DOCTOR OF DENTAL MEDICINE (DMD) PROGRAM COURSES

YEAR 1 COURSES

DEN 7101F – Human Structure and Function, Part I
Fall 4
Studies the disciplines of biochemistry, cell biology, general microanatomy, and physiology. Since form and function are interrelated, how the two are integrated as they are taken from the cell levels through tissues and then to organ systems will be taught. Exposure to cellular and histologic structures of tissues and organs and the exploration of the relationship between structure and function will be discussed, along with the integrated homeostatic relationship of body systems. Special consideration is given to those areas specifically related to dentistry and oral health.
Prerequisite: Biochemistry and admission to the program, or special permission from instructor

DEN 7101S – Human Structure and Function, Part II
Spring 6
Studies the disciplines of biochemistry, cell biology, general microanatomy, and physiology. Since form and function are interrelated, how the two are integrated as they are taken from the cell levels through tissues and then to organ systems will be taught. Exposure to cellular and histologic structures of tissues and organs and the exploration of the relationship between structure and function will be discussed, along with the integrated homeostatic relationship of body systems. Special consideration is given to those areas specifically related to dentistry and oral health.
Prerequisite: Biochemistry and admission to the program, or special permission from instructor

DEN 7102 – Microbiological & Immunological Concepts, Part I
Fall 4
Presents the fundamentals of bacteriology and virology and the elements of the immune response to common pathogens. Clinical case studies will be used to illustrate infectious processes in oral and systemic diseases, with emphasis on infections of the oral cavity. The principles of infection control will be introduced.

DEN 7108 – Microbiological & Immunological Concepts, Part II
Spring 3
Presents the fundamentals of general virology and retrovirology and the disease states resulting from infection with the common human viral pathogens as well as the human immunodeficiency virus (HIV). Clinical case studies will be used to illustrate the major human viral diseases, and the pathogenesis of immune deficiency and opportunistic infection, with particular emphasis on their impact on oral health.

DEN 7109F – Head and Neck Anatomy and Neuroscience, Part I
Fall 6
Lecture content and clinical case-based learning are presented with corresponding laboratory sessions that illustrate the bones, muscles, nerves, and vasculature of the head and neck, with special emphasis on the embryology and structure-function relationship of each of these structures.

DEN 7109S – Head and Neck Anatomy and Neuroscience, Part II
Spring 4
Lecture content and clinical case-based learning are presented with corresponding laboratory sessions that illustrate the bones, muscles, nerves, and vasculature of the head and neck, with special emphasis on the embryology and structure-function relationship of each of these structures.

DEN 7110 – Oral Microbiology & Oral Immunology
Spring 2
Presents clinical case studies to illustrate the common bacterial viral, fungal, and parasitic infections of the oral cavity, oral manifestations of systemic infection, and mucosal immunity. The microbiology and immunology of dental caries, periodontal and periapical diseases, and salivary gland infections will be discussed.

DEN 7111 – Development and Structure of Oral Tissue
Fall 4
Presents an overview of general human development and concentrates on the normal and abnormal development of the pharyngeal apparatus and orofacial region, including the development of the tooth and supporting structures and the histologic structure of mature oral tissues.

DEN 7118 – Clinical Dentistry II: Operative Dentistry
Lecture
Summer 2
Introduces basic principles, philosophy, and techniques of Operative Dentistry (the restoration of single teeth). Preparation and restoration teeth for Class I, II, III, IV, and V using multiple restorative materials including amalgam, composite, IRM, MTA, and glass ionomer. Taught concurrently with DEN 7118L (Lab component).

DEN 7118L – Clinical Dentistry II: Operative Dentistry Lab
Summer 3
Introduces basic principles, philosophy, and techniques of Operative Dentistry (the restoration of single teeth). Preparation and restoration teeth for Class I, II, III, IV, and V using multiple restorative materials including amalgam,
DEN 7120 – Introduction to Infection Control  
Fall  
1  
Prepares students for operation in a clinical setting. Emphasizes the importance of infection control in daily clinical work.  
Taught concurrently with DEN 7118 (Lecture component).

DEN 7121 – Principles of Clinical Dentistry: Operative Dentistry Lecture  
Spring  
1  
Introduces the basic principles, philosophy, and techniques of Operative Dentistry (the restoration of single teeth). Preparation and restoration of teeth for Class I and II type restorations using dental amalgam and composite restorative materials will be taught.  
Taught concurrently with DEN 7121L (Lab component).

DEN 7122 – Applied Fixed Restorative Dentistry Lecture  
Summer  
1  
Presents basic principles of fixed prostodontics. Topics include: preparation of a single posterior tooth for a full gold crown; understand the principles of retention and resistance; understand the laboratory procedures important to tooth preparation: including initial impressions, final impressions, die models and articulation of the case in preparation to send to a dental laboratory.  
Taught concurrently with DEN 7122L (Lab component).

DEN 7123 – Diagnosis and Treatment Planning I  
Fall  
1  
Provides early experiences in diagnosing and treatment planning for the dental patient through evaluation of treatment outcomes and evidenced-based dentistry. Topics include taking a patient history, conducting various examination procedures, interpreting clinical and laboratory findings, and reviewing organ systems, patient assessments, and treatment planning concepts.

DEN 7125 – Dental Anatomy and Occlusion Lecture  
Fall  
1  
Introduces the principles of comprehensive lifetime dental care, with emphasis on evaluation of individual patient needs. Topics include care and treatment planning for special needs patients (e.g., children, pregnant women, the elderly, and the medically compromised).  
Taught concurrently with DEN 7125L (Lab component).

DEN 7125L – Dental Anatomy and Occlusion Lab  
Fall  
2  
Introduces the principles of comprehensive lifetime dental care, with emphasis on evaluation of individual patient needs. Topics include care and treatment planning for special needs patients (e.g., children, pregnant women, the elderly, and the medically compromised).  
Taught concurrently with DEN 7125 (Lecture component).

DEN 7126 – Local Anesthesia and Nitrous Oxide Sedation  
Summer  
2  
Introduces the principles of local anesthesia and nitrous oxide sedation used in dentistry.

DEN 7127 – Introduction to Intraoral and Panoramic Radiography  
Spring  
1  
Provides hands-on practice in radiological and other imaging techniques used in oral health care practice. The concepts of radiologic hazards will be introduced.  
Radiographic and other imaging data will be recorded and interpreted, and used in the formulation of diagnoses and treatment planning.

DEN 7129 – Diagnosis and Treatment Planning II  
Summer  
2  
Provides expanded knowledge and experience in diagnosis and treatment planning within dental specialties. Treatment outcomes will be used to guide evidence-based treatment planning that may include alternative treatment plans.  
Fundamental knowledge to formulate a treatment plan using evidence-based practice based on patient
assessments including the identification of emergency and urgent treatment needs will be taught.

**Prerequisite:** DEN 7123

**DEN 7130 – Applied Dental Materials**

**Summer** 2

Provides foundational knowledge of the nature and behavior of materials used in dentistry and their application in dental practice. Topics include: dental materials specifications, evaluation programs, agencies concerned with materials and periodicals that evaluate dental materials; Structure, properties and surface activity of materials; Principles and theories of metals, waxes, impressions, gypsum, polymers and ceramic materials; and abrasion, finishing and polishing of dental materials, and analysis of sensitivity and failures.

**DEN 7135 – Periodontal Anatomy and Pathogenesis of Periodontal Disease**

**Summer** 1

An introduction to the anatomical and clinical features of the periodontium. The pathogenesis of periodontal disease and overview of preventive methods and periodontal treatment will be examined.

**DEN 7136 – Basics of Periodontal Instrumentation, Prevention, and Interventions Lecture**

**Spring** 1

Presents clinical aspects of periodontal care and clinical skills needed to interact with patients in preventive periodontal care. Participants will learn to scale, root plane and polish the coronal surfaces of teeth with hand and ultrasonic instruments.

Taught concurrently with DEN 7136L (Lab component).

**DEN 7136L – Basics of Periodontal Instrumentation, Prevention, and Interventions Lab**

**Spring** 2

Presents clinical aspects of periodontal care and clinical skills needed to interact with patients in preventive periodontal care. Participants will learn to scale, root plane and polish the coronal surfaces of teeth with hand and ultrasonic instruments.

