

# The Curriculum

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The curriculum of the School of Dentistry is designed to be responsive to the needs of contemporary dental practitioners. This is exemplified in the School of Dentistry's comprehensive patient care program.

## Comprehensive Patient Care Program

The clinical curriculum of the School of Dentistry is based on a general practice model. The philosophy of this model is to provide quality comprehensive dental care without fragmentation into separate specialties or disciplines. Students learn to focus on the patient's total dental needs rather than a single clinical procedure. The program that applies this philosophy is the Comprehensive Patient Care Program.

The Comprehensive Patient Care Program is patient centered and guided by general practice principles. This allows for easier integration of basic, behavioral and clinical science concepts in the delivery of patient care. One of the primary objectives of the Comprehensive Patient Care System is to build upon the principles the students have been exposed to during their training in the preclinical disciplines. Students are assigned to a Comprehensive Patient Management Group (CPMG), which is operated as a group practice. The group leader administers each CPMG and monitors the progress of each patient through his/her treatment plan. Students interact with support personnel modeled after a private practice setting. Dental assistants and additional faculty support complete the CPMG. Students collaborate with specialty disciplines, similar to a referral system used in private practice. Clinic treatment and instruction is designed to assure clinical competence in the various dental disciplines. Each D3 (third year) and D4 (fourth year) dental student is expected to demonstrate a satisfactory level of competency in the assigned CPMG and during block rotation assignments. Basic skills and mock board examinations allow the students the opportunity to demonstrate basic clinical knowledge and its application in the performance of patient treatment. Each CPMG holds regularly scheduled dental rounds sessions in which students present clinical cases and related issues of patient care.

Both first- and second-year students participate in CPMG activities, including dental rounds, and are assigned to provide simple dental care to patients and to serve as dental assistants for third and fourth year students.

The curriculum enhances the development of interpersonal patient skills and the reinforcement of the moral and ethical standards of the dental profession. The School of Dentistry has a long record of treating the underserved throughout the state of Wisconsin, as well as reaching out to the community through both urban and rural community sites. These are integral parts of the students' education and, as such, students are required to complete assigned rotations in order to graduate. These rotations include, but are not limited to, the Marquette University Community Dental Clinics in the city of Milwaukee, the Tri-County Community Dental Clinic in Appleton, the Peter Christensen Dental Clinic in Lac Du Flambeau, the Ministry Dental Center in Stevens Point, and the Chippewa Valley Technical College in Eau Claire. Students provide both preventive and clinical dental services to these underserved populations.

**Note:** All courses have initial discipline designators:

- DEIN = Dental Interdisciplinary courses
- DEGD = Dental General Dental Science courses
- DESS = Dental Surgical Science courses
- DEDS = Dental Developmental Science courses
- DECS = Dental Clinical Services courses
- BISC = Biomedical Sciences courses

## Dentistry

### First Year

#### First Term, Fall

BISC 7410	Microbiology	4
BISC 7514	Human Microanatomy	4
BISC 7515	Biomedical Systems 1	3
DEGD 7112	Preservation and Restoration of Tooth Structure 1	3
DEGD 7113	Dental Anatomy and Occlusion 1	2
DEIN 7110	Foundations of Oral Health 1	3
DEIN 7114	Introduction to Clinical Practice 1	3
DEIN 7118	Dental Rounds 1	1

Total Credit Hours

23

**Second Term, Spring**

BISC 7516	Biomedical Systems 2	4
BISC 7517	Biomedical Systems 3	4
BISC 7518	Biomedical Systems 4	4
DEGD 7122	Preservation and Restoration of Tooth Structure 2	3
DEGD 7123	Dental Anatomy and Occlusion 2	2
DEIN 7120	Foundations of Oral Health 2	3
DEIN 7121	Oral Biology	4
DEIN 7124	Introduction to Clinical Practice 2	2
DEIN 7128	Dental Rounds 2	1
Total Credit Hours		27

**Summer Session (S-1)**

DEGD 7132	Preservation and Restoration of Tooth Structure 3	3
DEGD 7133	Preclinical Removable Prosthodontics 1	3
DEIN 7130	Oral Medicine and Diagnosis 1	4
DEIN 7134	Introduction to Clinical Practice 3	2
DEIN 7138	Dental Rounds 3	1
Total Credit Hours		13

**Second Year****First Term, Fall**

BISC 7520	Dental Pharmacology	4
DEGD 7212	Preclinical Fixed Prosthodontics 1	3
DEGD 7213	Preclinical Removable Prosthodontics 2	2
DEIN 7210	Oral Medicine and Diagnosis 2	4
DEIN 7220	Oral Medicine and Diagnosis 3	3
DEIN 7214	Introduction to Clinical Practice 4	1
DEIN 7218	Dental Rounds 4	1
DESS 7210	Clinical Periodontal Therapy	1
Total Credit Hours		19

**Second Term, Spring**

DECS 7310	Special Patient Care	1
DEDS 7222	Orthodontic Principles and Techniques	3
DEGD 7222	Preclinical Fixed Prosthodontics 2 and Clinical Occlusion	3
DEGD 7223	Preclinical Removable Prosthodontics 3	2
DEIN 7221	Care of the Pediatric Patient	2
DEIN 7224	Intermediate Clinical Practice	3
DEIN 7228	Dental Rounds 5	1
DESS 7211	Introduction to Endodontics	2
Total Credit Hours		17

**Summer Session (S-2)**

DEDS 7234	Developmental Sciences Introductory Clinical Practicum	1
DEGD 7310	Clinical Restorative Procedures 1	2
DEIN 7230	Introduction to Implants	3
DEIN 7234	Clinical Dental Practice	1-3
DEIN 7238	Dental Rounds 6	1
DESS 7230	Emergency Medical Interventions	1
DESS 7231	Foundations of Oral and Maxillofacial Surgery	1

DESS 7234	Surgical Sciences Introductory Clinical Practicum	1
Total Credit Hours		11-13

### Third year

#### First Term, Fall

DECS 7314	Comprehensive Patient Care Practicum 1	5
DEDS 7310	Orthodontic Management	1
DEDS 7314	Developmental Sciences Clinical Practicum 1	1
DEGD 7320	Clinical Restorative Procedures 2	1
DEGD 7324	Prosthodontic Clinical Practicum 1	3
DEIN 7318	Dental Rounds 7	1
DEIN 7330	Foundations of Professional Development	2
DESS 7310	Intermediate Oral and Maxillofacial Surgery	1
DESS 7314	Surgical Sciences Clinical Practicum 1	2
DESS 7320	Clinical Endodontic Procedures	1
Total Credit Hours		18

