7112  Clinical Dental Pharmacology  Variable 0.1-5.0 credits
Integration of basic drug mechanisms with fundamentals of clinical pharmacology and patient care.

DISP 7113  Pain Control 1 (Local Anesthesia)  Variable 0.1-5.0 credits
The anatomy of the nerve supply to the teeth and associated structures is covered. The techniques for administration of local anesthesia to the maxilla and mandible are demonstrated by the faculty and performed by the student.

DISP 7114  Prevention and Management of Medical Emergencies  Variable 0.1-5.0 credits
The prevention, diagnosis, and management of medical emergencies are presented.

DISP 7115  Infection Control  Variable 0.1-5.0 credits
This course reviews the fundamental principles of infection control including a focus on universal precautions, aseptic technique, methods of sterilization and regulatory issues.

DISP 7116  Oral Radiology  Variable 0.1-5.0 credits
Designed to introduce the students to basic radiology and to provide them with the necessary practical skills in preparation for clinical dentistry.

DISP 7131 Oral Radiology Laboratory Variable 0.1-5.0 credits
The laboratory is designed to provide students with the necessary practical skills in preparation for clinical dentistry.

DISP 7160 Managing Your Student Practice Variable 0.1-5.0 credits
Course provides student with knowledge/skills necessary to make the transition from pre-clinic to clinical patient. Competencies established in infection control, documentation, record keeping, patient management, medico-legal/ethical implications, professionalism, organization skills, communication skills, auxiliary utilization, and equipment/instrument utilization.

DISP 7163 Transition Clinic for ISP Students Variable 0.1-5.0 credits
A mini-orientation of clinical methods and practices and an introduction to the appropriate utilization of AxiUm software. This will include an overview of the SODM oral diagnosis and treatment planning processes, procedures and policies with oth clinical and didactic components.

SECOND YEAR SPRING SEMESTER

DISP 8100 Case Presentation 3 Variable 0.1-5.0 credits
Patient care with development of treatment plan through presentation by student to students and faculty.

DISP 8101 Comprehensive Patient Care Clinic C Variable 0.1-5.0 credits
Continuation of Comprehensive Patient Care Clinic B with activities focusing on independence, student preparedness, technical skills, patient management and professionalism.

DISP 8110 Restorative Dentistry Advanced Clinical Training Service Seminar Variable 0.1-5.0 credits
This seminar-type course is a broad discussion of advanced restorative techniques for complex prosthodontic rehabilitation or reconstruction cases. Specific topics such as anesthetics, TMJ considerations and materials application will be included.

DISP 8116 Critical Appraisal of Translational Literature Variable 0.1-5.0 credits
The purpose of this course is to develop proficiency in critical thinking and problem solving as it pertains to scientific inquiry and research methodology in translational research.

DISP 8120 Endodontics 3 Variable 0.1-5.0 credits
This course addresses topics of diagnosis and management of a variety of endodontic treatment problems such as periapical pathosis, traumatic injuries, surgical intervention, and bleeding.

DISP 8123 Clinical Endodontics Variable 0.1-5.0 credits
Clinical rotation in endodontics.

DISP 8124 Clinical Periodontics Variable 0.1-5.0 credits
Clinical rotation in periodontics.

DISP 8125 Clinical Oral Maxillofacial Surgery - Section 1 Variable 0.1-5.0 credits
This is a clinical oral surgery experience including routine and surgical removal of erupted and impacted teeth and use of intravenous sedation techniques.

DISP 8128 Hospital Dentistry Variable 0.1-5.0 credits
This course provides an introduction to the hospital environment and the dental treatment of patients within that environment.

DISP 8130 Clinical Oncology Variable 0.1-5.0 credits
An assignment of one week for students includes lectures, seminars, tumor boards, surgery rounds, and radiation therapy conferences on a health professional approach to the prevention, diagnosis, and treatment of head and neck neoplasia.

DISP 8131 Oral Pathology 2 Variable 0.1-5.0 credits
This course is a continuation of DISP 7330.

DISP 8133 Clinical Oral Diagnosis Variable 0.1-5.0 credits
Clinical rotation in oral diagnosis.

DISP 8135 Clinical Operative Dentistry Variable 0.1-5.0 credits
Clinical rotation in operative dentistry.

DISP 8136 Clinical Fixed Prosthodontics Variable 0.1-5.0 credits
Clinical rotation in fixed prosthodontics.

DISP 8137 Clinical Removable Prosthodontics Variable 0.1-5.0 credits
Clinical rotation in removable prosthodontics.

DISP 8140 Clinical Pediatric Dentistry Variable 0.1-5.0 credits
Clinical rotation in pediatric dentistry

DISP 8160 Dental Ethics and Jurisprudence Variable 0.1-5.0 credits
This course prepares students for appropriate conduct consistent with the legal and ethical principles of the dental profession. It lays the foundations for each student's continued growth with respect to the legal and ethical obligations of professionalism.

DISP 8161 Practice Management Variable 0.1-5.0 credits
Understanding of basic management activities which must be continuously carried out in private practice. Primary focus on financial records, billing and collections, professional insurance, fees, clinical records, third party relations, case presentation, practice analysis, dental practice marketing, and personnel management.

DISP 8162 Dental Practice Planning Variable 0.1-5.0 credits
Teaches students to make decisions in planning / implementation of private practice. Primary focus on alternative practice arrangements, business formats, dental associateships, buying practice, designing / equipping dental office, financing a practice, leases, debt management, personal professional insurance, and selecting professional advisors.

DISP 8176 Public Health and Community Dentistry Variable 0.1-5.0 credits
This course exposes students to the public aspects of oral health care. It identifies the significance and scope of public health programs at all levels of government and relates the private practice of dentistry.

DISP 8203 Special Care Clinic A Variable 0.1-5.0 credits
This course is designed to introduce students to provide dental treatment to the special needs population.

DISP 8209 Advance Prosthodontics Variable 0.1-5.0 credits
This course will address various advance prosthodontic topics; beginning with CAD/CAM dentistry and digital workflow, then removable partial denture designs, occlusal concepts, diagnosis and treatment planning, esthetics, and cementation for fixed prosthodontics restorations.

DISP 8258 Diagnosis of Orofacial Lesions Variable 0.1-5.0 credits
Presentations of oral and maxillofacial lesions and anomalies from the comprehensive patient care program will be made by the students and critiqued by the faculty. Clinical history, detailed description, differential diagnosis and treatment/prognosis will form the basis of this interactive discussion.

FIRST YEAR SUMMER SEMESTER

DISP 7113 Complete & Removable Prosthodontics Variable 0.1-5.0 credits
The educational goal of this course is for the student to be able to collect information, diagnose, and develop a treatment plan for a completely edentulous patient that requires removable complete denture treatment, in order to restore them to good oral health and function as well as offer an accurate prognosis of treatment.