Taught concurrently with DEN 7136 (Lecture component).

**DEN 7139 – Clinical Occlusion Lecture**

**Summer** 1

Presents the principles and concepts of occlusion and articulation. Topics include: occlusal aspects of restorative and replacement dentistry. A Maxillary stabilization bite plane splint will be designed, fabricated and delivered.

Taught concurrently with DEN 7139L (Lab component).

**DEN 7139L – Clinical Occlusion Lab**

**Summer** 2

Presents the principles and concepts of occlusion and articulation. Topics include: occlusal aspects of restorative and replacement dentistry. A Maxillary stabilization bite plane splint will be designed, fabricated and delivered.

Taught concurrently with DEN 7139 (Lecture component).

**DEN 7140F – DSI General Dentistry Clinic**

**Fall** 2

Provides instruction and experience in all aspects of patient care in the general dentistry clinic in the first year of study.

**DEN 7140S – DSI General Dentistry Clinic**

**Spring** 2

Provides instruction and experience in all aspects of patient care in the general dentistry clinic in the first year of study.

**DEN 7140M – DSI General Dentistry Clinic**

**Summer** 2

Provides instruction and experience in all aspects of patient care in the general dentistry clinic in the first year of study.

**DEN 7141 – Panoramic Principles & Advanced Radiographic Anatomy**

**Summer** 1

Provides the principles and techniques of panoramic radiology to interpret panoramic radiographs. Topics include the biological effects of radiation, and methods and concepts of radiation protection for the patient and occupational use.

**Prerequisite:** DEN 7127

**DEN 7151 – Healthcare Financing and Public Health**

**Spring** 1

An introduction to public health systems and health care financing, with emphasis on oral health care delivery to populations. Topics include: fluoridation, health care policy and reform, oral health care delivery systems, and access to care.

**DEN 7154 – Health Care Delivery: Patients Records and HIPAA Regulations**

**Fall** 1

Introduces the different components of the dental patient record and their relevance and importance to dental practice. Emphasis will be placed on the present and past systemic and oral health history, dental charting, dental imaging and its interpretation. Patient privacy and confidentiality issues will be discussed.

**DEN 7156 – Community Outreach: Pediatric Education**

**Spring** 2

Presents the principles and practice of dental health education. This external rotation provides experience in a public health care setting where participants will be trained in patient health promotion and disease...
prevention. A dental education program on selected topics will be devised and implemented.

DEN 7157 – Patient Communications and Cultural Compatibility  
**Fall**  
Enhancing the knowledge, skills, and dispositions in the area of cultural awareness. Foundational concepts of culture in the clinical setting will be integrated. Topics include: projected demographic changes; cultural competency (e.g., race/ethnicity, culture, diversity and diverse populations); and effective communication and interviewing skills. Discussions also include the effective use of interpreters; religion and spiritual beliefs; folk beliefs and practices that affect health care and treatment; and how diverse cultures respond to illness, complementary medicine, traditional medical care, and medications.

DEN 7160 – The American Dental Student  
**Fall**  
Integrates research and professional development by introducing concepts in problem-solving, research skills for use with the library, internet, and key reference works, methods of scholarly and journalistic writing with emphasis on critical thinking, persuasion and evaluation of data, life-long learning and professional growth skills that benefit from a research experience. The exposure to research allows participants to embrace evidence-based practices, appreciate and understand the benefits of quality improvement, and participate in research focusing on the American dental student experience.

DEN 7161 – The American Dental Patient  
**Spring**  
Integrates research and professional development by introducing concepts in problem-solving, research skills for use with the library, internet, and key reference works, methods of scholarly and journalistic writing with emphasis on critical thinking, persuasion and evaluation of data, life-long learning and professional growth skills that benefit from a research experience. The exposure to research allows participants to embrace evidence-based practices, appreciate and understand the benefits of quality improvement, and participate in research focusing on the American dental patient experience.

DEN 7162 – Biochemical Basis for Clinical Nutrition  
**Summer**  
Sound nutritional principles will be discussed, as well as: evaluation of nutritional status of a patient; patient nutrition education aimed at preventing / treating oral diseases; role of nutrition in the etiology and progression of oral disease; and nutritional considerations in managing medically-compromised patients.

DEN 7163 – DS1 Enrichment Program (Elective)  
**Summer**  
Allows opportunities within the first year to participate in one of the following activities: research; clinical activity; community outreach under the supervision of a dentist/mentor. A written proposal that describes the location, period of time, mentor/supervisor and objective of the activities must be submitted. May be repeated to a maximum of nine credits.

YEAR 2 COURSES

DEN 7201 – Oral and Systemic Manifestations of Disease  
**Spring**  
 Presents the epidemiology, etiology, pathophysiology, histopathology, treatment, prognosis and prevention of oral and systemic diseases. Topics include: integration of the concepts of microbiology, biochemistry, pathophysiology and anatomy as they relate to the disease process.

DEN 7203 – Pharmacological Concepts  
**Spring**  
 Presents an introduction to the principles of pharmacology. Case-based learning will illustrate the fundamentals of pharmacology, pharmacokinetics, drug effects, and therapeutics. Topics will include the mechanism of action of the major drug classes.

DEN 7204 – Pathological Concepts  
**Fall**  
 Incorporates a series of seminars designed to illustrate, at a greater level of complexity, the relationship between biosciences and clinical sciences in the context of oral health care. A greater understanding of the complex relationship between the oro-facial complex and the rest of the body will be gained.

DEN 7205 – Clinically Oriented Anatomy  
**Spring**  
 Presents components of the human gross anatomy of the thorax, abdomen, and upper extremity in the context of systemic pathology which is offered concurrently. Case-based learning will be incorporated to illustrate the integration of the normal and pathological condition.

DEN 7208 – Oral Cancer: Prevention, Cause and Cure  
**Fall**  
 Presents fundamentals of common tumors of the head and neck. Case-based learning will be used to illustrate the etiology, pathology, diagnosis, treatment and treatment complications of head and neck neoplasia. Topics include: the principles of oral cancer screening and prevention.
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DEN 7220 – Principles of Endodontics Lecture
Spring 1
Provides the opportunity to demonstrate skill in access preparations, debridement of root canal system, cleansing and shaping procedures, obturation procedures, and interim restorative procedures.
Taught concurrently with DEN7220L (Lab component).

DEN 7220L – Principles of Endodontics Laboratory
Spring 2
Provides the opportunity to demonstrate skill in access preparations, debridement of root canal system, cleansing and shaping procedures, obturation procedures, and interim restorative procedures.
Taught concurrently with DEN7220 (Lecture component).

DEN 7226 – Introduction to Dental Implants Lecture
Summer 1
Presents basic principles and techniques of replacement of missing teeth with dental implants.
Taught concurrently with DEN 7226L (Lab Component).

DEN 7226L – Introduction to Dental Implants Lab
Summer 2
Presents basic principles and techniques of replacement of missing teeth with dental implants.
Taught concurrently with DEN 7226 (Lecture Component).

DEN 7227 – Oral & Maxillofacial Surgery I
Spring 1
Presents the principles of diagnosis and planning oral surgical techniques. Topics include: uncomplicated exodontia, treatment of infection and exodontias, and traumatic injuries.

DEN 7228 – Pharmacotherapeutics I: Prescribing Medicines
Summer 1
Pharmacotherapeutics is incorporated into the curriculum after completion of the foundation of biomedical and clinical science instructional material and at the beginning of significant interaction with patients to achieve maximum integration between the study of pharmacology in the treatment of disease, the study of patient assessment and care, and the diagnostic and therapeutic processes in the oral health care setting. Broadly organized into two sections: 1) drugs dentists use or prescribe in the practice of dentistry, and 2) drugs used in medicine for the treatment and pharmacological considerations of dental patients receiving concurrent dental and medical care.

DEN 7230 – Clinical Dentistry III: Orthodontics Lecture
Summer 1
Presents opportunities to enhance skills and practice in contemporary orthodontics. Experience in completing lab projects is included in the learning experience. Taught concurrently with DEN 7230L (Lab component).
Prerequisite: Successful completion of the DS2 spring semester.