#### Second Term, Spring

DECS 7320	Dental Practice Dynamics 1	1
DECS 7324	Comprehensive Patient Care Practicum 2	5
DEDS 7324	Developmental Sciences Clinical Practicum 2	1
DEGD 7330	Clinical Restorative Procedures 3	2
DEIN 7320	Clinical Radiology and Oral Pathology	2
DEIN 7328	Dental Rounds 8	1
DESS 7321	Advanced Oral and Maxillofacial Surgery	2
DESS 7323	Clinical Pharmacology and Medicine for Dentistry	1
DESS 7324	Surgical Sciences Clinical Practicum 2	2
Total Credit Hours		17

#### Summer Session (S-3)

DECS 7334	Comprehensive Patient Care Practicum 3 *	1-4
DEDS 7334	Developmental Sciences Clinical Practicum 3	1
DEIN 7338	Dental Rounds 9	1
DESS 7334	Surgical Sciences Clinical Practicum 3	1
Total Credit Hours		4-7

### Fourth Year

#### First Term, Fall

DECS 7410	Dental Practice Dynamics 2	2
DECS 7414	Senior Clinical Practicum in Comprehensive Patient Care 1 *	1-5
DECS 7996	Extended Clinical Practice (Variable)	0
DEDS 7414	Senior Clinical Practicum in Developmental Sciences 1	2
DEGD 7414	Senior Clinical Practicum in Prosthodontics 1	4
DEIN 7410	Senior Colloquium 1	1
DEIN 7418	Dental Rounds 10	1
DESS 7414	Senior Clinical Practicum in Surgical Sciences 1	4
Total Credit Hours		15-19

#### Second Term, Spring

DECS 7424	Senior Clinical Practicum in Comprehensive Patient Care 2 *	1-5
DECS 7996	Extended Clinical Practice (Variable)	0
DEDS 7424	Senior Clinical Practicum in Developmental Sciences 2	2

DEGD 7424	Senior Clinical Practicum in Prosthodontics 2	4
DEIN 7428	Dental Rounds 11	1
DESS 7424	Senior Clinical Practicum in Surgical Sciences 2	4
Total Credit Hours		12-16

## Biomedical Sciences Courses

### **BISC 7410. Microbiology. 4 cr. hrs.**

Focuses on infectious agents of human medical importance and on the host pathogen interaction. Topic areas include: the general characteristics of bacteria, viruses, fungi and parasites as well as the etiology, pathogenesis, laboratory identification and epidemiology of selected diseases. Control of microorganisms is discussed in terms of sterilization, disinfection, chemotherapy and immunization. The immune system and the immune response are discussed. Applies toward the Cell and Molecular Content Area. Prereq: School of Dentistry or PHAS major.

### **BISC 7514. General Histology. 4 cr. hrs.**

This course is a study of the normal microscopic structure and function of human cells, tissues and organs. The structural basis for various physiological and pathological processes such as inflammation and endocrine cycles is presented. The student is also introduced to tissues of the oral region that are studied in detail in DENT 7121. Laboratory exercises promote visual identification of structure. Prereq: School of Dentistry only.

### **BISC 7515. Biomedical Systems 1. 3 cr. hrs.**

Provides an introduction to human anatomy of the head and neck region. Topics include the skull, temporomandibular joint, muscles of mastication and facial expression and an overview of the orbital and cervical regions. Structural and functional relationships between the cranial nerves and central neuroanatomical pathways are presented along with selected clinical correlations. Begins to build the foundational knowledge of the biomedical systems that is necessary for dental students as they start patient rounds during the first semester. Applies toward the Anatomy and Systems Content Area. Prereq: School of Dentistry.

### **BISC 7516. Biomedical Systems 2. 4 cr. hrs.**

A human gross anatomy course for dental students that integrates lecture with a cadaver dissection laboratory. Follows the neurocranial anatomy course with expanded topics and detailed dissections of the head and neck regions. Lectures and dissections of the thorax, abdomen and pelvis, along with lectures on the upper and lower extremities are included. Part of a biomedical systems course sequence integrating anatomy, physiology, pathology, and dental clinical correlates. Prereq: School of Dentistry only.

### **BISC 7517. Biomedical Systems 3. 4 cr. hrs.**

Module 3 of a systems-based course integrating anatomy, physiology and pathology including dental clinical correlates. Prereq: School of Dentistry only.

### **BISC 7518. Biomedical Systems 4. 4 cr. hrs.**

Module 4 of a systems-based course integrating anatomy, physiology and pathology including dental clinical correlates. Prereq: School of Dentistry only.

### **BISC 7520. Dental Pharmacology. 4 cr. hrs.**

Fundamentals of human pharmacology and basic principles dictating drug actions within the human body with emphasis on applications in dentistry. Focuses on the therapeutic actions and clinical applications of various drug classes. Topics include: cellular mechanisms, physiological responses, adverse reactions, drug-drug interactions, and clinical indications, accompanied by discussion on the pathological conditions for which common therapeutic agents are used. Applications of pharmacology commonly encountered by dentists are presented and are reinforced through interactive clinically correlated lectures presented by dental professionals. Prereq: School of Dentistry only.

### **BISC 7995. Independent Study in Biomedical Sciences. 1-6 cr. hrs.**

Research on a selected topic under the direction of a faculty member of the Department of Biomedical Sciences. Can be taken for a maximum total of 6 credits, maximum of 3 credits can be applied towards BISC major.

## Dental Clinical Services Courses

### **DECS 7310. Special Patient Care. 1 cr. hr.**

An introduction to the multifaceted aspects of disabling conditions and their implications for oral health care. Conditions addressed include the developmental disabilities, sensory disability, cardiovascular and neuromuscular deficits. Emphasis is on clinical management of patients with such conditions. Aging is also studied in regard to the relationship between normal aging, chronic disease and oral health.

### **DECS 7314. Comprehensive Patient Care Practicum 1. 5 cr. hrs.**

Third year dental students interact with members of the dental team and deliver care under circumstances which are similar to a large group practice. Dental students are expected to demonstrate a satisfactory level of proficiency in the assigned CPMG and during block rotation assignments. Each CPMG meets once weekly for general dental rounds where students present cases or topics and are asked to defend treatment-planning decisions with reference to the literature. Emphasis is placed on relatively simple restorations within the student's capabilities. Students are expected to perform clinically acceptable procedures on manikins in unguided situations as an assessment of competency. S/U grade assessment.