DISP 7114 Complete & Removable Prosthodontics Lab Variable 0.1-5.0 credits
The laboratory part of the course includes the design and fabrication of a removable complete denture.

DISP 7119 Communication and Behavior Change Variable 0.1-5.0 credits
This interactive course focuses on communication skills for enhanced treatment planning dialogues and to facilitate behavior changes toward systemic and oral health. Professionalism, ethics and the patient-centered approach are emphasized within a humanistic culture in oral health care settings.

DISP 7121 Endodontics 1 and 2 Variable 0.1-5.0 credits
Course is an introduction to basic endodontics therapy. The philosophy of endodontics treatment and therapeutic techniques is discussed. Mechanisms of inflammation and repair are related to decisions in clinical practice.

DISP 7132 Diagnostic Radiology Variable 0.1-5.0 credits
Basic concepts and interpretative principles for panoramic radiography, TMJ radiography, sialography, xeroradiography, and extraoral views will be presented. Additionally, advanced imaging modalities that have been made available to assist in radiologic diagnoses in dentistry will be introduced.

DISP 7140 Pediatric Dentistry 1 Variable 0.1-5.0 credits
Basic principles of clinical diagnosis and treatment of the child patient are introduced. Developmental aspects of the formation of the craniofacial complex are applied to clinical management of space maintenance, pulpal, restorative, and behavior management problems.

DISP 7202 Case Presentation 1 Variable 0.1-5.0 credits
Patient care with development of treatment plan through presentation by student to students and faculty.

DISP 7203 Fixed Prosthodontics Variable 0.1-5.0 credits
An advanced preclinical lecture course covering ceramic restorations along with discussion of pontic design and manipulation of gold solder. Dowel-core fabrication for endodontically treated teeth is covered. Clinical application is stressed and study of diagnosis and treatment planning is expanded.
DISP 7204 Fixed Prosthodontics Laboratory
Emphasis on ceramic restorations and procedures involved in fabricating fixed bridges in the anterior of appearance zone. Restorations include direct pattern fabrication of dowel-cores to building up badly broken-down or fractured teeth.

DISP 7205 Comprehensive Patient Care Clinic A
An introductory clinic for students providing comprehensive dental care refining technical skills, and learning patient management skills in a large group practice setting.

DISP 7216 Seminars in Restorative Dentistry
This course will present topics on operative dentistry relative to clinic patient care. Current materials and techniques as well as a review of fundamental concepts of operative dentistry will be taught.

DISP 7220 Pain Control 2 (Nitrous Oxide Analgesia)
Pharmacological indications and contraindications and prevention and treatment of complications relating to use of nitrous oxide is presented.

DISP 7222 Orofacial Pain (Temp Sum 2021 Course Due to Covid)
This course is designed to acquaint the student with evaluation, diagnosis, arrangement and pathology of the temporomandibular joint. Emphasis is on the multidisciplinary nature of treating disorders of TMJ.

DISP 7231 Health Data Collection 1
Designed to introduce the student to the problem-oriented dental record and to a systems approach to the collection of health data. Includes both lecture and clinical phases.

DISP 7232 Clinical Oral Diagnosis
Clinical rotation in oral diagnosis.

DISP 8105 Evidence Based Topical Reviews
Introduction to concepts of evidence based dentistry and hierarchy of evidence for clinically relevant topics. Students develop clinically relevant queries and submit PICO questions, bibliographies, publication critiques, and make presentations regarding he evidence for their topic to their classmates/faculty.

DISP 8125 Clinical Oral Maxillofacial Surgery - Section 2
This is a clinical oral surgery experience including routine and surgical removal of erupted and impacted teeth and use of intravenous sedation techniques.

DISP 8200 Case Presentation 4
Patient care with development of treatment plan through presentation by student to students and faculty.

DISP 8201 Comprehensive Patient Care Clinic D
Continued provision of Comprehensive Patient Care Clinic C with emphasis on effective practice management.

DISP 8206 Special Care Clinic B
This course is designed to introduce dental students to provide dental treatment to the special needs population.

DISP 8220 Clinical Endodontics
Clinical rotation in endodontics.

DISP 8222 Clinical Periodontics
Clinical rotation in periodontics.

DISP 8225 Clinical Fixed Prosthodontics
Clinical rotation in fixed prosthodontics.

DISP 8226 Clinical Operative Dentistry
Clinical rotation in operative dentistry.

**DISP 8227**  
Clinical Removable Prostodontics  
Variable 0.1-5.0 credits

**DISP 8231**  
Clinical Oral Diagnosis  
Variable 0.1-5.0 credits

**DISP 8240**  
Clinical Pediatric Dentistry  
This course provides experience in developmental, behavioral, preventive, diagnostic, and therapeutic care on a comprehensive basis for pediatric patients in the primary, transitional, and permanent dentition phases and patients with special health needs.  
Variable 0.1-5.0 credits

**FIRST YEAR FALL SEMESTER**

**DISP 7211**  
Endodontics 1 Laboratory  
This is a laboratory course in basic endodontic techniques utilizing extracted natural teeth as models of clinical treatment.  
Variable 0.1-5.0 credits

**DISP 7222**  
Orofacial Pain  
This course is designed to acquaint the student with evaluation, diagnosis, arrangement and pathology of the temporomandibular joint. Emphasis is on the multidisciplinary nature of treating disorders of TMJ.  
Variable 0.1-5.0 credits

**DISP 7240**  
Pediatric Dentistry 2  
Basic principles of clinical diagnosis and treatment of the child patient are introduced.  
Variable 0.1-5.0 credits

**DISP 7300**  
Case Presentation 2  
Presentations of actual treatment cases from the comprehensive patient care program are made by students and critiqued by the faculty.  
Variable 0.1-5.0 credits

**DISP 7301**  
Comprehensive Patient Care Clinic B  
Continuation of Comprehensive Patient Care Clinic A with additional emphasis on the treatment of pediatric, orthodontic, geriatric, and endodontics cases.  
Variable 0.1-5.0 credits

**DISP 7310**  
Implant Dentistry  
Concepts and applications of tissue integrated prostheses are presented and discussed. Topics include an historical perspective of implant dentistry, surgical and prosthetic techniques, diagnosis and treatment planning analysis of current systems, qualifications and consent, and clinical applications.  
Variable 0.1-5.0 credits

**DISP 7314**  
Esthetic Dentistry  
This course is designed to present information to students about those clinical dentistry procedures or concepts which are performed primarily to enhance dental esthetics.  
Variable 0.1-5.0 credits