DEN 7230L – Clinical Dentistry III: Orthodontics Lab
Summer 2
Presents opportunities to enhance skills and practice in contemporary orthodontics. Experience in completing lab projects is included in the learning experience. Taught concurrently with DEN 7230 (Lecture component).
Prerequisite: Successful completion of the DS2 spring semester.

DEN 7233F – Restorative Dentistry: Removable Prosthodontics Lecture
Fall 1
Presents principles of diagnosis and planning treatment for partially and fully edentulous patients. Procedures and techniques for replacement of teeth for partially and fully edentulous patients in the preclinical laboratory will be experienced.
Taught concurrently with DEN 7233FL (Lab Component).

DEN 7233FL – Restorative Dentistry: Removable Prosthodontics Lab
Fall 2
Presents principles of diagnosis and planning treatment for partially and fully edentulous patients. Procedures and techniques for replacement of teeth for partially and fully edentulous patients in the preclinical laboratory will be experienced.
Taught concurrently with DEN 7233F (Lecture Component).

DEN 7233S – Restorative Dentistry: Removable Prosthodontics Lecture
Spring 1
Presents principles of diagnosis and planning treatment for partially and fully edentulous patients. Procedures and techniques for replacement of teeth for partially and fully edentulous patients in the preclinical laboratory will be experienced.
Taught concurrently with DEN 7233SL (Lab Component).

DEN 7233SL – Restorative Dentistry: Removable Prosthodontics Lab
Spring 2
Presents principles of diagnosis and planning treatment for partially and fully edentulous patients. Procedures and techniques for replacement of teeth for partially and fully edentulous patients in the preclinical laboratory will be experienced.
Taught concurrently with DEN 7233S (Lecture Component).
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DEN 7233M – Restorative Dentistry: Removable Prosthodontics Lecture
Summer 1
Presents principles of diagnosis and planning treatment for partially and fully edentulous patients. Procedures and techniques for replacement of teeth for partially and fully edentulous patients in the preclinical laboratory will be experienced.
Taught concurrently with DEN 7233ML (Lab Component).

DEN 7233ML – Restorative Dentistry: Removable Prosthodontics Lab
Summer 2
Presents principles of diagnosis and planning treatment for partially and fully edentulous patients. Procedures and techniques for replacement of teeth for partially and fully edentulous patients in the preclinical laboratory will be experienced.
Taught concurrently with DEN 7233M (Lecture component).

DEN 7234 – Nitrous Oxide Sedation
Summer 1
The didactic portion of the course covers the history of sedation, the physical properties and pharmacokinetics of nitrous oxide, relevant respiratory anatomy and physiology, indications and contraindications, patient medical assessment, administration and record keeping, complications and management of medical emergencies, and finally the ethical and legal implication of inhalation sedation. The clinical aspect of the course requires a demonstration of the knowledge and skill to successfully administer nitrous oxide to a patient while asked questions regarding potential complications that may arise.

DEN 7235 – Pediatric Dentistry Principles & Techniques
Summer 1
Offers best practices for the treatment of the child patient including behavior management and the management of anxiety. Topics include: diagnosis and treatment of dental caries, growth and development problems, malocclusion, and traumatic injuries.
Taught concurrently with DEN 7235L (Lab Component).

DEN 7235L – Pediatric Dentistry Principles & Techniques Lab
Summer 2
Offers best practices for the treatment of the child patient including behavior management and the management of anxiety. Topics include: diagnosis and treatment of dental caries, growth and development problems, malocclusion, and traumatic injuries.
Taught concurrently with DEN 7235 (Lecture component).

DEN 7236 – Introduction to Periodontal Diagnosis and Initial Therapy
Fall 2
Provides information on the clinical management of infectious periodontal disease in preparation for treating patients clinically. Topics include: examine, diagnose, and predict the course of inflammatory periodontal disease. Treatment planning methods will become familiar through case-based learning.

DEN 7240 – DSII General Clinic
Summer 9
Provides instruction and experience in all aspects of patient care in the general dentistry clinic in the second year of study.

DEN 7241F – Simulated Comprehensive Care Lecture
Fall 1
Integrates both didactic information relative to the use of hand pieces in patient care, operative dentistry, and fixed prosthodontics, coupled with preclinical experiences in comprehensive care for a simulated patient. Topics include: treatment planning, more complex restorations, best practices in documenting procedures. The emphasis will be on patient-centered care, supported by evidence-based dentistry.
Taught concurrently with DEN 7241FL (Lab component).

DEN 7241FL – Simulated Comprehensive Care Laboratory
Fall 2
This lab component to DEN 7241F provides hands-on experience with the simulated patient. Training devices (e.g., CAD/CAM, etc.) will be used to enhance the learning experience. Emphasis will be placed on time management and quality of care necessary for patient-centered care. Exposure to fabrication of in-office appliances (e.g., bleaching trays, mouth guards, provisional and restorative matrices, diagnostic cast, etc.) will also be experienced.
Taught concurrently with DEN 7241F (Lecture component).

DEN 7241S – Simulated Comprehensive Care Lecture
Spring 1
Integrates both didactic information relative to the use of hand pieces in patient care, operative dentistry, and fixed prosthodontics, coupled with preclinical experiences in comprehensive care for a simulated patient. Topics include: treatment planning, more complex restorations, best practices in documenting procedures. The emphasis will be on patient-centered care, supported by evidence-based dentistry.
Taught concurrently with DEN 7241SL (Lab component).
COURSE CATALOG

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DEN 7241SL – Simulated Comprehensive Care Laboratory
Spring 2
This lab component to DEN 7241S provides hands-on experience with the simulated patient. Training devices (e.g., CAD/CAM, etc.) will be used to enhance the learning experience. Emphasis will be placed on time management and quality of care necessary for patient-centered care. Exposure to fabrication of in-office appliances (e.g., bleaching trays, mouth guards, provisional and restorative matrices, diagnostic cast, etc.) will also be experienced. Taught concurrently with DEN 7241S (Lecture component).

DEN 7241M – Simulated Comprehensive Care Lecture
Summer 1
Integrates both didactic information relative to the use of hand pieces in patient care, operative dentistry, and fixed prosthodontics, coupled with preclinical experiences in comprehensive care for a simulated patient. Topics include: treatment planning, more complex restorations, best practices in documenting procedures. The emphasis will be on patient-centered care, supported by evidence-based dentistry. Taught concurrently with DEN 7241LM (Lab component).

DEN 7241ML – Simulated Comprehensive Care Laboratory
Summer 2
This lab component to DEN 7241M provides hands-on experience with the simulated patient. Training devices (e.g., CAD/CAM, etc.) will be used to enhance the learning experience. Emphasis will be placed on time management and quality of care necessary for patient-centered care. Exposure to fabrication of in-office appliances (e.g., bleaching trays, mouth guards, provisional and restorative matrices, diagnostic cast, etc.) will also be experienced. Taught concurrently with DEN 7241M (Lecture component).

DEN 7243 – Advanced Techniques in Dental Radiology
Spring 1
Illustrates the foundational knowledge and skills necessary to use advanced 3D imaging technology to diagnose oral diseases and conditions, and dental implant treatment.

DEN 7244F – DSII General Clinic
Fall 3
Provides instruction and experience in all aspects of patient care in the general dentistry clinic in the second year of study.

DEN 7244S – DSII General Clinic
Spring 3
Provides instruction and experience in all aspects of patient care in the general dentistry clinic in the second year of study.

DEN 7251 – Specialty Practice
Fall 1
Presents experience in the different specialty practices, the roles and integration of members of the practice team, and the course of the patient through the clinical care process. During external rotation, participants will observe and participate, within their documented scope of practice, in the oral health care treatment of patients and all interactions between patients and members of the specialty teams. Experiences will be presented during integration seminars.

DEN 7252 – Community Outreach: Geriatric Population
Fall 3
Presents principles of patient oral health education, and preventive dentistry are covered. Participation in hands-on oral health education at Clark County elementary schools and senior centers, external rotation will experience the oral health status of vulnerable populations, the elderly and children. Participation also in preventive dentistry techniques, oral health screenings, and comprehensive oral examinations.