### **DECS 7320. Dental Practice Dynamics 1. 1 cr. hr.**

Provides the student with an understanding of the dynamics of patient management and clinical practice systems that will allow them to effectively manage the practice environment. Topics include: the psychology of the clinic patient, effective appointment strategies, attracting clinic patients and creating ideal systems for the private practice among others. S/U grade assessment.

**DECS 7324. Comprehensive Patient Care Practicum 2. 5 cr. hrs.**

Builds on the initial Comprehensive Care Practicum, DECS 7314. Students are expected to provide clinical care across the various disciplines of dentistry. Each CPMG meets once weekly for a general dental rounds where students present cases or topics and are asked to defend treatment-planning decisions with a reference to the literature. Emphasizes principles of cavity design for different direct restorative materials. Teaches indirect single tooth restorations, including cast gold, porcelain-fused-to-metal, and all-ceramic restorations. Basic skills competency exercises are required using both manikin and patient-based procedures. S/U grade assessment.

**DECS 7334. Comprehensive Patient Care Practicum 3. 1-4 cr. hrs.**

Continues the sequence of Comprehensive Patient Care Practicums. Students are expected to be able to deliver care more efficiently and to be able to handle more complex cases. Includes assessment of student experiences in community dental clinics and patient education experiences in schools and community health settings. S/U grade assessment.

**DECS 7410. Dental Practice Dynamics 2. 2 cr. hrs.**

Builds on the initial course in the sequence, Dental Practice Dynamics 1, and provides the students with the background to be successful practitioners. Topics include: Creating a compelling philosophy of care, preparing for financial viability, leadership and change, the future of dental practice and developing the practice environment. S/U grade assessment.

**DECS 7414. Senior Clinical Practicum in Comprehensive Patient Care 1. 1-5 cr. hrs.**

The first of two advanced level courses in Comprehensive Care Dentistry, students are expected to demonstrate their ability to provide a broad range of dental services to patients requiring both relatively simple and more difficult care. Students are also expected to demonstrate their ability to diagnosis and treatment plan cases and present/defend them in the 4th year Dental Rounds. Students are also assessed on their community service involvement. S/U grade assessment.

**DECS 7424. Senior Clinical Practicum in Comprehensive Patient Care 2. 1-5 cr. hrs.**

The second of two advanced level courses in Comprehensive Care Dentistry, students are expected to demonstrate their ability to provide a broad range of dental services to patients requiring both relatively simple and more difficult care. Students are also expected to demonstrate their ability to diagnosis and treatment plan cases and present/defend them in the 4th year Dental Rounds. Students are also assessed on their community service involvement. S/U grade assessment.

**DECS 7996. Extended Clinical Practice. 0 cr. hrs.**

Allows students to fulfill clinical requirements necessary for graduation. Requires completion of all course work in D.D.S. program. SNC/UNC grade assessment.

**Dental Developmental Sciences Courses****DEDS 7222. Orthodontic Principles and Techniques. 3 cr. hrs.**

Designed to prepare the general dentist to recognize developmental issues and provide limited-focus "hands-on" orthodontic care for specific types of malocclusions in the permanent dentition including principles of impression making, clinical evaluation and diagnosis.

**DEDS 7234. Developmental Sciences Introductory Clinical Practicum. 1 cr. hr.**

Orientation of the student to the pediatric clinic. Students are introduced to operations and procedures regarding the clinical management and treatment of the child patient. S/U grade assessment. Prereq: Enrolled in the School of Dentistry.

**DEDS 7310. Orthodontic Management. 1 cr. hr.**

Stresses the complexities of comprehensive orthodontic treatment. Emphasizes road-based considerations in the diagnosis, treatment planning and provision of competent orthodontic care for resolving complex malocclusions. Focuses on the interaction between generalist and orthodontic specialist.

**DEDS 7314. Developmental Sciences Clinical Practicum 1. 1 cr. hr.**

Provides the dental student's first experience in the clinical management and treatment of the child patient. Includes experiences in minor tooth movement. S/U grade assessment.

**DEDS 7324. Developmental Sciences Clinical Practicum 2. 1 cr. hr.**

Provides continuing experience in the clinical management and treatment of the child patient. Includes experiences in minor tooth movement. Students may be assigned more complicated cases as their progress warrants. S/U grade assessment.

**DEDS 7334. Developmental Sciences Clinical Practicum 3. 1 cr. hr.**

Provides continuing experience in the clinical management and treatment of the child patient. Students may be assigned more complicated cases as their progress warrants. S/U grade assessment. Prereq: Enrolled in the School of Dentistry.

**DEDS 7414. Senior Clinical Practicum in Developmental Sciences 1. 2 cr. hrs.**

Provides advanced experience in the clinical management and treatment of the child patient. Includes caries management, sealant placement and application of fluorides. Also includes experiences in minor tooth movement and other Orthodontic procedures that are within the student's scope of care. S/U grade assessment.

**DEDS 7424. Senior Clinical Practicum in Developmental Sciences 2. 2 cr. hrs.**

Provides additional advanced experiences in the clinical management and treatment of the child patient. Includes caries management, sealant placement and application of fluorides. Also includes experiences in minor tooth movement and other Orthodontic procedures that are within the student's scope of care. S/U grade assessment.

## Dental General Science Courses

### **DEGD 7112. Preservation and Restoration of Tooth Structure 1. 3 cr. hrs.**

This didactic and laboratory course introduces first year dental students to principles and dental biomaterials necessary for the preservation and restoration of a tooth that has been adversely affected by dental disease or other processes. In laboratory settings, students prepare artificial and natural teeth for different types of dental restorations. While hand skill development is emphasized, the importance of proper diagnosis and treatment planning, including material selection is also stressed. The didactic portion of the course provides the scientific and clinical basis for laboratory projects.

### **DEGD 7113. Dental Anatomy and Occlusion 1. 2 cr. hrs.**

Presents occlusion as part of the biomechanical system, emphasizing the mechanical relationships between anterior and posterior anatomy, anterior guidance, and certain parameters of the jaw joint. Students perform laboratory exercises in which they duplicate the form and function of selected anterior and posterior teeth in wax. Serves as the foundation for subsequent restorative dentistry courses, including the fixed prosthodontic and removable prosthodontic preclinical courses.