**DISP 7318**  
Critical Thinking and Patient Care Seminar  
This course will provide the student with a practical application of the practice of evidence-based dentistry, critical thinking, formulation of clinical questions, critical appraisal of the literature and the translation of the biologic and social sciences to clinical patient care.  
Variable 0.1-5.0 credits

**DISP 7320**  
Oral and Maxillofacial Surgery 2  
The diagnosis and treatment of oral and maxillofacial surgical problems including techniques for extraction of teeth, alveoplasty, biopsy, management of infection, treatment of maxillary and mandibular fractures, and suturing techniques.  
Variable 0.1-5.0 credits

**DISP 7323**  
Dental Pain and Emergencies  
This course covers the diagnostic and treatment considerations for the management of the patient in pain and other emergency problems encountered in general dentistry.  
Variable 0.1-5.0 credits

**DISP 7328**  
Clinical Periodontics  
Clinical rotation in periodontics.  
Variable 0.1-5.0 credits

**DISP 7330**  
Oral Pathology 1  
This course is a comprehensive review of the fundamental mechanisms and general principles of oral pathology, including developmental disturbances of oral and para-oral structures, benign and malignant tumors and cysts.  
Variable 0.1-5.0 credits

**DISP 7331**  
Clinical Oral Diagnosis  
Clinical rotation in oral diagnosis.  
Variable 0.1-5.0 credits

**DISP 7335**  
Clinical Fixed Prosthodontics  
Variable 0.1-5.0 credits
Clinical rotation in fixed prosthodontics.

**DISP 7336**  
Clinical Operative Dentistry  
Variable 0.1-5.0 credits

Clinical rotation in operative dentistry.

**DISP 7337**  
Clinical Removable Prosthodontics  
Variable 0.1-5.0 credits

Clinical rotation in removable prosthodontics.

**DISP 7340**  
Pediatic Dentistry  
Variable 0.1-5.0 credits

Course emphasizes diagnostic/treatment considerations for pediatric patients. Lecture materials by faculty/case presentations utilized to facilitate working knowledge of treatment planning/procedures. Sedation techniques for behavior problems discussed as well as traumatic injuries, hospital dentistry and medically compromised patients.

**DISP 7360**  
Behavioral Health, Gerontology and Geriatrics  
Variable 0.1-5.0 credits

Developing foundational knowledge in mental health/illness (mental health literacy), geriatrics and care for adult patients with developmental disabilities. Additionally at enhancing skills in building rapport/motivating patients for adoption of health behaviors, through lecture and two standardized patient interview experiences.

**DISP 7370**  
Diagnosis and Treatment of Common Oral Lesions  
Variable 0.1-5.0 credits

Presentations of actual treatment cases from the comprehensive patient care program are made by students and critiques by the faculty.

**DISP 7380**  
Dentistry for Adults with Special Health Care Needs  
Variable 0.1-5.0 credits

To introduce students to medical problems/disabilities affecting patients who will be treated in the School's Special Care Clinic. This includes foundational knowledge in the features of common congenital disabilities, proper communication techniques, and assessment of the oral health treatment strategies most compatible for the patient.

**DISP 7708**  
Dental Materials Seminar  
Variable 0.1-5.0 credits

The course is aimed to be an interactive session where the students will be divided into teams and will be asked to create presentations on clinical applications of dental materials.

**SECOND YEAR FALL SEMESTER**

**DISP 8105**  
Evidence Based Topical Reviews  
Variable 0.1-5.0 credits

Introduction to concepts of evidence based dentistry and hierarchy of evidence for clinically relevant topics. Students develop clinically relevant queries and submit PICO questions, bibliographies, publication critiques, and make presentations regarding he evidence for their topic to their classmates/faculty.

**DISP 8110**  
Restorative Dentistry Advanced Clin Training Service Seminar  
Variable 0.1-5.0 credits

This seminar-type course is a broad discussion of advanced restorative techniques for complex prosthodontic rehabilitation or reconstruction cases. Specific topics such as anesthetics, TMJ considerations and materials application will be included.

**DISP 8207**  
Special Care Clinic C  
Variable 0.1-5.0 credits

This course is designed to introduce dental students to provide dental treatment to the special needs population

**DISP 8300**  
Case Presentation  
Variable 0.1-5.0 credits

Patient care with development of treatment plan through presentation by student to students and faculty.

**DISP 8301**  
Comprehensive Patient Care Clinic E  
Variable 0.1-5.0 credits

Advanced comprehensive patient care including applied principles of practice management.

**DISP 8310**  
Advanced Implant Prosthodontics Seminar  
Variable 0.1-5.0 credits

Students gain experience in clinical use of cast restorations. Emphasis is placed on the fabrication of restorations that are to function adequately in the patient's biologic environment.

**DISP 8321**  
Clinical Endodontics  
Variable 0.1-5.0 credits

Clinical rotation in endodontics.

**DISP 8323**  
Clinical Periodontics  
Variable 0.1-5.0 credits

Clinical rotation in periodontics.

**DISP 8325**  
Clinical Fixed Prosthodontics  
Variable 0.1-5.0 credits

Clinical rotation in fixed prosthodontics.

**DISP 8326**  
Clinical Operative Dentistry  
Variable 0.1-5.0 credits

Clinical rotation in operative dentistry.

**DISP 8327**  
Clinical Removable Prosthodontics  
Variable 0.1-5.0 credits

Clinical rotation in removable prosthodontics.
DISP 8328  Clinical Oral Radiology  Variable 0.1-5.0 credits
Clinical rotation in oral radiology.

DISP 8330  Clinical Oral Diagnosis  Variable 0.1-5.0 credits
Clinical rotation in oral diagnosis.

DISP 8350  Orthodontics  Variable 0.1-5.0 credits
Early physical and emotional development of the child is presented, emphasizing prenatal and neonatal influences on the craniofacial complex. The etiology and classification of malocclusion along with the development of disturbances of hard and soft tissues are introduced.

DISP 8355  Clinical Emergencies  Variable 0.1-5.0 credits
The patient who presents with oral pain is evaluated and relief of discomfort is provided by the student under the supervision of the dental faculty.

ELECTIVE COURSES

DISP 8400  Advanced Readings in Pediatric Dentistry Elective  Variable 0.1-5.0 credits
Seminar offered to interested ISP students. Each week a different topic in pediatric dentistry will be covered. Students will be expected to read and discuss relevant, current, peer reviewed journal articles and to complete one final assignment.

DISP 8401  Spanish Study Abroad Elective  Variable 0.1-5.0 credits
This is an elective course for eligible students that provides the opportunity for ISP students to travel to Quetzaltenango, Guatemala to study Spanish intensively for 2 weeks at Celas Maya Spanish Language School. Department consent required.

