CLD821 - Clinical Dentistry II

This course introduces students to the basic elements of clinical dentistry and provides students initial experiences utilizing the Clinical Team in order to provide care in the School of Dental Medicine's patient-care clinics.

CLD827 - Integrated Dental Practice II

CLD827 will provide dental students the opportunity to obtain a thorough understanding of dental assisting. In addition students will learn the basics of SDM clinical operations, assist D4 students in treating patients in the comprehensive care clinic and review anesthesia techniques in a seminar format. Students also administer anesthesia to a colleague during a clinical rotation.

CLD827 introduces predoctoral dental students to dental assisting, anesthesia techniques, SDM clinic operations, anesthesia and clinical dentistry. Second-year dental students have already had an initial exposure to clinical dentistry in the first year. CLD827 builds on this initial experience through formal training in dental assisting, anesthesia, clinic management and clinical dentistry.

CLD827 is an essential element in the clinical dentistry curriculum as it is one of the first courses in which participants learn and engage with other dental team members in the delivery of direct patient treatment.

Course goals:

- Clinic Operations: To familiarize the D2 student with SDM clinical operations, policies and protocols utilized in direct patient care and management.
- Oral Health Topics: The dental student should be able to administer local anesthetic.

Patient Management: To provide an opportunity for students to coordinate treatment and patient concerns with several other departments and staff within the SDM.

ODS821 - Oral Radiology Technique

Knowledge of the fundamentals of radiography is important to obtain the most informative radiographs of the highest quality to assist in the diagnosis and treatment of oral disease while keeping the patient and the operator's exposure to radiation at a minimum. Radiation documentation is a legal and ethical requirement as is the ALARA (As Low As Reasonably Achievable) Principle regarding dosage, patient communication and proper shielding. Digital sensors and sensor holders that align the receptor precisely with the x-ray beam are used to increase accuracy. Quality assurance is enforced through strict infection control; lead shielding use and maintenance, exposure setting, record documentation, digital image processing and storage, and proper PSP sensor placement using Rinn XCP holding and aiming devices. Students observe a variety of radiographic images illustrating variations of normal anatomy, caries, periodontal disease, artifacts, dental anomalies, and pathology. Digital Image Enhancement and Measurement Tools: Students will store original digital radiographic images in MIPACS to the DICOM server after faculty review and approval via the swipe card. Students will document in axiUm by completing a Radiographic Templated Note. Students will create derived images utilizing image enhancement and measurement icons.

ORB820 - Nutrition in Practice of Dental Medicine

This didactic course is designed to increase your knowledge and understanding of general nutrition and the role of nutrition in maintaining oral health. The student is responsible for all of the material presented in the course. It should be noted that PowerPoint presentations in class are considered to be a discussion/presentation guide and are not a comprehensive representation of everything presented or discussed in class. As such, the student is fully responsible for the material covered in class regardless of whether it appears in the PowerPoint slides. This course incorporates a number of didactic and clinical technologies to support instruction, as follows:

- UBlearns (Blackboard) course management system
- Zoom/Webex video/web conferencing
- Panopto recording
- Examsoft/Examplify & Respondus examination technologies

ORB825 - Oral Sciences & Preventive Dentistry

ORB825 is a bridge science course that provides essential information on oral sciences and preventive dentistry. This course is composed of Oral Histology, Oral Microbiology and Preventive Dentistry that are organized in a tissue-based manner. The course also integrates oral science information to clinical sciences. To effectively teach the topics and enhance critical thinking, this course uses active learning methods, including mini-tests, team-learning, case studies, reflection and interactive formative assessments and assignments (i.e., Exit slips, polls, think-pair-share, concept maps).

OSU822 - Regional Anesthesia

This required course in Oral and Maxillofacial Surgery begins your exposure to oral and maxillofacial surgery. Didactic instruction will consist of lectures and suggested reading. It will cover the basics of local anesthesia physiology, pharmacology, anatomy and clinical skills to administer local anesthesia as well as medical emergencies/complications which can arise. This course is given concurrently with Clinical Dentistry where the basic injection skills will be demonstrated and performed.

PER821 - Intro to Perio & Prevention

Periodontal diseases are among the most common infectious diseases. The prevalence of biofilm-induced gingivitis is 99% in children and the prevalence of periodontitis is 67% in some age groups. Periodontal diseases are characterized by gingival inflammation, loss of connective tissue attachment and alveolar bone. These diseases are, in general, initiated by oral biofilms and exacerbated by host immune responses. PER821 is the first of six courses in the pre-doctoral curriculum covering periodontics and related aspects of preventive dentistry PER821 introduces predoctoral dental students to periodontics and preventive dentistry. The lectures generally follow the standard sequence of diagnosis and treatment for periodontal diseases starting with the periodontal examination. Upon completion of this course, students will have basic knowledge of periodontal disease and preventive dentistry which will be applied to clinical care in the next course in the periodontics curriculum, PER822, in the Fall semester of the second year.