### **DEGD 7122. Preservation and Restoration of Tooth Structure 2. 3 cr. hrs.**

This didactic and laboratory course introduces first year dental students to principles and dental biomaterials necessary for the preservation and restoration of a tooth that has been adversely affected by dental disease or other processes. In laboratory settings, students prepare artificial and natural teeth for different types of dental restorations. While hand skill development is emphasized, the importance of proper diagnosis and treatment planning, including material selection is also stressed. The didactic portion of the course provides the scientific and clinical basis for laboratory projects. This is a continuation of DEGD 7113.

### **DEGD 7123. Dental Anatomy and Occlusion 2. 2 cr. hrs.**

Presents occlusion as part of the biomechanical system, emphasizing the mechanical relationships between anterior and posterior anatomy, anterior guidance, and certain parameters of the jaw joint. Students perform laboratory exercises in which they duplicate the form and function of selected anterior and posterior teeth in wax. Serves as the foundation for subsequent restorative dentistry courses, including the fixed prosthodontic and removable prosthodontic preclinical courses. This is a continuation of DEGD 7113.

### **DEGD 7132. Preservation and Restoration of Tooth Structure 3. 3 cr. hrs.**

This didactic and laboratory course introduces first year dental students to principles and dental biomaterials necessary for the preservation and restoration of a tooth that has been adversely affected by dental disease or other processes. In laboratory settings, students prepare artificial and natural teeth for different types of dental restorations. While hand skill development is emphasized, the importance of proper diagnosis and treatment planning, including material selection is also stressed. The didactic portion of the course provides the scientific and clinical basis for laboratory projects. This is a continuation of DEGD 7122.

### **DEGD 7133. Preclinical Removable Prosthodontics 1. 3 cr. hrs.**

Introduces students to both the clinical and laboratory steps necessary to fabricate complete maxillary and mandibular dentures for the edentulous patient. Student teams perform all the steps from diagnosis through post placement management for assigned live edentulous patients. Emphasizes the reasons for complete denture therapy, the sequence of care, and the importance of specific procedures for patient management. The goal is to prepare students for their individual clinical experiences in complete denture prosthetics.

### **DEGD 7212. Preclinical Fixed Prosthodontics 1. 3 cr. hrs.**

Builds on the basic principles presented in the introduction course RESC 516. Principles of various retainer preparations, impressions, and master casts with removable dies are taught. Also covered, are provisional restorations, pontic designs and bridge assembly. Emphasis is on simulation of all clinical and laboratory procedures.

### **DEGD 7213. Preclinical Removable Prosthodontics 2. 2 cr. hrs.**

Introduces students to the clinical and laboratory steps necessary to fabricate removable partial dentures for a patient. Emphasis is placed on treatment planning, selection of correct abutment teeth, analysis of occlusal relationships, surveying and design.

### **DEGD 7222. Preclinical Fixed Prosthodontics 2 and Clinical Occlusion. 3 cr. hrs.**

Students complete manikin based fixed prosthodontic projects. Functional anatomy and physiology of the masticatory system are introduced as it relates to the biomechanics of jaw movement. This is correlated with a hands-on component where the students perform an analysis of occlusion of a patient. The student performs all aspects of an occlusal analysis including fabrication of diagnostic casts articulated in centric relation, analysis of functional occlusion, and selective grinding of casts.

### **DEGD 7223. Preclinical Removable Prosthodontics 3. 2 cr. hrs.**

A continuation of DEGD 7213 with emphasis on treatment planning for partial dentures and implants.

### **DEGD 7310. Clinical Restorative Procedures 1. 2 cr. hrs.**

Builds on the material presented in the preclinical restorative dentistry courses. Includes contemporary clinical techniques for intracoronal restoration, restorative of endodontically treated teeth, treatment planning and design for fixed partial dentures and diagnosis and clinical techniques for complete and removable partial dentures. Also presents a significant applied dental biomaterials segment.

### **DEGD 7320. Clinical Restorative Procedures 2. 1 cr. hr.**

A continuation of DEGD 7310 with emphasis on clinical techniques for fixed partial dentures. Builds on the restorative techniques section of DEIN 7230, Introduction to Implants.

**DEGD 7324. Prosthodontic Clinical Practicum 1. 3 cr. hrs.**

Provides the student's initial experience with the disciplines of Fixed and Removable Prosthodontics. Stresses basic principles, concepts and techniques used to treat complete and partially edentulous patients. Students provide crowns, fixed partial dentures, removable partial dentures and complete dentures to patients according to their physiological, structural and psychological needs under direct supervision of prosthodontic specialists. S/U grade assessment. Prereq: Successful completion of the Prosthodontics Pre-clinical laboratory courses.

**DEGD 7330. Clinical Restorative Procedures 3. 2 cr. hrs.**

Third and final course in the Restorative Dentistry Clinical continuum. Focuses mainly on the management of TMD problems and occlusion in general practice.

**DEGD 7414. Senior Clinical Practicum in Prosthodontics 1. 4 cr. hrs.**

Provides students with advanced experience in the disciplines of Fixed and Removable Prosthodontics. Stresses the principles, concepts and techniques used to treat complete and partially edentulous patients. Students provide appropriate prosthodontic care to patients according to the patient's physiological, structural and psychological needs under direct supervision of prosthodontic specialists. S/U grade assessment. Prereq: Satisfactory completion of first three years of dental curriculum or equiv.

**DEGD 7424. Senior Clinical Practicum in Prosthodontics 2. 4 cr. hrs.**

Continuation of DEGD 7414. Provides the students with additional advanced experience in the disciplines of Fixed and Removable Prosthodontics. Stresses the principles, concepts and techniques used to treat complete and partially edentulous patients. Students provide appropriate prosthodontic care to patients according to the patient's physiological, structural and psychological needs under direct supervision of prosthodontic specialists. S/U grade assessment. Prereq: Satisfactory completion of first three years of dental curriculum or its equiv.