DEN 7253 – Dental Research and Analysis Methodology
Fall 1
Incorporates concepts in problem solving, research skills for use with the library, internet, and key reference works, methods of scholarly and journalistic writing with emphasis on critical thinking, persuasion and evaluation of data, life-long learning and professional growth skills that benefit from a research experience. The exposure to research allows participants to embrace evidence-based practices, appreciate and understand the benefits of quality improvement, and participate in research as practicing dentists.

DEN 7254 – Contemporary Issues in Behavioral Science
Summer 1
Outlines prevention strategies for addressing tobacco use and cessation. Motivational interviewing and nutritional risk assessment will be discussed in alignment with the reduction in caries risk. Case studies demonstrating effective communication strategies for patient treatment will be reviewed. Implementation strategies to integrate SBIRT (screening, brief intervention and referral to treatment) protocols in a dental setting will be discussed.

DEN 7255 – Dental Public Health Research and Practice
Spring 1
Outlines the basis and application of evidence-based practices to prevent oral diseases and promote oral health in communities, using dental public health principles. The course explores how determinants of health, health disparities, and inequities influence dental and craniofacial health using contemporary health promotion strategies.
DEN 7263 – DS2 Enrichment Program (Elective)  
Summer 1  
Allows opportunities within the second year to participate in one of the following activities: research; clinical activity; community outreach under the supervision of a dentist/mentor. A written proposal that describes the location, period of time, mentor/ supervisor and objective of the activities must be submitted. May be repeated to a maximum of nine credits.

YEAR 3 COURSES

DEN 7320 – Clinical Medicine I  
Fall 1  
Clinical Medicine is incorporated into the curriculum in sequence with the completion of biomedical and clinical science foundational instructional material and at the beginning of significant student-patient interaction. The goal is to achieve maximum integration between the study of disease, the study of the patient, and the diagnostic and therapeutic processes in the oral health care setting. Essential critical thinking and problem solving skills are developed through case studies of the child, adolescent, adult, and geriatric patient.

DEN 7321 – Principles of Periodontal Surgery  
Fall 2  
Provides preparation for the clinical management of advanced periodontal disease requiring surgical intervention. In clinical settings the ability to assess the need for surgical care versus continued non-surgical management, plan and present surgery as an option and observe/assist/perform basic periodontal surgical procedures is required. A surgery lab introduces procedures that can be personally managed in practice.

DEN 7324 – Esthetic Dentistry: Principles and Techniques  
Fall 2  
Presents the principles and techniques related to restoration of individual anterior and posterior teeth and replacement and/or restoration of multiple missing teeth will be presented. Topics include: tooth bleaching; principles of shade selection and matching; materials selection for esthetic dentistry; diagnosis of congenital, traumatic and caries related defects; and treatment planning esthetic procedures.

DEN 7325 – DSIII Advanced General Dentistry Seminar  
Summer 2  
Presents advanced concepts, techniques, and treatment procedures related to operative dentistry and the restoration of individual teeth. Experience with mock examinations similar to those found on the national board examinations will be offered.

DEN 7326 – Oral and Maxillofacial Pathology I  
Fall 3  
Oral Pathology I and II are lecture-seminar offerings which have been designed as two successive one-semester progressions to maintain continuity in the sequencing of material. Knowledge of the etiology, epidemiology, pathophysiology, and histopathology of pathologic processes as they relate to examination, evaluation, treatment, and prognosis of the patient will be learned. The scope of pathology that affects the oral and maxillofacial region will be explored, including developmental anomalies; reactive, inflammatory, and infectious conditions; immunologic disorders; neoplasia; and oral manifestations of systemic and genetic diseases. Emphasis is placed on formulating differential diagnoses and clinical-pathological correlation.

DEN 7327 – Oral and Maxillofacial Pathology II  
Spring 3  
Oral Pathology I and II are lecture-seminar offerings which have been designed as two successive one-semester progressions to maintain continuity in the sequencing of material. Knowledge of the etiology, epidemiology, pathophysiology, and histopathology of pathologic processes as they relate to examination, evaluation, treatment, and prognosis of the patient will be learned. The scope of pathology that affects the oral and maxillofacial region will be explored, including developmental anomalies; reactive, inflammatory, and infectious conditions; immunologic disorders; neoplasia; and oral manifestations of systemic and genetic diseases. Emphasis is placed on formulating differential diagnoses and clinical-pathological correlation.

DEN 7328 – Clinical Medicine II  
Spring 1  
Provides experience in the evaluation, diagnosis, and treatment planning for patients of all ages. Comprehensive treatment plans based on systemic findings and patients considerations will be developed to help achieve maximum integration between the study of disease, the study of the patient, and the diagnostic and therapeutic processes in the oral health care setting.

DEN 7329 – Honors RPD Design (Elective)  
Fall, Spring, Summer 1  
Presents advanced design concepts in removable prosthodontics beyond those touched upon in previous courses. How to successfully handle advanced clinical designs are illustrated.
### DOCTOR OF DENTAL MEDICINE (DMD) PROGRAM COURSES

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Term</th>
<th>Credit Hours</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEN 7330</td>
<td>Forensic Dentistry (Elective)</td>
<td>Summer</td>
<td>2</td>
<td>Presents concepts of forensic dentistry designed to instruct on all aspects of forensic odontology.</td>
</tr>
<tr>
<td>DEN 7332</td>
<td>Temporomandibular Disorders</td>
<td>Spring</td>
<td>1</td>
<td>Presents the etiology, diagnosis, and treatment of TM Disorders. Topics include: current dominant multifactorial concepts, and the etiology of TM disorders</td>
</tr>
<tr>
<td>DEN 7333</td>
<td>Principles of Removable Partial Dentures</td>
<td>Summer</td>
<td>1</td>
<td>Presents the basic principles and philosophy of Removable Prosthodontics. Examination, treatment planning and preparation of partially edentulous patients to receive removable partial dentures, as well as treatment plans for preprosthetic surgery cases and other removable treatment will be learned.</td>
</tr>
<tr>
<td>DEN 7334</td>
<td>Oral and Maxillofacial Surgery II</td>
<td>Spring</td>
<td>1</td>
<td>Hospital protocol and issues inherent in treating the medically compromised patients are discussed. Patient care procedures at locally affiliated hospitals will be observed and assistance will be provided.</td>
</tr>
<tr>
<td>DEN 7338</td>
<td>Advanced Clinical Orthodontics (Elective)</td>
<td>Spring</td>
<td>1</td>
<td>Presents general principles of clear aligner appliance, indications, clinical procedures and treatment outcome. This elective course provides an overview of the clear aligner technique.</td>
</tr>
<tr>
<td>DEN 7340F</td>
<td>DSIII General Dentistry Clinic</td>
<td>Fall</td>
<td>14</td>
<td>Provides instruction and experience in all aspects of patient care in the general dentistry clinic in the third year of study.</td>
</tr>
<tr>
<td>DEN 7340S</td>
<td>DSIII General Dentistry Clinic</td>
<td>Spring</td>
<td>14</td>
<td>Provides instruction and experience in all aspects of patient care in the general dentistry clinic in the third year of study.</td>
</tr>
<tr>
<td>DEN 7340M</td>
<td>DSIII General Dentistry Clinic</td>
<td>Summer</td>
<td>14</td>
<td>Provides instruction and experience in all aspects of patient care in the general dentistry clinic in the third year of study.</td>
</tr>
<tr>
<td>DEN 7340</td>
<td>Practice Administration</td>
<td>Spring</td>
<td>1</td>
<td>Presents the management of the non-technical aspects of a dental practice. It will consist of three components: practice management, jurisprudence, and ethics.</td>
</tr>
<tr>
<td>DEN 7351</td>
<td>Practice Administration III</td>
<td>Summer</td>
<td>1</td>
<td>Presents the management of the non-technical aspects of a dental practice. It will consist of three components: practice management, jurisprudence, and ethics.</td>
</tr>
<tr>
<td>DEN 7354</td>
<td>Community Outreach: Disabled and Special Needs Population</td>
<td>Summer</td>
<td>2</td>
<td>Provides knowledge and skills needed to work with patients with special needs. Topics include: etiology and prevalence of common disabling conditions; barriers to dental care for disabled/special needs individuals; psychological and social factors which impact the disabled/special needs population.</td>
</tr>
<tr>
<td>DEN 7355</td>
<td>Oral &amp; Maxillofacial Surgery III</td>
<td>Summer</td>
<td>1</td>
<td>Hospital protocol and issues inherent in treating the medically compromised patients are discussed. Patient care procedures at locally affiliated hospitals will be observed and assistance will be provided.</td>
</tr>
<tr>
<td>DEN 7357</td>
<td>Honors Prosthodontics (Elective)</td>
<td>Summer</td>
<td>1</td>
<td>Presents advanced topics and clinical restoration of a more complex dentition, which may include removable, fixed, esthetic and implant restorations. Designed for those who intend to enter specialty or resident programs as well as general private practice.</td>
</tr>
<tr>
<td>DEN 7358</td>
<td>Periodontal Regeneration and Case Management</td>
<td>Summer</td>
<td>1</td>
<td>Provides instruction on implant and periodontal surgical procedures that are constantly evolving. Treatments that are becoming &quot;main stream&quot; in currently clinical practice but not addressed previously will be discussed. Issues in patient and specialist interactions which facilitate successful case management are included.</td>
</tr>
</tbody>
</table>