DISP 8402  Trifinio Guatemala ISP Elective  Variable 0.1-5.0 credits
This course is offered to eligible students who wish to travel for one week to Trifinio, Guatemala to provide comprehensive dental care at the CU Center for Global Health's Trifinio Health Clinic. Department consent required.

DISP 8406  Advanced Readings in Dental Public Health Elective  Variable 0.1-5.0 credits
Elective seminar offered to interested students. Different topics in dental public health will be covered. Students will be expected to read, present, discuss and review articles.

DISP 8410  Refugee and Immigrant Health  Variable 0.1-5.0 credits
This course addresses the very timely issue of refugees and immigrants. Students will learn the integration and screening process of refugees, the common physical (including oral) and mental health issues that are prevalent in the refugee community, the role of various plays as well as opportunities to get involved.
POSTGRADUATE PERIODONTICS CERTIFICATE/MASTER PROGRAM
(The Postgraduate Periodontics curriculum is subject to change without notice.)

First Year, Summer Semester

DPER 7100 Periodontics Specialty Clinic 1 5.8 cr.
In this postdoctoral course, students receive experiences with all accepted methods of periodontal treatment, dental implantology, and periodontal plastic procedures.

DPER 7101 Periodontal Current Literature 1 1.0 cr.
In this postdoctoral seminar course, relevant readings in the periodontal literature relating to specific topics are assigned and critically discussed.

DPER 7103 Periodontal Literature Review Seminar 1 0.5 cr.
In this postdoctoral seminar course, relevant readings in the periodontal literature relating to specific topics are assigned and critically discussed.

DPER 7111 Advanced Periodontal Concepts 1 1.1 cr.
This postdoctoral course is an intense review of periodontal procedures, in which residents are also instructed in periodontal case documentation procedures, intra-oral photography, record keeping and clinical protocol.

DPER 7113 Oral Medicine & Clinical Diagnosis 1.0 cr.
In this postdoctoral course, students review a variety of oral diseases and accepted methods of treatment of those as well as systemic diseases manifested in the oral cavity.

DPER 7114 Physical Diagnosis 1.3 cr.
This course will emphasize the art and science of medical history and physical assessment of dental patients. Anatomy, physiology, techniques of examination and clinical relevance for various body systems will be discussed at length.

DPER 7115 Interdisciplinary Course 1A 0.3 cr.
Seminar includes residents from GPR and Graduate Periodontics and GPR, Periodontics, and Prosthodontics faculty to share clinically relevant multidisciplinary information. Patient diagnostic evaluations and treatment plans are evaluated in an interactive environment. Topics involving new advancements are presented and discussed.

DPER 7211 Pain Control & Sedation/Comprehensive Management 2.0 cr.
This is a postgraduate course for pain control and sedation, and evaluation of patients to determine appropriate modalities of pain and anxiety control.

First Year, Fall Semester

DPER 7200 Periodontics Specialty Clinic 2 8.9 cr.
In this postdoctoral course, students receive experiences with all accepted methods of periodontal treatment, dental implantology, and periodontal plastic procedures.

DPER 7201 Periodontal Current Literature 1A 3.3 cr.
This postdoctoral course encompasses a review of the latest dental and medical journals for the most recent information related to the art, science, and practice of periodontics. Students prepare abstracts to be discussed at scheduled seminars. (Part 1 of two-semester course)

DPER 7203 Periodontal Literature Review Seminar 1A 3.3 cr.
In this postdoctoral seminar course, relevant readings in the periodontal literature relating to specific topics are assigned and critically discussed.

DPER 7204 Periodontal Case Presentations Seminar 1 1.3 cr.
In this postdoctoral course, residents prepare and present a complete documentation database, diagnosis/prognosis, treatment plan, treatment procedures, and evaluation of treatment results in formal case presentations simulating the oral examination for the American Board of Periodontology. (Part 1 of two-semester course)

DPER 7210 Advanced Periodontal Biology 2.0 cr.
This postdoctoral course develops a fundamental understanding of the microscopic anatomy, cell biology and physiology of the periodontal tissues in health, during disease progression, and following periodontal therapy.

DPER 7212 Postgraduate Dental Implantology Seminar 1 1.0 cr.
In this initial lecture and seminar course, relevant readings in the dental literature relating to specific topics in dental implantology are assigned and critically discussed. A variety of cases are treatment planned by the residents.

DPER 7215 Interdisciplinary Course 1B 2.8 cr.
Seminar includes residents from GPR and Graduate Periodontics and GPR, periodontics, and prosthodontics faculty to share clinically relevant multidisciplinary information. Patient diagnostic evaluations and treatment plans are evaluated in an interactive environment. Topics involving new advancements are presented and discussed.
DPER 7216 Pharmacology I 10.8 cr.
Review General Principles: Current pharmacology for the medical management of pain, infection, & selected systemic diseases; & adverse drug events. Based on the 200 drugs dispensed by US community pharmacies for prevention, diagnosis, and treatment of disease, special reference/dent.

DPER 7219 Dental and Medical Emergency Management 0.6 cr.
This is a pragmatic course to familiarize the resident with dental and medical emergencies that may present during patient care. Major texts on medical emergency management and the medically compromised patient are used as a guideline.

DPER 8120 Head & Neck Anatomy 3.0 cr.
This postdoctoral course is an advanced study of head and neck anatomy as it relates to periodontal patient care

DPER 7220 Research Methodology & Biostatistics 1 1.9 cr.
This graduate course in dentistry is an in-depth study of scientific research methods, study design and organization, data gathering, and the biostatistical tools required to analyze the results of a study and carry out a scientific research project.

First Year, Spring Semester

DPER 7300 Periodontics Specialty Clinic 3 7.8 cr.
In this postdoctoral course, students receive experiences with all accepted methods of periodontal treatment, dental implantology, and periodontal plastic procedures.

DPER 7301 Periodontal Current Literature Review Seminar 1B 2.0 cr.
This postdoctoral course encompasses a review of the latest dental and medical journals for the most recent information related to the art, science, and practice of periodontics. Students prepare abstracts to be discussed at scheduled seminars. (Part 2 of two-semester course)

DPER 7303 Periodontal Literature Review Seminar 1B 3.3 cr.
In this postdoctoral seminar course, relevant readings in the periodontal literature relating to specific topics are assigned and critically discussed.

DPER 7304 Periodontal Case Presentations Seminar 1A 1.8 cr.
In this postdoctoral course, residents prepare and present a complete data base, diagnosis/prognosis, treatment plan, treatment procedures, and evaluation of treatment results in formal case presentations simulating the oral examination for the American Board of Periodontology. (Part 2 of two-semester course)

DPER 7305 Periodontal Research 1 1.5 cr.
Course requires student to select a research topic, define a research question, do a literature search on the topic, organize a research project, carry out the project, collect and analyze the results, and write a publishable manuscript on the project.