**Dental Interdisciplinary Courses****DEIN 7110. Foundations of Oral Health 1. 3 cr. hrs.**

The goal of this colloquia sequence is to provide dental students with a comprehensive overview of the contemporary practice of dentistry and to initiate them in an educational process that will culminate with their entry into the profession. Inter-disciplinary discussions about what dentists actually do when serving patients with a broad range of health problems are used to introduce students to the knowledge, skills, and experience that are fundamental to the delivery of modern oral health care. Emphasis is placed on common disease processes that affect the oral cavity, key aspects of clinical decision making, contemporary treatment modalities. The colloquia are closely coordinated with and complement preclinical laboratory technique courses given in the first and second years.

**DEIN 7114. Introduction to Clinical Practice 1. 3 cr. hrs.**

The first course in the clinical practice sequence has been designed to provide fundamental knowledge, skills, and experience that will enable first year students to become directly involved in interactions with patients. Upon completion of DEIN 7114-7134, dental students will have sufficient working knowledge of infection control, how to interact with patients, dental radiography, dental assisting, and related topics to be able to play a meaningful part in the delivery of oral health care to patients. In addition to providing opportunities for direct contact between students and patients, sessions that allow students to work in laboratory and clinical settings with instruments and equipment integral to modern clinical practice are an important part of DEIN 7114-7134. Students are provided an extensive laboratory experience in periodontics which prepares them to deliver oral prophies and basic scaling of teeth. Students must receive a passing grade in this section of the course to receive a passing grade for the entire course. S/U grade assessment.

**DEIN 7117. Research Practicum 1. 1 cr. hr.**

This elective course provides structured research experience in the biomedical, clinical or behavioral sciences. Under the guidance of a faculty mentor, the student will design and/or carry out research projects of appropriate difficulty and scope based on the student's ability. S/U grade assessment. Prereq: Cons. of instr.

**DEIN 7118. Dental Rounds 1. 1 cr. hr.**

Dental Rounds consist of student driven, case-based presentations that are both multidisciplinary and clinically relevant. Students relate concepts learned in the basic sciences, oral medicine and pathology, general pathology and physiology to clinical dental correlates and comprehensive treatment planning. Rounds provide an opportunity for students to develop critical thinking and problem solving skills while expanding their dental knowledge base. D1 students are responsible for an assigned basic science aspect of the case and work as a member of the integrated D1-D4 team.

**DEIN 7120. Foundations of Oral Health 2. 3 cr. hrs.**

The goal of this colloquia sequence is to provide dental students with a comprehensive overview of the contemporary practice of dentistry and to initiate them in an educational process that will culminate with their entry into the profession. Inter-disciplinary discussions about what dentists actually do when serving patients with a broad range of health problems are used to introduce students to the knowledge, skills, and experience that are fundamental to the delivery of modern oral health care. Emphasis is placed on common disease processes that affect the oral cavity, key aspects of clinical decision making, contemporary treatment modalities. The colloquia are closely coordinated with and complement preclinical laboratory technique courses given in the first and second years. This is a continuation of DEIN 7110.

**DEIN 7121. Oral Biology. 4 cr. hrs.**

Covers oral histology and oral microbiology/immunology, correlating this information with clinical situations.

**DEIN 7124. Introduction to Clinical Practice 2. 2 cr. hrs.**

Continuation of DEIN 7114. S/U grade assessment.

**DEIN 7127. Research Practicum 2. 1 cr. hr.**

This elective course provides structured research experience in the biomedical, clinical or behavioral sciences. Under the guidance of a faculty mentor, the student will design and/or carry out research projects of appropriate difficulty and scope based on the student's ability. This is the second of a series of possible practicum experiences in research. S/U grade assessment. Prereq: Cons. of instr.

**DEIN 7128. Dental Rounds 2. 1 cr. hr.**

This Dental Rounds course continues student driven, case-based presentations that are both multidisciplinary and clinically relevant. Students relate concepts learned in the basic sciences, oral medicine and pathology, general pathology and physiology to clinical dental correlates and comprehensive treatment planning. Rounds provide an opportunity for students to develop critical thinking and problem solving skills while expanding their dental knowledge base. D1 students are responsible for an assigned basic science aspect of the case and work as a member of the integrated D1-D4 team.

**DEIN 7130. Oral Medicine and Diagnosis 1. 4 cr. hrs.**

The first in a sequence of courses that provides the framework for diagnosis and evaluation of the dental patient. It deals with physical evaluation including basic interviewing skills, taking a comprehensive medical history, taking and evaluating vital signs, ordering appropriate laboratory tests and an overview of infectious diseases. Students learn where modification of dental treatment is necessary in the presence of various systemic diseases and conditions. Basic radiographic interpretation is introduced, as well as rudiments of dental pharmacology.

**DEIN 7134. Introduction to Clinical Practice 3. 2 cr. hrs.**

The extension of DEIN 7114 and 7124 allows the student to gain broader patient care experience, particularly in periodontal therapy, as well as; receiving more background knowledge in dental radiology. S/U grade assessment.

**DEIN 7137. Research Practicum 3. 1-3 cr. hrs.**

This elective course provides structured research experience in the biomedical, clinical or behavioral sciences. Under the guidance of a faculty mentor, the student will design and/or carry out research projects of appropriate difficulty and scope based on the student's ability. This is the third of a series of possible practicum experiences in research. S/U grade assessment. Prereq: Cons. of instr.

**DEIN 7138. Dental Rounds 3. 1 cr. hr.**

Dental Rounds during the summer session assist and guide students in treatment planning with moderate or complex cases which have been approved by the group leader. Students prepare for treatment planning rounds by having completed the comprehensive exam, study models, oral medicine clearance and radiographic survey in addition to a preliminary treatment plan. Ideally, the patient would be present for the session as well. D1 students will be present for observation and questions or suggestions and assist team leader with presentation of the case.

**DEIN 7210. Oral Medicine and Diagnosis 2. 4 cr. hrs.**

Continuation of the Oral Medicine and Diagnosis sequence. It includes behavioral and pharmacological management of the patient including anxiety and pain management. The student is also exposed to basic diagnostic procedures including taking an appropriate patient history, patient interviewing, selection and application of radiographs and conducting a comprehensive oral examination. The student will also be introduced to identification of oral lesions.

**DEIN 7214. Introduction to Clinical Practice 4. 1 cr. hr.**

Covers basic clinical knowledge as a prerequisite to clinical practice. Sophomore dental students will perform simple clinical procedures on patients in a comprehensive patient management group setting, and demonstrate an understanding of the various disciplines in providing comprehensive care. S/U grade assessment.