**Prerequisite:** Successful completion of Perio courses prior to DS3.

**UNLV SDM Course Catalog (2018-2019)**
DEN 7359 – Community Outreach: Rural Rotation
Year round, graded in Summer 2
Provides general dental services for patients in underserved areas of Nevada under the supervision of adjunct dental clinical faculty. A minimum of fifteen (15) hours of approved community service is required before continuing to the fourth year of study is allowed.

DEN 7360 – Ethics and Interprofessional Practice in Health Care
Spring 1
Presents issues and ethical situations encountered in contemporary dental practice, including treatment decisions, incorporation of new technologies, and alternative delivery systems. Issues and ethical dilemmas will be presented within the context of the ADA Principles of Ethics and Professional Behavior. Introduction to concepts of interprofessional and collaborative practice in a patient-centered environment is included.

DEN 7363 – DS3 Enrichment Program (Elective)
Summer 1
Allows opportunities within the third year to participate in one of the following activities: research; clinical activity; community outreach under the supervision of a dentist/mentor. A written proposal that describes the location, period of time, mentor/supervisor and objective of the activities must be submitted. May be repeated to a maximum of nine credits.

DEN 7399 – Advanced Endodontics Elective (Root Camp)
Summer 1
Offers advanced non-surgical endodontic procedures, including molar therapy. Topics include: the use of rotary cleaning and shaping techniques. Designed for the use of endodontic procedures in private practice. Not for individuals intending to go into a specialty/residency program.

DEN 7425 – Advanced General Dentistry II
Fall 2
Presents knowledge to provide comprehensive general dentistry in practice setting. Experience with mock examinations similar to those found on the national board examinations will be offered.

DEN 7426 – Forensic Dentistry
Summer 1
Introductory course designed to acquaint dental student to field of forensic dentistry and help prepare the student to respond to the possibility of mass fatality incidents in their practice areas.

DEN 7427 – Regional Board (Elective)
Spring 1
This course will provide experiences and instruction in all aspects of screening, diagnosis, and treatment of patients toward general dentistry regional board exam.

DEN 7429 – General Practice (Elective)
Fall, Spring 1
This Selective will provide additional training in critical thinking, evaluation and education/teaching skills.

DEN 7440F – DSIV General Clinic
Fall 14
Provides instruction and experience in all aspects of patient care in the general dentistry clinic in the fourth year of study.

DEN 7440S – DSIV General Clinic
Spring 14
Provides instruction and experience in all aspects of patient care in the general dentistry clinic in the fourth year of study.

DEN 7441 – Oral Histopathology (Elective)
Spring 1
Histopathology is an elective lecture-seminar which has been designed to build upon knowledge gained from Oral and Maxillofacial Pathology I and II. It serves as an extension course for those interested in expanding their knowledge of the clinical, radiographic, and microscopic aspects of oral and maxillofacial diseases.

DEN 7443F – Clinical Diagnostic Conference: Grand Rounds
Fall 2
Participants will present and critically evaluate selected clinical cases, enabling them to integrate their clinical knowledge and demonstrate their skills in clinical judgment and critical thinking.
Prerequisite: Successful completion of DS3 school year or course director’s approval

DEN 7443S – Clinical Diagnostic Conference: Grand Rounds
Spring 2
Participants will present and critically evaluate selected clinical cases, enabling them to integrate their clinical knowledge and demonstrate their skills in clinical judgment and critical thinking.
Prerequisite: Successful completion of DS3 school year or course director’s approval
DEN 7453 – Dental Jurisprudence  
**Spring**  2  
Review of current legal and regulatory issues that impact the contemporary practice of dentistry. Topics include state and federal regulations, licensure, professional liability, personnel issues, etc.

DEN 7450 – Honors Prosthodontics (Elective)  
**Fall**  1  
Presents advanced topics and clinical restoration of a more complex dentition, which may include removable, fixed, esthetic and implant restorations. Designed for those who are intending to enter specialty or resident programs as well as general private practice.

DEN 7451 – Honors Prosthodontics (Elective)  
**Spring**  1  
Presents advanced topics and clinical restoration of a more complex dentition, which may include removable, fixed, esthetic and implant restorations. Designed for those who are intending to enter specialty or resident programs as well as general private practice.

DEN 7499 – Advanced Endodontics Elective (Root Camp)  
**Spring, Summer**  1  
Presents advanced non-surgical endodontic procedures, including molar therapy. Topics include: the use of rotary cleaning and shaping techniques. Designed for those who are intending to use endodontic procedures in private practice. Not for those who are intending to go into a specialty/residency program.
DOCTOR OF DENTAL SURGERY (DDS) PROGRAM COURSES

YEAR 1 COURSES

DDS 9240 – DDS Y1 Summer General Clinic
Summer  4
Provides instruction and experience in all aspects of patient care in the general dentistry clinic in the first year of study.

DDS 9251 – DDS Y1 Summer Mega-Course
Summer  22
A special curriculum to bridge the knowledge and skill gaps between the DDS students’ original dental education and U.S. standard dental education at UNLV School of Dental Medicine.

DDS 9340-I – DDS Y1 Fall General Clinic
Fall  15
Provides instruction and experience in all aspects of patient care in the general dentistry clinic in the second year of study.

DDS 9351 – DDS Y1 Fall Mega-Course
Fall  9.5
Designed to provide a variety of information to participants in DDS program. Topics include: Oral and Maxillofacial Pathology, Clinical Medicine, Community Outreach – Rural Rotation, Principles of Periodontal Surgery, and Esthetic Dentistry.

DDS 9340-II – DDS Y1 Spring General Clinic
Spring  15
Provides instruction and experience in all aspects of patient care in the general dentistry clinic in the second year of study.

DDS 9352 – DDS Y1 Spring Mega-Course
Spring  10
Designed to provide a variety of information to participants in DDS program. Topics include: Oral and Maxillofacial Pathology, Clinical Medicine, Practice Administration, Hospital Dentistry, Temporomandibular Disorders, Laser Dentistry, Professional Ethics in Health Care.

DDS 9353 – DDS Y2 Summer Mega-Course
Summer  8
Designed to provide a variety of information to participants in DDS program. Topics include: Advanced Restorative Dentistry, Principles of Advanced Removable Partial Dentures, Practice Administration, Oral and Maxillofacial Surgery, Community Outreach – Disabled and Special Needs Population, Periodontal Regeneration and Case Management, and Introduction to Forensic Dentistry and Bioterrorism.

DDS 9440-I – DDS Y2 Fall General Clinic
Fall  18
Provides instruction and experience in all aspects of patient care in the general dentistry clinic in the third year of study.

DDS 9451 – DDS Y2 Fall Mega-Course
Fall  4
Designed to provide a variety of information to participants in DDS program. Topics include: Advanced General Dentistry and Clinical Diagnostic Conference.

DDS 9440-II – DDS Y2 Spring General Clinic
Spring  18
Provides instruction and experience in all aspects of patient care in the general dentistry clinic in the third year of study.