DPER 7308 Ethics and Practice Management 1 0.6 cr.
This course provides the periodontal resident with the information needed for successful personal financial and practice management. Curriculum will rotate over a three-year cycle to include personal financial management, human resources, accounting, legal, and dental practice management.

DPER 7315 Interdisciplinary Course 1C 2.3 cr.
Seminar includes residents from GPR and Graduate Periodontics and GPR, periodontics, and prosthodontics faculty to share clinically relevant multidisciplinary information. Patient diagnostic evaluations and treatment plans are evaluated in an interactive environment. Topics involving new advancements are presented and discussed.

DPER 7316 Pharmacology II 0.8 cr.
Review General Principles: Current pharmacology for the medical management of pain, infection, & selected systemic diseases; & adverse drug events. Based on the 200 drugs dispensed by US community pharmacies for prevention, diagnosis, and treatment of disease, special reference/dent.

DPER 7317 Implant Provisionalization for the Perio Resident 1.3 cr.
Seminar includes residents from GPR and Graduate Periodontics and GPR, periodontics, and prosthodontics faculty to share clinically relevant multidisciplinary information. Patient diagnostic evaluations and treatment plans are evaluated in an interactive environment. Topics involving new advancements are presented and discussed.

DPER 8106 Anesthesiology 1.3 cr.
This is a hospital based seminar and clinical course to familiarize the resident in patient evaluation, pharmacology, airway management, IV techniques, and general anesthesia procedures.

DPER 7320 Research Methodology & Biostatistics 2 1.3 cr.
This graduate course in dentistry is an advanced in-depth study of scientific research methods, study design and organization, data gathering, and the biostatistical tools required to analyze the results of a study. In addition, this course requires the student to prepare a research proposal.

**DPER 6209 Surgical Anatomy and Osteology 0.7 cr.**
Presentation of head and neck anatomy with emphasis on surgical anatomy related to procedures that a periodontist would perform. Comprehensive osteology is reviewed to prepare the orthodontic resident for board certification with also an emphasis on surgical procedures relevant to the orthodontist.

**Second Year, Summer Semester**

**DPER 8100 Periodontics Specialty Clinic 4 5.8 cr.**
In this postdoctoral course, students receive experiences with all accepted methods of periodontal treatment, dental implantology, and periodontal plastic procedures.

**DPER 8101 Periodontal Current Literature 2 1.0 cr.**
In this postdoctoral seminar course, relevant readings in the periodontal literature relating to specific topics are assigned and critically discussed.

**DPER 8102 Periodontal Literature Review Seminar 2 0.5 cr.**
In this postdoctoral seminar course, relevant readings in the periodontal literature relating to specific topics are assigned and critically discussed.

**DPER 8105 Periodontal Research 2 1.0 cr.**
Course requires student to select a research topic, define a research question, do a literature search on the topic, organize a research project, collect and analyze the results, and write a publishable manuscript on the project.

**DPER 8115 Interdisciplinary Course 2A 0.8 cr.**
Seminar includes residents from GPR and Graduate Periodontics and GPR, periodontics, and prosthodontics faculty to share clinically relevant multidisciplinary information. Patient diagnostic evaluations and treatment plans are evaluated in an interactive environment. Topics involving new advancements are presented and discussed.

**DPER 8116 Management of Orofacial Pain 1.4 cr.**
This course focuses on the structure, function, and pathofunction of the cranio-cervical region and stomatognathic system emphasizing different diagnosis and case-specific management utilizing evidenced-based decision making.

**DPER 8100 Advanced Radiology and Radiographic Interpretation 1.4 cr.**
This graduate course in dentistry in oral and maxillofacial radiology includes lectures and case studies in radiation physics, radiation biology, radiation hygiene and radiographic techniques. In addition, this course will provide information on advanced imaging modalities and interpretative skills.

**Second Year, Fall Semester**

**DPER 8200 Periodontics Specialty Clinic 5 10.9 cr.**
In this postdoctoral course, students receive experiences with all accepted methods of periodontal treatment, dental implantology, and periodontal plastic procedures.

**DPER 8201 Periodontal Current Literature 2A 3.3 cr.**
In this postdoctoral seminar course, relevant readings in the periodontal literature relating to specific topics are assigned and critically discussed.

**DPER 8203 Periodontal Literature Review Seminar 3 3.3 cr.**
In this postdoctoral seminar course, relevant readings in the periodontal literature relating to specific topics are assigned and critically discussed.

**DPER 8204 Periodontal Case Presentations Seminar 2A 1.3 cr.**
In this postdoctoral course, residents prepare and present a complete documentation database, diagnosis/prognosis, treatment plan, treatment procedures, and evaluation of treatment results in formal case presentations simulating the oral examination for the American Board of Periodontology. *(Part 1 of two-semester course)*

**DPER 8205 Periodontal Research 3 1.0 cr.**
Course requires student to select a research topic, define a research question, do a literature search on the topic, organize a research project, carry out the project, collect and analyze the results, and write a publishable manuscript on the project.

**DPER 8215 Interdisciplinary Course 2B 2.8 cr.**
Seminar includes residents from GPR and Graduate Periodontics and GPR periodontics and prosthodontics faculty to share clinically relevant multidisciplinary information. Patient diagnostic evaluations and treatment plans are evaluated in an interactive environment. Topics involving new advancements are presented and discussed.
DPER 8216 Pharmacology III 0.8 cr.
Review General Principles: Current pharmacology for the medical management of pain, infection, & selected systemic diseases; & adverse drug events. Based on top 200 drugs dispensed by US community pharmacies for prevention, diagnosis, and treatment of disease, reference/dent.

DPER 8219 Dental and Medical Emergency Management 0.6 cr.
This is a pragmatic course to familiarize the resident with dental and medical emergencies that may present during patient care. Major texts on medical emergency management and the medically compromised patient are used as a guideline.

DPER 8222 Periodontic/Orthodontic Treatment 1.0 cr.
This postdoctoral course is a study of the interdisciplinary care of the patient with periodontal and orthodontic needs and includes a review of the literature in conjunction with a periodontist and orthodontist.

Second Year, Spring Semester

DPER 8300 Periodontics Specialty Clinic 6 7.0 cr.
In this postdoctoral course, students receive experiences with all accepted methods of periodontal treatment, dental implantology, and periodontal plastic procedures.

DPER 8301 Periodontal Current Literature 2B 2.0 cr.
In this postdoctoral seminar course, relevant reading in the periodontal literature relating to specific topics are assigned and critically discussed.

DPER 8303 Periodontal Literature Review Seminar 4 3.3 cr.
In this postdoctoral seminar course, relevant readings in the periodontal literature relating to specific topics are assigned and critically discussed.