**DEIN 7217. Research Practicum 4. 1-2 cr. hrs.**

This elective course provides structured research experience in the biomedical, clinical or behavioral sciences. Under the guidance of a faculty mentor, the student will design and/or carry out research projects of appropriate difficulty and scope based on the student's ability. This is the fourth of a series of possible practicum experiences in research. S/U grade assessment. Prereq: Cons. of instr.

**DEIN 7218. Dental Rounds 4. 1 cr. hr.**

Dental Rounds consist of student driven, case-based presentations that are both multidisciplinary and clinically relevant. Students relate concepts learned in the basic sciences, oral medicine and pathology, general pathology and physiology to clinical dental correlates and comprehensive treatment planning. Rounds provide an opportunity for students to develop critical thinking and problem solving skills while expanding their dental knowledge base. D2 students are responsible for an assigned pathology aspect of the case and work as a member of the integrated D1-D4 team.

**DEIN 7220. Oral Medicine and Diagnosis 3. 4 cr. hrs.**

This is the third and final course in the Oral Medicine and Diagnosis sequence. Integrates oral and maxillofacial pathology into the diagnostic process and involves the study of the diseases and abnormalities of the oral cavity and adjacent regions, including their etiology, epidemiology, clinical and radiographic features, diagnosis, treatment and prognosis. Taught in an interdisciplinary fashion, involving oral and maxillofacial pathology, oral and maxillofacial radiology and oral and maxillofacial surgery.

**DEIN 7221. Care of the Pediatric Patient. 2 cr. hrs.**

Designed to provide a comprehensive overview of pediatric dentistry by integrating several clinical disciplines. It will prepare the general dentist to provide dental care to children from infancy to early adolescence. The course includes topics focused on the pediatric patient such as: diagnosis and treatment planning, child abuse and neglect, orthodontic diagnosis and treatment in the mixed dentition, non-pharmacological behavior management, trauma, gingival and periodontal disease, growth and development, oral surgery, management of the medically compromised/disabled, oral pathology and hospital dentistry among others.



**DEIN 7224. Intermediate Clinical Practice. 3 cr. hrs.**

Sophomore dental students will perform simple and intermediate clinical procedures on patients in a comprehensive patient management group setting. Provides the transition between simple clinical practice and full clinical care privileges. S/U grade assessment.

**DEIN 7227. Research Practicum 5. 1-2 cr. hrs.**

This elective course provides structured research experience in the biomedical, clinical or behavioral sciences. Under the guidance of a faculty mentor, the student will design and/or carry out research projects of appropriate difficulty and scope based on the student's ability. This is the fifth of a series of possible practicum experiences in research. S/U grade assessment. Prereq: Cons. of instr.

**DEIN 7228. Dental Rounds 5. 1 cr. hr.**

This Dental Rounds course continues student driven, case-based presentations that are both multidisciplinary and clinically relevant. Students relate concepts learned in the basic sciences, oral medicine and pathology, general pathology and physiology to clinical dental correlates and comprehensive treatment planning. Rounds provide an opportunity for students to develop critical thinking and problem solving skills while expanding their dental knowledge base. D2 students are responsible for an assigned pathology aspect of the case and work as a member of the integrated D1-D4 team.

**DEIN 7230. Introduction to Implants. 3 cr. hrs.**

Includes a comprehensive overview of diagnosing, treatment planning, surgical placement, restoring and maintaining of dental implants. Students will plan and restore a single implant supported crown and a two implant retained overdenture. Emphasis will be on pre-clinical simulation of clinical and laboratory procedures required for successful implant restoration.

**DEIN 7234. Clinical Dental Practice. 1-3 cr. hrs.**

In this course, students interact with the dental team and deliver dental care under circumstances which are similar to a large group practice. Following a selection of patients by the group leader, a wide range of patients is assigned, assuring a broad clinical experience in general dentistry. Student progress is closely monitored and is measured by daily performance assessments and several competency examinations. S/U grade assessment.

**DEIN 7237. Research Practicum 6. 1-3 cr. hrs.**

This elective course provides structured research experience in the biomedical, clinical or behavioral sciences. Under the guidance of a faculty mentor, the student will design and/or carry out research projects of appropriate difficulty and scope based on the student's ability. This is the sixth of a series of possible practicum experiences in research. S/U grade assessment. Prereq: Cons. of instr.

**DEIN 7238. Dental Rounds 6. 1 cr. hr.**

Dental Rounds during the summer session assist and guide students in treatment planning with moderate or complex cases which have been approved by the group leader. Students prepare for treatment planning rounds by having completed the comprehensive exam, study models, oral medicine clearance and radiographic survey in addition to a preliminary treatment plan. Ideally, the patient would be present for the session as well. D2 students will be present for observation and questions or suggestions and assist team leader with presentation of the case.

**DEIN 7239. Basic and Pre-Clinical Science Review. 2 cr. hrs.**

Provides a comprehensive review of the various basic science and selected preclinical (pathology and dental anatomy) courses. Presents an overview of these areas focused on their application to the practice of dentistry. Designed to prepare students for the Part I National Board Examinations. S/U grade assessment.

**DEIN 7317. Research Practicum 7. 1-2 cr. hrs.**

Provides structured research experience in the biomedical, clinical or behavioral sciences. Under the guidance of a faculty mentor, the student will design and/or carry out research projects of appropriate difficulty and scope based on the student's ability. This is the seventh of a series of possible practicum experiences in research. S/U grade assessment. Prereq: Cons. of instr.

**DEIN 7318. Dental Rounds 7. 1 cr. hr.**

Dental Rounds consist of student driven, case-based presentations that are both multidisciplinary and clinically relevant. Students relate concepts learned in the basic sciences, oral medicine and pathology, general pathology and physiology to clinical dental correlates and comprehensive treatment planning. Rounds provide an opportunity for students to develop critical thinking and problem solving skills while expanding their dental knowledge base. D3 students are responsible for an assigned evidenced based (PICO) aspect of the case and work as a member of the integrated D1-D4 team.

**DEIN 7320. Clinical Radiology and Oral Pathology. 2 cr. hrs.**

The object of this course is to present the various clinical, histopathologic and radiographic appearance of oral pathologies. Emphasis will be placed on differential diagnosis and the correlation between clinical, microscopic and radiographic findings. In addition, the student will be introduced to advanced imaging modalities as they relate to the head and neck. Third year/Second term.