DDS 9452 – DDS Y2 Spring Mega-Course
Spring  3
Designed to provide a variety of information to participants in DDS program. Topics include: Jurisprudence and Clinical Diagnostic Conference.
CERTIFICATE IN ORTHODONTICS AND DENTOFACIAL ORTHOPEDICS IN CONJUNCTION WITH A MS/PhD IN ORAL BIOLOGY

**ORTH 8001 – Introduction to Orthodontics**  
*Fall*  
4  
An introduction and overview of the specialty of orthodontics and dentofacial orthopedics to prepare the orthodontic resident for advanced education in this dental specialty.

**ORTH 8011 – Cephalometrics**  
*Fall*  
2  
Discuss the history, development and the use of cephalometrics in clinical orthodontic practice. Basic principles of Cephalometric analysis and description of developing as well as established skeletal Class I, II & III discrepancies.

**ORTH 8012 – Clinical Specialty Seminar I**  
*Spring*  
3  
Utilizes a case-based, integrative approach to prepare orthodontic residents for professional practice. A vertical curricular design is used throughout this series with faculty initially facilitating and modeling the majority of the diagnostic and treatment planning activities. The design of this seminar provides the resident with guidance as they learn to organize and synthesize orthodontic knowledge.

**ORTH 8013 – Clinical Specialty Seminar II**  
*Spring*  
3  
A continuation and progressing advanced level of the one hour clinical seminars that will proceed all clinical sessions. The purpose of these seminars is for the faculty to preview the daily clinic schedule and prepare the residents for the procedures to be performed during that clinic session.

**ORTH 8014 – Clinical Specialty Seminar III**  
*Fall*  
3  
Emphasizes orthodontic examination, diagnosis, treatment planning and treatment. Offered in a combination of seminar and lectures. A continuation and progressing advanced level of the one-hour clinical seminars that will proceed all clinical sessions. The purpose of these seminars is for the faculty to preview the daily clinic schedule and prepare the residents for the procedures to be performed during that clinic session.

**ORTH 8021 – Introduction to Clinic Orthodontics**  
*Fall*  
4  
An introduction and overview of the three-hour clinical sessions during which the residents will screen, diagnose, treatment plan and treat and/or manage the orthodontic malocclusions of their patients, under the supervision of the attending orthodontic clinical faculty. Clinical attire, policies, procedures and professionalism will be discussed.

**ORTH 8022 – Clinic Orthodontics**  
*Fall*  
6  
A continuation and progressing advanced level of the three-hour clinical sessions during which the resident will screen, diagnose, treatment planning and treat and/or manage the orthodontic malocclusions of their patients, under the supervision of the attending orthodontic clinical faculty.

**ORTH 8023 – Clinic Orthodontics**  
*Spring*  
6  
A continuation and progressing advanced level of the three-hour clinical sessions during which the residents will screen, diagnose, treatment plan and treat and/or manage the orthodontic malocclusions of their patients under the supervision of the attending orthodontic clinical faculty.

**ORTH 8024 – Clinic Orthodontics**  
*Fall*  
6  
A continuation and progressing advanced level of the clinical sessions which provides the resident with a more advanced level of material regarding orthodontic diagnosis, treatment planning and treatment. These clinical sessions are used to further evaluate residents diagnostic and treatment planning skills as well as their execution of the treatment plan. Progress is measured by interaction with attending faculty.

**ORTH 8025 – Clinic Orthodontics**  
*Spring*  
6  
A continuation and progressively advanced level of three-hour clinical sessions during which the residents will screen, diagnose, treatment plan and treat and/or manage the orthodontic malocclusions of their patients under the supervision of the attending orthodontic clinical faculty.

**ORTH 8026 – Clinic Orthodontics**  
*Fall*  
12  
A continuation and progressively advanced level of three-hour clinical sessions during which the residents will screen, diagnose, treatment plan and treat and/or manage the orthodontic malocclusions of their patients under the supervision of the attending orthodontic clinical faculty.

**ORTH 8027 – Clinic Orthodontics**  
*Spring*  
12  
Provides Orthodontics Residents a more advanced level of material regarding orthodontic diagnosis, treatment planning and treatment. Residents build on their previous knowledge and experience. Residents are taught various finishing techniques and how to choose the proper retention per individual cases. Actual progress is
compared to pretreatment projections. If progress is not on schedule, causes and solutions are discussed and changes are implemented as needed. Residents must prepare ABO-format written presentations for their 6 finished cases.

ORTH 8208 – Clinic Orthodontics

Fall

Provides Orthodontic Residents a more advanced level of clinical education regarding orthodontic diagnosis, treatment planning and the provision of treatment. Residents build on their previous knowledge and experience. Residents are taught various treatment techniques and discuss the pros and cons of each in developing treatment plans, options and prognosis. If progress is not on schedule, causes and solutions are discussed and changes are implemented as needed. The experiences and outcomes of this course may be applied to the program requirement of written ABO-format cases. This course is repeatable up to 3 credits.

ORTH 8209 – Clinic Orthodontics

Fall

Provides Orthodontic Residents a more advanced level of clinical education regarding orthodontic diagnosis, treatment planning and the provision of treatment. Residents build on their previous knowledge and experience. Residents are taught various treatment techniques and discuss the pros and cons of each in developing treatment plans, options and prognosis. If progress is not on schedule, causes and solutions are discussed and changes are implemented as needed. The experiences and outcomes of this course may be applied to the program requirement of written ABO-format cases. This course is repeatable up to 3 credits.

ORTH 8210 – Clinic Orthodontics

Fall

Provides Orthodontic Residents a more advanced level of clinical education regarding orthodontic diagnosis, treatment planning and the provision of treatment. Residents build on their previous knowledge and experience. Residents are taught various treatment techniques and discuss the pros and cons of each in developing treatment plans, options and prognosis. If progress is not on schedule, causes and solutions are discussed and changes are implemented as needed. The experiences and outcomes of this course may be applied to the program requirement of written ABO-format cases. This course is repeatable up to 3 credits.

ORTH 8512 – Biomechanics

Fall

A study of the principles of biomechanics as applied to orthodontic treatment. Special emphasis is placed on relevant aspects of biomaterial science, principles of mechanics applied to the analysis of force delivery systems, and the biologic response of tissues to applied forces.

ORTH 8513 – Growth and Development

Spring

Addresses the following competencies: Assess, evaluate, and incorporate into practice new knowledge, scientific reasoning involved in craniofacial development; Evaluate, diagnose, and perform orthodontic treatment planning for individual patients utilizing growth potential; Diagnose and manage malocclusion and occlusal disorders that are challenged by normal or abnormal growth.

ORTH 8515 – Orthognathic Surgery

Fall

Introduces the interdisciplinary treatment; analyzing records and formulating a treatment plan for orthognathic surgery, and a variety of orthognathic procedures. Preparation to recognize and diagnose any orthognathic surgery case and be able to interact with an Oral and Maxillofacial Surgeon as well as other specialties in such cases.

ORTH 8518 – Orthodontic Materials

Fall

Comprised of seminar discussions of material used in the practice of orthodontics. Residents will demonstrate an understanding of: the characterization of contemporary materials, methods of testing, clinical use, and health and safety concerns with the use of common materials. Also provides the foundation for developing a research project involving orthodontic materials.

ORTH 8602 – Diagnosis, Treatment Planning and Case Presentation

Fall

A comprehensive in depth study of orthodontic diagnosis, treatment planning and American Board of Orthodontics (ABO) case reports of patients treated by orthodontic residents in our clinic. This will be accomplished in a seminar format where residents will present their case reports to fellow residents and faculty.

ORTH 8603 – Diagnosis, Treatment Planning and Case Presentation

Spring

A comprehensive in depth study of orthodontic diagnosis, treatment planning and American Board of Orthodontics
(ABO) case reports of patients treated by orthodontic residents in our clinic. This will be accomplished in a seminar format where residents will present their case reports to fellow residents and faculty.

ORTH 8604 – Diagnosis, Treatment Planning and Case Presentation
Fall  4
A comprehensive in depth study of orthodontic diagnosis, treatment planning and American Board of Orthodontics (ABO) case reports of patients treated by orthodontic residents in our clinic. This will be accomplished in a seminar format where residents will present their case reports to fellow residents and faculty.

ORTH 8605 – Diagnosis, Treatment Planning and Case Presentation
Spring  4
A comprehensive in depth study of orthodontic diagnosis, treatment planning and American Board of Orthodontics (ABO) case reports of patients treated by orthodontic residents in our clinic. This will be accomplished in a seminar format where residents will present their case reports to fellow residents and faculty.