DPER 8304 Periodontal Case Presentations Seminar 2A 1.8 cr.
In this postdoctoral course, residents prepare and present a complete documentation database, diagnosis/prognosis, treatment plan, treatment procedures, and evaluation of treatment results in formal casepresentations simulating the oral examination for the American Board of Periodontology.

DPER 8305 Periodontal Research 4 1.5 cr.
Course requires student to select a research topic, define a research question, do a literature search on the topic, organize a research project, carry out the project, collect and analyze the results, and write a publishable manuscript on the project.

DPER 8308 Ethics and Practice Management 2 0.6 cr.
This course provides the periodontal resident with the information needed for successful personal, financial, and practice management. Curriculum will rotate over a three-year cycle to include personal financial management, human resources, accounting, legal and dental practice management.

DPER 8311 Advanced Immunology/Microbiology 1.5 cr.
This postdoctoral course will review and update knowledge in the areas of microbiology and immunology relevant to homeostasis and pathology in the oral cavity.

DPER 8315 Interdisciplinary Course 2C 2.3 cr.
Seminar includes residents from GPR and Graduate Periodontics and GPR periodontics and prosthodontics faculty to share clinically relevant multidisciplinary information. Patient diagnostic evaluations and treatment plans are evaluated in an interactive environment. Topics involving new advancements are presented and discussed.

DPER 8316 Pharmacology IV 0.8 cr.
Review General Principles: Current pharmacology for the medical management of pain, infection, & selected systemic diseases; & adverse drug events. Based on top 200 drugs dispensed by US community pharmacies for prevention, diagnosis, and treatment of disease, reference/dent.

DPER 8317 Advanced Oral & Maxillofacial Pathology for Perio 1.3 cr.
This course is designed to prepare residents to recognize, analyze and appreciate primary/secondary disease conditions of the oral & paraoral regions. Reflects an emphasis on the understanding of basic and fundamental biologic aberrations and an integration of these concepts into a meaningful approach to diagnostic pathology.

Third Year, Summer Semester

DPER 9100 Periodontics Specialty Clinic 7 5.8 cr.
In this postdoctoral course, students receive experiences with all accepted methods of periodontal treatment, dental implantology, and periodontal plastic procedures.
DPER 9101 Periodontal Current Literature 3A 1.0 cr.
In this postdoctoral seminar course, relevant reading in the periodontal literature relating to specific topics are assigned and critically discussed.

DPER 9102 Periodontal Literature Review Seminar 5 0.5 cr.
In this postdoctoral seminar course, relevant reading in the periodontal literature relating to specific topics are assigned and critically discussed.

DPER 9105 Periodontal Research 5 0.5 cr.
Course requires student to select a research topic, define a research question, do a literature search on the topic, organize a research project, carry out the project, collect and analyze the results, and write a publishable manuscript on the project.

DPER 9105 Interdisciplinary Course 3A 0.8 cr.
Seminar includes residents from GPR and Graduate Periodontics and GPR periodontics and prosthodontics faculty to share clinically relevant multidisciplinary information. Patient diagnostic evaluations and treatment plans are evaluated in an interactive environment. Topics involving new advancements are presented and discussed.

DPER 9017 Scientific Writing and Evaluation 1.4 cr.
This graduate course in dentistry is an in-depth study of scientific writing to prepare the student to evaluate the literature as well as to prepare a scientific manuscript for publication.

**Third Year, Fall Semester**

DPER 9200 Periodontics Specialty Clinic 8 8.7 cr.
In this postdoctoral course, students receive experiences with all accepted methods of periodontal treatment, dental implantology, and periodontal plastic procedures.

DPER 9201 Periodontal Current Literature 3B 3.3 cr.
In this postdoctoral seminar course, relevant reading in the periodontal literature relating to specific topics are assigned and critically discussed.

DPER 9203 Periodontal Literature Review Seminar 6 3.3 cr.
In this postdoctoral seminar course, relevant readings in the periodontal literature relating to specific topics are assigned and critically discussed.

DPER 9204 Periodontal Case Presentations Seminar 3A 1.3 cr.
In this postdoctoral course, residents prepare and present a complete documentation database, diagnosis/prognosis, treatment plan, treatment procedures, and evaluation of treatment results in formal case presentations simulating the oral examination for the American Board of Periodontology.

DPER 9205 Periodontal Research 6 1.0 cr.
Course requires student to select a research topic, define a research question, do a literature search on the topic, organize a research project, carry out the project, collect and analyze the results, and write a publishable manuscript on the project.

DPER 9215 Interdisciplinary Course 3B 2.8 cr.
Seminar includes residents from GPR and Graduate Periodontics and GPR periodontics and prosthodontics faculty to share clinically relevant multidisciplinary information. Patient diagnostic evaluations and treatment plans are evaluated in an interactive environment. Topics involving new advancements are presented and discussed.

DPER 9216 Pharmacology V 0.8 cr.
Review General Principles: Current pharmacology for the medical management of pain, infection, & selected systemic diseases; & adverse drug events. Based on top 200 drugs dispensed by US community pharmacies for prevention, diagnosis, and treatment of disease, reference/dent.

DPER 9219 Dental and Medical Emergency Management 0.6 cr.
This is a pragmatic course to familiarize the resident with dental and medical emergencies that may present during patient care. Major texts on medical emergency management and the medically compromised patient are used as a guideline.

**Third Year, Spring Semester**

DPER 9300 Periodontics Specialty Clinic 9 7.8 cr.
In this postdoctoral course, students receive experiences with all accepted methods of periodontal treatment, dental implantology, and periodontal plastic procedures.

DPER 9301 Periodontal Current Literature 3C 2.0 cr.
This postdoctoral course encompasses a review of the latest dental and medical journals for the most recent information related to the art, science, and practice of periodontics. Students prepare abstracts to be and discussed at scheduled seminars.

**DPER 9303 Periodontal Literature Review Seminar 7** 3.3 cr.
In this postdoctoral seminar course, relevant readings in the periodontal literature relating to specific topics are assigned and critically discussed.

**DPER 9304 Periodontal Case Presentations Seminar 3B 1.8 cr.**
In this postdoctoral course, residents prepare and present a complete documentation database, diagnosis/prognosis, treatment plan, treatment procedures, and evaluation of treatment results in formal case presentations simulating the oral examination for the American Board of Periodontology.

**DPER 9305 Periodontal Research 7** 3.0 cr.
Course requires student to select a research topic, define a research question, do a literature search on the topic, organize a research project, carry out the project, collect and analyze the results, and write a publishable manuscript on the project.

**DPER 9308 Ethics and Practice Management 3 0.6 cr.**
This course provides the periodontal resident with the information needed for successful personal, financial, and practice management. Curriculum will rotate over a three-year cycle to include personal financial management, human resources, accounting, legal and dental practice management.