**DEIN 7327. Research Practicum 8. 1-2 cr. hrs.**

Provides structured research experiences in the Biomedical, Clinical or Behavioral Sciences. Under the guidance of a faculty mentor, the student will design and/or carry out research projects of appropriate difficulty and scope based on the student's ability. This is the eighth in a series of possible practicum experiences in research. S/U grade assessment. Prereq: Cons. of instr.

**DEIN 7328. Dental Rounds 8. 1 cr. hr.**

This Dental Rounds course continues student driven, case-based presentations that are both multidisciplinary and clinically relevant. Students relate concepts learned in the basic sciences, oral medicine and pathology, general pathology and physiology to clinical dental correlates and comprehensive treatment planning. Rounds provide an opportunity for students to develop critical thinking and problem solving skills while expanding their dental knowledge base. D3 students are responsible for an assigned evidenced based (PICO) aspect of the case and work as a member of the integrated D1-D4 team.

**DEIN 7330. Foundations of Professional Development. 2 cr. hrs.**

Capstone course within the curriculum for instruction on professionalism. It combines the areas of ethics, jurisprudence, service learning and public health into professionalism themes and engages students in interactive learning. Themes are built around the American Dental Association's Principles of Ethics and Code of Professional Conduct, including such topics as: Respect for Autonomy, Beneficence, Nonmaleficence, Justice and Veracity. The interplay between professional obligations, social justice and the law is emphasized in the course, with the goal of fostering a culture of professionalism among future dental healthcare providers.

**DEIN 7337. Research Practicum 9. 1-4 cr. hrs.**

Provides structured research experiences in the Biomedical, Clinical or Behavioral Sciences. Under the guidance of a faculty mentor, the student will design and/or carry out research projects of appropriate difficulty and scope based on the student's ability. This is the ninth in a series of possible practicum experiences in research. S/U grade assessment. Prereq: Cons. of instr.

**DEIN 7338. Dental Rounds 9. 1 cr. hr.**

Dental Rounds during the summer session assist and guide students in treatment planning with moderate or complex cases which have been approved by the group leader. Students prepare for treatment planning rounds by having completed the comprehensive exam, study models, oral medicine clearance and radiographic survey in addition to a preliminary treatment plan. Ideally, the patient would be present for the session as well. D3 students serve as team leader and are responsible for selection and presentation of the case and treatment plan.

**DEIN 7410. Senior Colloquium 1. 1 cr. hr.**

Provides an opportunity for Senior students to select from a variety of short-term experiences of varying advanced content. Selections are available from most of the specialty areas of dentistry and from other content areas that may be helpful in the practice of dentistry.

**DEIN 7417. Research Practicum 10. 1-4 cr. hrs.**

Provides structured research experiences in the Biomedical, Clinical or Behavioral Sciences. Under the guidance of a faculty mentor, the student will design and/or carry out research projects of appropriate difficulty and scope based on the student's ability. This is the tenth of a series of possible practicum experiences in research. S/U grade assessment. Prereq: Cons. of instr.

**DEIN 7418. Dental Rounds 10. 1 cr. hr.**

Dental Rounds consist of student driven, case-based presentations that are both multidisciplinary and clinically relevant. Students relate concepts learned in the basic sciences, oral medicine and pathology, general pathology and physiology to clinical dental correlates and comprehensive treatment planning. Rounds provide an opportunity for students to develop critical thinking and problem solving skills while expanding their dental knowledge base. D4 students are responsible for selection and presentation of case and for leadership of the D1-D4 student team.

**DEIN 7427. Research Practicum 11. 1-4 cr. hrs.**

Provides structured research experiences in the Biomedical, Clinical or Behavioral Sciences. Under the guidance of a faculty mentor, the student will design and/or carry out research projects of appropriate difficulty and scope based on the student's ability. This is the eleventh of a series of possible practicum experiences in research. S/U grade assessment. Prereq: Cons. of instr.

**DEIN 7428. Dental Rounds 11. 1 cr. hr.**

This Dental Rounds continues student driven, case-based presentations that are both multidisciplinary and clinically relevant. Students relate concepts learned in the basic sciences, oral medicine and pathology, general pathology and physiology to clinical dental correlates and comprehensive treatment planning. Rounds provide an opportunity for students to develop critical thinking and problem solving skills while expanding their dental knowledge base. D4 students are responsible for selection and presentation of case and for leadership of the D1-D4 student team.

**DEIN 7931. Topics in Dentistry. 1-3 cr. hrs.**

Taught occasionally when there is need to add a topic of current interest to the curriculum.

**DEIN 7932. Advanced Topics in Dentistry. 1-3 cr. hrs.**

Taught occasionally when there is need to add a topic of current interest to the curriculum.

**DEIN 7995. Independent Study in Dental Interdisciplinary. 1-3 cr. hrs.**

Independent study and research in special areas of interest in dentistry under faculty supervision. Prereq: Cons. of academic dean.

## Dental Surgical Science Courses

**DESS 7210. Clinical Periodontal Therapy. 1 cr. hr.**

Exposes the student, in a more specific and in-depth manner to the fundamental information that was covered in earlier courses. Discusses the diagnosis, pathogenesis and treatment of periodontal diseases. Students learn the principles, indications, contraindications and techniques for each periodontal surgical procedure and appropriate follow-up care. An emphasis will be placed on recognizing appropriate case selection and acceptable end points of therapy.

**DESS 7211. Introduction to Endodontics. 2 cr. hrs.**

This is a combined pre-clinical lecture and laboratory course. The lecture portion is designed to introduce the student to the fundamentals of endodontics. The rationale and scope of endodontology is covered as well as internal anatomy, endodontic materials, diagnosis, treatment planning, asepsis and the interrelationship of histopathology and microbiology with endodontics. The laboratory portion introduces the student to the clinical skills necessary to perform root canal treatment on single and multi-rooted teeth. Special emphasis is placed on coronal access, cleaning and shaping and obturation of the root canal system. Simulated clinical conditions are utilized on extracted and plastic teeth.

**DESS 7230. Emergency Medical Interventions. 1 cr. hr.**

Provides the basic information needed to handle medical emergencies in the clinical dental setting. Topics include administration of emergency drugs, identification of patient stress, CPR and advanced support techniques.