ORTH 8606 – Diagnosis, Treatment Planning and Case Presentation
Fall  4
A comprehensive in depth study of orthodontic diagnosis, treatment planning and American Board of Orthodontics (ABO) case reports of patients treated by orthodontic residents in our clinic. This will be accomplished in a seminar format where residents will present their case reports to fellow residents and faculty.

ORTH 8607 – Diagnosis, Treatment Planning and Case Presentation
Spring  4
A comprehensive in depth study of orthodontic diagnosis, treatment planning and American Board of Orthodontics (ABO) case reports of patients treated by orthodontic residents in our clinic. This will be accomplished in a seminar format where residents will present their case reports to fellow residents and faculty.

ORTH 8803 – Literature Review/Journal Club
Spring  2
Introduction to analyzing and understanding literature in orthodontics, including classification of study designs, hypothesis testing, scientific writing, analysis and interpretation of data, and critical evaluation of the literature. Residents participate in critical review of research in orthodontics and craniofacial biology throughout their education and in preparation for the American Board of Orthodontics examination.

ORTH 8804 – Literature Review/Journal Club
Fall  2
A continuation and progressively advanced level of analyzing and understanding literature in orthodontics, including classification of study designs, hypothesis testing, scientific writing, analysis and interpretation of data, and critical evaluation of the literature. Residents participate in critical review of research in orthodontics and craniofacial biology throughout their education and in preparation for the American Board of Orthodontics examination.

ORTH 8805 – Literature Review/Journal Club
Spring  2
A continuation and progressively advanced level of analyzing and understanding literature in orthodontics, including classification of study designs, hypothesis testing, scientific writing, analysis and interpretation of data, and critical evaluation of the literature. Residents participate in critical review of research in orthodontics and craniofacial biology throughout their education and in preparation for the American Board of Orthodontics examination.

ORTH 8910 – Craniofacial Anomalies Growth and Development
Fall  2
Introduce diagnostic and treatment planning principles of interdisciplinary team approach, as well as, provide a sound basis for clinical examination, diagnosis and team management of patients with severe malocclusion associated with birth defects and craniofacial anomalies.
ORTH 8001 – Introduction to Orthodontics  
**Fall** 4  
An introduction and overview of the specialty of orthodontics and dentofacial orthopedics to prepare the orthodontic resident for advanced education in this dental specialty.

PEDO 8001 – Introduction to Pediatric Dentistry  
**Fall** 10  
This faculty led seminar includes lectures, reading assignments and assigned presentations. This is an intensive course which covers the entire content of the AAPD Reference Manual (oral health policies, clinical guidelines and resources). Also, an introduction to clinical software and its application (IT orientation and Axium training).

PEDO 8101 – Clinical Seminar I  
**Fall, Spring** 4  
Clinical Seminars 8101 and 8102 are a series of comprehensive seminars, which cover a wide range of topics over the residents’ two-year training period. This series will provide the foundation to enable the residents to effectively function in the various clinical settings of the program.

PEDO 8102 – Clinical Seminar II  
**Fall, Spring** 4  
Clinical Seminars 8101 and 8102 are a series of comprehensive seminars, which cover a wide range of topics over the residents’ two-year training period. This series will provide the foundation to enable the residents to effectively function in the various clinical settings of the program.

PEDO 8201 – Post-Graduate Clinic I  
**Fall, Spring** 17  
Provides postgraduate residents various clinic sites to perform pediatric dentistry for healthy children, medically compromised children, and physically and mentally challenged children from infants to adolescents in a diverse population.

PEDO 8202 – Post-Graduate Clinic II  
**Fall** 18  
Provides postgraduate residents various clinic sites to perform pediatric dentistry for healthy children, medically compromised children, and physically and mentally challenged children from infants to adolescents in a diverse population.

PEDO 8802 – Post-Graduate Clinic II  
**Spring** 19  
Provides postgraduate residents various clinic sites to perform pediatric dentistry for healthy children, medically compromised children, and physically and mentally challenged children from infants to adolescents in a diverse population.

PEDO 8802 – Literature Review/Journal Club I  
**Fall/Spring** 2  
Series designed to provide for systematic discussions and review of required readings and pertinent current articles in preparation for the American Board of Pediatric Dentistry Written Examination.

PEDO 8802 – Literature Review/Journal Club II  
**Fall** 2  
Series designed to provide for systematic discussions and review of required readings and pertinent current articles in preparation for the American Board of Pediatric Dentistry Written Examination.

PEDO 8802 – Literature Review/Journal Club II  
**Spring** 3  
Series designed to provide for systematic discussions and review of required readings and pertinent current articles in preparation for the American Board of Pediatric Dentistry Written Examination.

PEDO 8910 – Special Patient Care I  
**Fall, Spring** 2  
Covers two years, utilizing various teaching modalities, including but not limited to: case conferences, presentations, treatment planning, lectures from faculty and guests, literature review, and rotations. An evidence-based approach to learning will be an integral part of this course.

PEDO 8911 – Special Patient Care II  
**Fall, Spring** 2  
Covers two years, utilizing various teaching modalities, including but not limited to: case conferences, presentations, treatment planning, lectures from faculty and guests, literature review, and rotations. An evidence-based approach to learning will be an integral part of this course.
PEDO 8930 – Anesthesiology Rotation  
**Spring**  
5  
Training in the pharmacology, physiology, and administration of general anesthesia agents is provided through a one month full-time assignment to a local anesthesia group. The resident works under the direct supervision of anesthesiology staff in the pre-surgery ward rounds, administration of anesthesia for all types of surgery, and the post-surgery rounds.

PEDO 8940 – Emergency Medicine Rotation  
**Spring**  
2  
The resident is assigned for two weeks to the Department of Emergency Medicine at University Medical Center (UMC) through University of Nevada School of Medicine Department of Emergency Medicine, Emergency Medicine Residency Program. During the rotation, the resident participates as a hospital staff in the Emergency Medicine service.

PEDO 8950 – Pediatric Medicine Rotation  
**Spring**  
2  
The resident is assigned for two weeks to the Department of Pediatrics at University Medical Center (UMC) through University of Nevada School of Medicine Department of Pediatrics, Pediatric Residency Program. During the rotation, the resident participates as a hospital house staff in the General Pediatrics in-patient service to include rounds, house call, patient clinics. The rotation is designed to conform to the AAPD guidelines for pediatric medicine by providing the environment to emphasize a thorough, accurate history, an physical examination and to give the resident as much opportunity as possible to improve skills in taking, recording, and presenting a history and physical, and in using the information to arrive at reasonable possible diagnoses.
PGDE 8403 – Biomedical Science Core II  
**Spring**  4  
This is the second semester course covering the modules in the following areas: Oral Cells and Tissues; and Oral/Maxillofacial Pathology. Each module coordinator is responsible for developing the modality of information delivery and evaluation.

PGDE 8312 – Independent Research I  
**Fall, Spring**  3  
Research fundamentals and practical component involving research of topics using methodologies in different laboratories. Rotation through different laboratories; conduct a short project; and submit an article for publication. Allows knowledge application of systematic literature review, organization, synthesis of information, hypothesis design, research methodology, data organization, statistical analysis and scientific writing.

PGDE 8313 – Independent Research II  
**Fall**  3  
Research fundamentals and practical component involving research of topics using methodologies in different laboratories. Rotation through different laboratories; conduct a short project; and submit an article for publication. Allows knowledge application of systematic literature review, organization, synthesis of information, hypothesis design, research methodology, data organization, statistical analysis and scientific writing.

PGDE 8314 – Independent Research III  
**Spring**  3  
Research fundamentals and practical component involving research of topics using methodologies in different laboratories. Rotation through different laboratories; conduct a short project; and submit an article for publication. Allows knowledge application of systematic literature review, organization, synthesis of information, hypothesis design, research methodology, data organization, statistical analysis and scientific writing.

PGDE 8315 – Independent Research IV  
**Fall**  3  
Continues with advanced levels of research and scientific methodology. Topics include literature analysis, institutional review board (IRB), informed consent, experimental design, basic statistics, method development, data analysis and reporting.