**DPER 9315 Interdisciplinary Course 3C** 2.3 cr.
Seminar includes residents from GPR and Graduate Periodontics and GPR periodontics and prosthodontics faculty to share clinically relevant multidisciplinary information. Patient diagnostic evaluations and treatment plans are evaluated in an interactive environment. Topics involving new advancements are presented and discussed.

**DPER 9316 Pharmacology VI 0.8 cr.**
Review General Principles: Current pharmacology for the medical management of pain, infection, & selected systemic diseases; & adverse drug events. Based on top 200 drugs dispensed by US community pharmacies for prevention, diagnosis, and treatment of disease, reference/dent.

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**ORTHODONTICS CERTIFICATE PROGRAM**
*(The Orthodontics Certificate curriculum is subject to change without notice.)*

**FIRST YEAR, Fall Semester**

**DSOR 5101 Orthodontics 101 – Boot Camp** 4.2 cr.
This post-doctoral course is an intense review of the breadth and scope of orthodontics including growth and development and the different clinical orthodontic modalities.

**DSOR 5102 Dentofacial Growth and Development 1** 1.8 cr.
This post-doctoral course is an in-depth study of human growth and development that includes basic embryology of the head and neck, growth theories and facial and dental arch changes throughout human life.

**DSOR 5103 Diagnosis and Treatment Planning 1** 1.8 cr.
This post-doctoral course is an in-depth study of advanced orthodontic data gathering and interpretation as used in orthodontic diagnosis and treatment planning.

**DSOR 5104 Biomechanics 1** 3.5 cr.
This post-doctoral course is an in-depth, advanced study of orthodontic biomechanical systems and their effect on the craniofacial and dental structures. Included in this course are the protocols required to treat both skeletal and dental malocclusions.

**DSOR 5105 Research Methodology and Biostatistics 1** 1.8 cr.
This post-doctoral course is an in-depth study of scientific research methods, study design and organization, data gathering, and the biostatistical tools required to analyze the results of a study.

**DSOR 5107 Treatment Planning 1**  
This post-doctoral course is the case-based study of advanced orthodontic treatment planning. Post-doctoral students are required to present patient diagnoses and proposed treatment plans for faculty and student discussion, to include treatment modality presentations by students.

**DSOR 5108 Current Literature Review 1**  
Course is the study, analysis and discussion of journal articles and topics that are prominent in orthodontics within the previous year. Post-doctoral students critically review and analyze the articles to determine advances in the art and science of orthodontics.

**DSOR 5111 History of Orthodontics & Dentofacial Orthopedics**  
This post-doctoral course is an in-depth study of the development of orthodontic treatment and of orthodontics as a specialty, including the study of prominent figures that played a part in specialty and treatment development.

**DSOR 5841 Research 1**  
Course requires student to select a research topic, define a research question, do a literature search on the topic, organize a research project, carry out the project, collect and analyze the results, and write a publishable manuscript on the project.

**DSOR 5931 Clinical Orthodontics 1**  
This post-doctoral course involves the advanced treatment of orthodontic problems and patient care. Supervision is provided by educationally qualified orthodontists to provide high quality and efficient clinical patient care.

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**FIRST YEAR, Spring Semester**

**DSOR 5202 Dentofacial Growth and Development 2**  
Prereq: DSOR5102  
This post-doctoral course is an in-depth study of human growth and development that includes the affects of treatment on growth and development.

**DSOR 5203 Diagnosis and Treatment Planning 2**  
Prereq: DSOR5103  
This post-doctoral course is a continuation of the in-depth study of advanced orthodontic data gathering and interpretation as used in orthodontic diagnosis and treatment planning.

**DSOR 5204 Biomechanics 2**  
Prereq: DSOR5104  
This post-doctoral course is an in-depth, advanced study of orthodontic biomechanical systems and their effect on the craniofacial and dental structures. Included in this course are the protocols required to treat both skeletal and dental malocclusions.

**DSOR 5205 Research Methodology & Biostatistics 2**  
Prereq: DSOR5105  
This post-doctoral course is an in-depth study of scientific research methods, study design and organization, data gathering, and the biostatistical tools required to analyze the results of the study.

**DSOR 5207 Treatment Planning 2**  
Prereq: DSOR5107  
This post-doctoral course is the case-based study of advanced orthodontic treatment planning. Post-doctoral students are required to present patient diagnoses and proposed treatment plans for faculty and student discussion, to include treatment modality presentations by students.

**DSOR 5208 Current Literature Review 2**  
Prereq: DSOR5108  
Course is the study, analysis and discussion of journal articles and topics that are prominent in orthodontics within the previous year. Post-doctoral students critically review and analyze the articles to determine advances in the art and science of orthodontics.

**DSOR 5321 Orthognathic Surgical Treatment**  
Review of surgical procedures pertaining to combined orthognathic surgical cases.

**DSOR 5842 Research 2**  
Course requires student to select a research topic, define a research question, do a literature search on the topic, organize a research project, carry out the project, collect and analyze the results, and write a publishable manuscript.
DSOR 5932 Clinical Orthodontics 2  7.8 cr.
This post-doctoral course involves the advanced treatment of orthodontic problems and patient care. Supervision is provided by educationally qualified orthodontists to provide high quality and efficient clinical patient care.

FIRST YEAR, Summer Semester

DSOR 5211 Treatment in Preadolescent Children  1.8 cr.
This post-doctoral course is a study of the orthodontic and pediatric care of the preadolescent patient, to include preventative and Phase I patient care.

DSOR 5304 Biomechanics 3  1.8 cr.
Prereq: DSOR5104, DSOR5204
This post-doctoral course is an in-depth, advanced study of orthodontic biomechanical systems and their effect on the craniofacial and dental structures. Included in this course are the protocols required to treat both skeletal and dental malocclusions.

DSOR 5302 Implants in the Orthodontic Patient  1.0 cr.
This post-doctoral course is an in-depth study of the use of implants in patients both for restorative dentistry and as orthodontic anchorage.

DSOR 5307 Treatment Planning 3  3.5 cr.
Prereq: DSOR5107, DSOR 5207
This post-doctoral course is the case-based study of advanced orthodontic treatment planning. Post-doctoral students are required to present patient diagnoses and proposed treatment plans for faculty and student discussion, to include treatment modality presentations by students.

DSOR 5331 Management of TMJ Patient  1.8 cr.
This course is a review of treatment and outcomes for TMJ dysfunction treatment & non-treatment.

DSOR 5341 Fundamentals of Teaching/Communication  0.9 cr.
This graduate course in dentistry prepares students to communicate effectively with patients and their families to enhance treatment planning dialogues, facilitate case presentation and acceptance, and encourage behavioral changes toward attaining and maintaining systemic and oral health.