PER822 - Introduction to Clinical Periodontics

The activities in this course are designed to help dental students achieve competence in managing and preventing periodontal diseases. Specifically, this course is designed to prepare second year dental students to perform adult prophylaxis and periodontal maintenance for their patients in the spring semester of the second year. Dental students will perform adult prophylaxisor periodontal maintenance on each other and a School patient during their clinical rotation in PER822.

PAS600 - General Pathology

General Pathology Introduction is the study of basic mechanisms of disease and as such represents an essential prerequisite for an understanding of organ pathology, human systemic disease and experimental pathology.

Since abnormal body function or “disease” is usually presumed to result from some form of tissue “injury”, much of pathology can be viewed as a “reaction to injury”. The injurious agent may be easily recognizable (trauma, infection etc.), subtle and/or complex (immunologic injury), or may be completely unknown (some tumors presently fall into this category).

The human body can react to injury in a large number of ways. These reactions vary with the type and duration of injury, and with the inherent nature of the organ or tissue injured. Some tissues react with monotonous uniformity to any of a wide variety of injurious agents. Other tissues can react to injury in a multiplicity of ways. These patterns of “reaction to injury” are what we recognize pathologically and clinically as specific disease and determine many of a disease’s clinical manifestations as well as its natural history.

Students will be prepared with an understanding of the principles of disease and the reactions to injury.

RDN811 - Cariology & Direct Restorations II

***** Lecture portion *** Counts for 35% of combined course grade**

This lecture course is designed to provide relevant information regarding the topics of diagnosis and treatment of carious lesions and other hard tissue defects, caries risk assessment, fundamental methods for the prevention of dental caries using fluorides, varnishes and other remineralizing agents, fundamental concepts in the practice of modern direct restorative dentistry, as well as the principles for the preparation and restoration with direct restorative materials. Dental amalgam, resin composites and glass ionomers will be discussed from the clinical application, composition and handling stand point. Dental biomaterials relative to the restorative materials presented in the course will be discussed as the different types of restorations are introduced. The course is designed to provide the second-year dental student the cognitive knowledge of the terminology, principles, instruments, materials and techniques utilized in the practice of direct restorative dentistry. In this course students will also learn to critically think about patient assessment, examination, and treatment planning.

***** Pre-Clinical Lab Portion *** Counts for 65% of combined course grade**

This lab course is designed to introduce students to the non-surgical and surgical treatment of dental caries. Students will develop the psychomotor skills required to perform basic direct restorative dentistry procedures to a clinically acceptable level when working in patient simulated position with manikins. The development of these skills will be required for achieving competency in the course. In addition, this course presents contemporary concepts in the practice of direct restorative dentistry, as well as the principles for the preparation and restoration with direct restorative materials. In this course students also learn to critically think about patient assessment, examination, and treatment planning. This course introduces dental amalgam and glass ionomer materials, which will be presented from a clinical application, composition and handling standpoints.

RDN813 - Indirect Restorations

Indirect restoration refers to a dental restoration fabricated indirectly in the dental laboratory, including inlays, onlays, complete coverage crowns, partial fixed dental prosthesis and custom made posts. RDN813 introduces students to the basic knowledge, material science, and clinical/laboratory procedures involved in the fabrication of single complete coverage crown for vital and non-vital tooth. Students learn to: fabricate diagnostic casts, mount diagnostic casts, perform diagnostic wax up, prepare tooth for single crown, fabricate definitive conventional impression and record digital impression, fabricate the removable die system (Pindex), procedures for the insertion single crown restoration, indirect cast post. In addition, students learn to design and mill an all-ceramic restoration. They also will be exposed to wax pattern, wax pattern investment and casting procedure. Moreover students will be exposed to CAD-CAM technology, design and manufacturing of single complete coverage crown.

RDN824 - Removable Prosthodontics I - Lec & Lab

The removable prosthodontics pre-clinical curriculum spans the D2 Fall (RDN824) and Spring (RDN826) semesters, and introduces students to the methods used to evaluate and treat patients who are partially or completely edentulous. In these courses, students are introduced to the clinical and laboratory procedures involved in complete and partial denture treatment. Content in these courses is divided into didactic (lecture) and psychomotor skill development (laboratory). Complete dentures is the focus of RDN824, in which students learn how to fabricate custom trays, record bases, mount casts on an articulator, set anterior and posterior denture teeth, and wax-up final denture base contours. Students trim and polish their processed dentures during the Spring semester (RDN826). A mannequin is used to simulate clinical procedures, which include secondary impressions and maxillomandibular records. During the final two weeks of the course, concepts of partial denture terminology, surveying, and design are introduced in order to afford sufficient time in the Spring semester (RDN826) to devote to partial denture pre-clinical activities. Accompanying lectures during the afternoon session provide clinical relevance to the tasks performed in the laboratory, including an introduction to CAD/CAM denture fabrication