PGDE 8316 – Independent Research V  
**Spring**  3  
Continues with advanced levels of research and scientific methodology. Topics include literature analysis, institutional review board (IRB), informed consent, experimental design, basic statistics, method development, data analysis and reporting.

PGDE 8402 – Biomedical Science Core I  
**Fall**  4  
Addresses the foundation knowledge required by post-doctoral dental residents to become proficient in: Diagnosis and treatment planning based on information about normal and abnormal growth and development; Use of the concepts gained in embryology and genetics in planning treatment; Use of knowledge of anatomy, histology and cell biology in planning and carrying out treatment; Clinical application of knowledge about the diagnosis, prevention and treatment of pathology of oral tissues. This is the first semester of a two semester course which is divided into seven (7) modules that address the following areas (first semester): Oral Microbiology and Immunology; Embryology; Head and Neck Anatomy; Cell Biology; Basic Bone Biology and Histology. The second semester covers: Oral Cells and Tissues; and Oral/Maxillofacial Pathology. Each module coordinator is responsible for developing the modality of information delivery and evaluation.

PGDE 8403 – Biomedical Science Core II  
**Spring**  4  
This is the second semester course covering the modules in the following areas: Oral Cells and Tissues; and Oral/Maxillofacial Pathology. Each module coordinator is
responsible for developing the modality of information delivery and evaluation.

PGDE 8414 – Pharmacology
Spring 1
Covers patterns of inheritance and molecular mechanisms that underlie normal and abnormal craniofacial development will be presented in lecture format. Residents will present clinical cases that will be discussed in the context of non-syndromic and syndromic anomalies.

PGDE 8415 – Advanced Biomedical Sciences
Fall 2
Covers patterns of inheritance and molecular mechanisms that underlie normal and abnormal craniofacial development will be presented in lecture format. Residents will present clinical cases that will be discussed in the context of non-syndromic and syndromic anomalies.

PGDE 8503 – Interdisciplinary Seminar
Fall 2
Provides Graduate Residents a background in contemporary treatments in the major clinical disciplines, with emphasis on interactions between them. This course is conducted as a literature review or current clinical research with summary papers to be written in each of the topics.

PGDE 8516 – Advanced Clinical Sciences: Radiology
Fall 4
Provide residents with digital maxillofacial radiology procedures and protocols. Introduce residents to advanced maxillofacial radiology technology, i.e., Cone Beam CT.

PGDE 8517 – TMD (Temporomandibular Disorders and Occlusion)
Spring 2
Reviews appropriate literature of stomatognathic function, diagnosis and treatment of TM Disorders. Resident will review the multi-factorial theory of TM Disorders and will distinguish simple TM Disorders vs. complex TM Disorders. A plan for management of TM disorders within their clinical discipline will be developed.

PGDE 8701 – Literature Review
Fall 2
Introduces critical analysis of available evidence and systems to rate, synthesize and organize the literature. The various types and levels of research will be discussed as well as the approaches to categorize and critique the evidence. Residents will learn how to research the evidence and write a review of clinical issues and write a research project plan.

PGDE 8703 – Biostatistics
Spring 2
Present relevant topics in the areas of practice management, ethics, nutrition and cultural diversity. The application of these topics to the practice of orthodontics will be emphasized.

PGDE 8704 – Research Design
Spring 2
Extends upon research fundamentals discussed in PGDE 8701 and includes a major practical component involving conduct of research over a broad range of topics using various methodologies and in different research laboratories. Residents will rotate through a minimum of two different laboratories, conduct a short project within each and submit an article for publication. Allows residents to apply their knowledge of systemic literature review, organization and synthesis of information, hypothesis design, research methodology, data organization, statistical analysis and scientific writing obtained from PGDE 8701.

PGDE 8715 – Practice Management
Fall 2
Covers business practice organization (Business Entities, Mission Statement, Practice Goals, Risk Management, OSHA Regulations); strategic plans for practice location and establishment (Demographic Analysis, Office Design, Associate and Partnership Agreements, Practice Valuation, Business Loans); effective leadership, office management and communication (Office Staff, New Patient Process, Practice Marketing, Communication, Statistical Monitors, Practice Management Software); office finances (Financial Indicators, Accounts Payables and Accounts/Contracts Receivables, Inventory Control); ethical issues in orthodontics; issues relative to patient care delivery, communication, and practice management; and contemporary issues relative to professional ethics and controversial issues.

PGDE 8716 – Practice Management II
Spring 2
Covers business practice organization (Business Entities, Mission Statement, Practice Goals, Risk Management, OSHA Regulations); strategic plans for practice location and establishment (Demographic Analysis, Office Design, Associate and Partnership Agreements, Practice Valuation, Business Loans); effective leadership, office management and communication (Office Staff, New Patient Process, Practice Marketing, Communication, Statistical Monitors, Practice Management Software); office finances (Financial Indicators, Accounts Payables and Accounts/Contracts Receivables, Inventory Control); ethical issues in
orthodontics; issues relative to patient care delivery, communication, and practice management; and contemporary issues relative to professional ethics and

PGDE 8900 – Thesis
Fall 6
Guides residents through the process of writing their proposal and thesis, following the guidelines/practices of scientific writing. Residents typically register for the course as they embark on writing up their research. Depending on resident abilities, course topics generally include idea organization and development, word choice, grammar, and revising their own writing. Individualized attention by thesis committees is an integral part of the course. Assignments and activities will be determined by the specific needs of the resident with regards to their thesis. Attention is given to the rhetorical and grammatical analyses of sample thesis proposals or chapters. While in conference with their committee members, residents will discuss their own proposal or thesis (specific chapters). Designed to begin as a seminar style with extensive dialogue among the residents, instructor, and resource persons. In-class discussions should be enhanced with additional resident-advisor (and committee, if appropriate) meetings. Residents are expected to be prepared for all class meetings. Since lecture will be minimized, it is essential that all residents be prepared to contribute to all in-class discussions and writing activities. Once the residents have selected their topics, committees, and presented their prospectus, the course will be taught as an independent study, with residents meeting with committee members on a weekly basis to move toward completion.

PGDE 8901 – Dissertation I
Fall 6
Guides residents through the process of writing their proposal and dissertation, following the guidelines/practices of scientific writing. Residents typically register for the course as they embark on writing up their research. Depending on resident abilities, course topics generally include idea organization and development, word choice, grammar, and revising their own writing. Individualized attention by thesis committees is an integral part of the course. Assignments and activities will be determined by the specific needs of the resident with regards to their dissertation. Attention is given to the rhetorical and grammatical analyses of sample dissertation proposals or chapters. While in conference with their committee members, residents will discuss their own proposal or dissertation (specific chapters). Designed to begin as a seminar style with extensive dialogue among the residents, instructor, and resource persons. In-class discussions should be enhanced with additional resident-advisor (and committee, if appropriate) meetings. Residents are expected to be prepared for all class meetings. Since lecture will be minimized, it is essential that all residents be prepared to contribute to all in-class discussions and writing activities. Once the residents have selected their topics, committees, and presented their prospectus, the course will be taught as an independent study, with residents meeting with committee members on a weekly basis to move toward completion. This course is repeatable up to 3 credits.

PGDE 8902 – Dissertation II
Fall 1
Guides residents through the process of writing their proposal and dissertation, following the guidelines/practices of scientific writing. Residents typically register for the course as they embark on writing up their research. Depending on resident abilities, course topics generally include idea organization and development, word choice, grammar, and revising their own writing. Individualized attention by thesis committees is an integral part of the course. Assignments and activities will be determined by the specific needs of the resident with regards to their dissertation. Attention is given to the rhetorical and grammatical analyses of sample dissertation proposals or chapters. While in conference with their committee members, residents will discuss their own proposal or dissertation (specific chapters). Designed to begin as a seminar style with extensive dialogue among the residents, instructor, and resource persons. In-class discussions should be enhanced with additional resident-advisor (and committee, if appropriate) meetings. Residents are expected to be prepared for all class meetings. Since lecture will be minimized, it is essential that all residents be prepared to contribute to all in-class discussions and writing activities. Once the residents have selected their topics, committees, and presented their prospectus, the course will be taught as an independent study, with residents meeting with committee members on a weekly basis to move toward completion.
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