DSOR 5344 Advanced Radiology & Radiological Interpretation  1.8 cr.
This graduate course in dentistry in oral and maxillofacial radiology includes lectures and case studies in radiation physics, radiation biology, radiation hygiene and radiographic techniques. In addition, this course will provide information on advanced imaging modalities and interpretative skills.

SECOND YEAR, Fall Semester

DSOR 6107 Treatment Planning 4  4.0 cr.
Prereq: DSOR5107, DSOR5207, DSOR5307
This post-doctoral course is the case-based study of advanced orthodontic treatment planning. Post-doctoral students are required to present patient diagnoses and proposed treatment plans for faculty and student discussion, to include treatment modality presentations by students.

DSOR 6108 Current Literature Review 4  1.0 cr.
Prereq: DSOR5108, DSOR5208, DSOR5308
Course is the study, analysis and discussion of journal articles and topics that are prominent in orthodontics within the previous year. Post-doctoral students critically review and analyze the articles to determine advances in the art and science of orthodontics.
DSOR 6111 Periodontic/Orthodontic Treatment 1.0 cr.
This post-doctoral course is a study of the interdisciplinary care of the patient with periodontal and orthodontic needs and includes a review of the literature in conjunction with a periodontist.

DSOR 6201 Ethics, Practice Management, Jurisprudence 2.0 cr.
This post-doctoral course is an in-depth study of ethics, managing a practice and jurisprudence as it relates to the clinical practice of orthodontics.

DSOR 6206 Dento/Craniofacial Anomalies 1.0 cr.
This post-doctoral course is a study of dental and craniofacial anomalies and the orthodontic and surgical treatment of patients. This includes both seminars, case-based and case-presentation study.

DSOR 6844 Research 4 6.5 cr.
Prereq: DSOR5841, DSOR5842, DSOR5843
Course requires student to select a research topic, define a research question, do a literature search on the topic, organize a research project, carry out the project, collect and analyze the results, and write a publishable manuscript on the project.

DSOR 6934 Clinical Orthodontics IV Fall 8.1 cr.
Prereq: DSOR5931, DSOR5932, DSOR5933
This post-doctoral course involves the advanced treatment of orthodontic problems and patient care. Supervision is provided by educationally qualified orthodontists to provide high quality and efficient clinical patient care.

SECOND YEAR, Spring Semester

DSOR 8317 Oral & Maxillofacial Pathology 0.8 cr.
This course is designed to prepare residents to recognize, analyze and appreciate primary/secondary disease conditions of the oral & paroral regions. Reflects an emphasis on the understanding of basic and fundamental biologic aberrations and an integration of these concepts into a meaningful approach to diagnostic pathology.

DSOR 6207 Treatment Planning 5 4.3 cr.
Prereq: DSOR5107, DSOR5207, DSOR5307, DSOR6107
This post-doctoral course is the case-based study of advanced orthodontic treatment planning. Post-doctoral students are required to present patient diagnoses and proposed treatment plans for faculty and student discussion, to include treatment modality presentations by students.

DSOR 6208 Current Literature Review 5 1.1 cr.
Prereq: DSOR5108, DSOR5208, DSOR5308, DSOR6108
This post-doctoral course is study, analysis and discussion of journal articles and topics that are prominent in orthodontics within the previous year. Post-doctoral students critically review an analyze the articles to determine advances in the art and science of orthodontics.

DSOR 6209 Surgical Anatomy & Osteology 1.1 cr.
This graduate course in dentistry is an advanced study of head & neck anatomy that is relevant to the dental specialist. It includes both actual & radiographic anatomical identification.

DSOR 6845 Research 5 7.1 cr.
Prereq: DSOR5841, DSOR5842, DSOR5843, DSOR6844
Course requires student to select a research topic, define a research question, do a literature search on the topic, organize a research project, carry out the project, collect and analyze the results, and write a publishable manuscript on the project.

DSOR 6935 Clinical Orthodontics 5 9.2 cr.
Prereq: DSOR5931, DSOR5932, DSOR5933, DSOR6934
This post-doctoral course involves the advanced treatment of orthodontic problems and patient care. Supervision is provided by educationally qualified orthodontists to provide high quality and efficient clinical patient care.

DSOR 6936 Review for American Board Examination 1.1 cr.
This postgraduate course in dentistry is an advanced review course in published orthodontic research studies and techniques in preparation for taking the written portion of the American Board of Orthodontics written examination. Restrictions: Successful completion of Year 1 of the postgraduate Program in Orthodontics.
### SECOND YEAR, Summer Semester

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### THIRD YEAR, Fall Semester

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<td>DSOR 7212</td>
<td>Orthodontic Clinical Teaching 2</td>
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<td>DSOR 7847</td>
<td>Research 7</td>
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<td>Clinical Orthodontics 7</td>
<td>8.7</td>
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<td>DSOR 7939</td>
<td>Clinical Problems 2</td>
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Course is a case-based course to study clinical problems encountered in the practice of orthodontics by the orthodontic specialist. It requires the student to analyze and then present the records of patients who encountered less than ideal results during treatment.

**DSOR 7940 Orthodontic Retention I**
Retention techniques, clinical studies in retention, and study of post-treatment changes in orthodontic patients. Prereq: Successfully completing Years 1 and 2 of the postgraduate program in Orthodontics and Dentofacial Orthopedics.

**THIRD YEAR, Spring Semester**

**DSOR 7307 Treatment Planning**
In this postdoctoral course, residents prepare and present a complete data base, diagnosis/prognosis, treatment plan, treatment procedures, and evaluation of treatment results in formal case presentations simulating the oral examination for the American Board of Periodontology. *(Part 2 of two-semester course)*

**DSOR 7300 Current Literature Review**
In this postdoctoral course, students receive experiences with all accepted methods of periodontal treatment, dental implantology, and periodontal plastic procedures.

**DSOR 7312 Orthodontic Clinical Teaching**
This post-doctoral course requires the student to teach basic orthodontic diagnostic and treatment techniques to the pre-doctoral dental student.

**DSOR 7848 Research**
Postgraduate course study requiring student to select research topic, define research question, do literature search on the topic, organize research project, carry out project, collect and analyze the results and write a publishable manuscript on the project.

**DSOR 7934 Clinical Orthodontics**
This postgraduate course involves the advanced treatment orthodontic problems and patient care. Supervision is provided by educationally qualified orthodontists to provide high quality and efficient clinical patient care.

**DSOR 7941 Retention 2**
Retention techniques, clinical studies in retention, and study of post-treatment changes in orthodontic patients. Prereq: Successfully completing years 1 and 2 of the postgraduate program in Orthodontics and Dentofacial Orthopedics and successful completion of the DSOR 7940.