**DESS 7231. Foundations of Oral and Maxillofacial Surgery. 1 cr. hr.**

Provides students with the basic surgical knowledge to render the procedures provided by the general practitioner including foundations in special examination, diagnosis and treatment planning for dentoalveolar surgery, and medicolegal issues dealing with oral and maxillofacial surgery. Students assess and provide outcomes, manage minor complications, and provide both routine and special post operative care. Medications commonly used in oral surgery will be presented with regards to selection, dosage administration and prescription writing.

**DESS 7234. Surgical Sciences Introductory Clinical Practicum. 1 cr. hr.**

Orientation of the student to the Surgical Sciences rotations. Students are introduced to operations and procedures regarding the clinical treatment of patients with needs in the areas of periodontal therapy, edodontics, oral surgery and/or pathology.

**DESS 7310. Intermediate Oral and Maxillofacial Surgery. 1 cr. hr.**

Continues the basic course in dentoalveolar surgery to include diagnosis, treatment and post operative care for patients presenting with complications of severe nature, a need for preprosthetic surgery in conjunction with exodontia, contemporary implant surgery, odontogenic infections, complex radiation and chemotherapy patients with oral surgical needs, and management of obstructive salivary gland diseases. Students are also introduced to techniques, protocol and the management of the hospitalized dental patient.

**DESS 7314. Surgical Sciences Clinical Practicum 1. 2 cr. hrs.**

Provides the initial experiences that students have with the clinical treatment of patients with needs in the areas of periodontal therapy, endodontics, oral surgery and oral pathology. Students rotate through controlled experiences in these various areas and provide comprehensive care to patients with certain needs, particularly in the area of periodontics. S/U grade assessment.

**DESS 7318. Junior Honors Clinical Practicum in Oral Surgery. 1 cr. hr.**

An in-depth practicum for students who have applied for or have been accepted into advanced OMS programs. Students are exposed in a more specific and in depth manner to oral and maxillofacial surgical residency programs. Students are assigned additional complex dento-alveolar procedures as they arise and are expected to present case histories, treatment plans, outcomes and assessments of the procedures provided in an outcome based discussion. Enrollment in this course requires special permission of the course director, academic dean, the student's group leader and the clinical director. Prereq: Enrollment in the School of Dentistry.

**DESS 7319. Junior Honors Clinical Practicum in Periodontics. 1-2 cr. hrs.**

Exposes the students, in more specific and in-depth manner to periodontal surgical procedures. Focuses on different surgical procedures and incorporate evidence based dentistry in the treatment planning and end point of therapy. Literature review and journal club will be included in the course with emphasis on current literature and surgical technique. Students also have the chance to learn more and possibly participate in more complex periodontal procedures. Allows for the possibility of discussing research ideas and research projects. Prereq: Cons. of the course dir. and the academic dean.

**DESS 7320. Clinical Endodontic Procedures. 1 cr. hr.**

Lecture course designed to aid the student in incorporating routine endodontic treatment to a general practice. The cause and correction of endodontic failures are discussed. A variety of treatment modalities is presented that correspond to different clinical situations. Diagnosis, treatment planning and management of endodontic problems are emphasized. Topics include bleaching, endodontic surgery, apexification, methods of treating endodontic emergencies, a review of endodontic diagnosis, vital pulp therapy, restoration of endodontically treated teeth, replantation and other advanced procedures. How to determine successful treatment and when to refer is discussed.

**DESS 7321. Advanced Oral and Maxillofacial Surgery. 2 cr. hrs.**

Provides the student with diagnostic skills, surgical management and post operative complications in patients with major deformities requiring preprosthetic surgery, advanced techniques in implant surgery, major odontogenic infections, the principles of biopsy and diagnosis, management of minor and major facial trauma, dentofacial deformities and the diagnosis and management of TMJ and facial pain.

**DESS 7323. Clinical Pharmacology and Medicine for Dentistry. 1 cr. hr.**

Builds on the foundational knowledge provided in an earlier general pharmacology course. Provides clinical correlations to topics and addresses areas that are specific to the practitioner, such as: prescribing medications where appropriate, the management of drug interactions and a full review of anesthesia specific to the dental patient. Prereq: Enrolled in the School of Dentistry.

**DESS 7324. Surgical Sciences Clinical Practicum 2. 2 cr. hrs.**

Second course in a sequence that provides the dental student experiences in the clinical treatment of patients with needs in the areas of periodontal therapy, endodontics, oral surgery and oral pathology. Students rotate through controlled experiences in these various areas and provide comprehensive care to patients with certain needs, particularly in the area of periodontics. Students are expected to have greater skill and to be less dependent at this point. S/U grade assessment.

**DESS 7334. Surgical Sciences Clinical Practicum 3. 1 cr. hr.**

Third course in a sequence that provides the dental student experiences in the clinical treatment of patients with needs in the areas of periodontal therapy, endodontics, oral surgery and/or pathology. Students rotate through controlled experiences in these various areas and provide comprehensive care to patients with certain needs, particularly in the area of periodontics. Students are expected to have greater skill and to be more independent at this point. Prereq: Enrolled in the School of Dentistry.

**DESS 7414. Senior Clinical Practicum in Surgical Sciences 1. 4 cr. hrs.**

This is the first of two advanced level practicums that provide experiences in periodontics, endodontics, oral surgery and oral pathology. Successful progress in each discipline is required to be judged as making satisfactory progress in this practicum experience. S/U grade assessment.

**DESS 7418. Senior Honors Clinical Practicum in Oral Surgery. 1 cr. hr.**

An in-depth practicum for students who have applied for or have been accepted into advanced OMS programs. Students are exposed in a more specific and in depth manner to oral and maxillofacial surgical residency programs. Students are assigned additional complex dento-alveolar procedures as they arise and are expected to present case histories, treatment plans, outcomes and assessments of the procedures provided in an outcome based discussion. Enrollment in this course requires special permission of the course director, academic dean, the student's group leader and the clinical director. Prereq: Enrollment in the School of Dentistry.

**DESS 7419. Senior Honors Clinical Practicum in Periodontics. 1-2 cr. hrs.**

A continuation of DESS 7319 with more in-depth cases for the student to work on. S/U grade assessment. Prereq: Cons. of the course dir. and the academic dean.

**DESS 7424. Senior Clinical Practicum in Surgical Sciences 2. 4 cr. hrs.**

This is the second of two advanced level practicums that provide experiences in periodontics, endodontics, oral surgery and oral pathology. Successful progress in each discipline is required to be judged as making satisfactory progress in this practicum experience. S/U grade assessment.