

Winter Term

DS1 Required Courses

### **AN 712 Head & Neck Neuro-Anatomy**

A dental professional should have a thorough knowledge of the anatomy of the head and neck. An understanding of anatomical relationships is required for physical diagnosis, radiographic analysis, administration of anesthesia both local and general, and as a basis for the study of pathology. This course is designed to provide the student with the anatomical tools develop a strong basic science foundation of knowledge to make a safe dental clinician.

### **DEN 730-740 Introduction to Comprehensive Care I - IV**

DEN 730-758 courses evaluate students' ability to provide comprehensive patient care including patient management, clinic utilization and time management, and quality of care appropriate to student's level. All courses in the DEN series (730 in the DS1 year, 740 in the DS2 year, 754-5 in the DS3 year and 756-758 in the DS4 year), focus on the integration of the clinical disciplines in the provision of comprehensive care to meet patient needs.

### **DM 712 Introduction to Dental Materials II**

DM 712, Introduction to Dental Materials II, is the second in a series of three, one-credit hour courses. While the student is introduced to gold, waxes, ceramics, porcelain, polymers, and elastomers in this course they have the opportunity to manipulate the materials concurrently in REST 712. The primary purpose of this course is to provide the student with knowledge of: 1) the general nature and composition of dental materials, 2) the physical properties of materials used in dentistry and medicine, and 3) the indications for and proper use of dental materials.

### **IB 702 Biophys II**

This is an interdisciplinary course, combining the traditional contents of biochemistry, physiology, and neuroscience courses into a single course that emphasizes the integrative nature of science. Topics from biochemistry, physiology, and neuroscience are dovetailed where appropriate, and concepts from one traditional discipline are deliberately injected into the others where appropriate. Students are expected to master traditional content, and integrate this knowledge at the biochemical, cellular, and systems levels to solve multidisciplinary challenges that traditional course cannot explore. Toward this goal, students are given "integrative" problem sets and comprehensive final examinations, consisting of integrative questions that cannot be answered on the basis single-topic mastery. The underlying rationale is that delivering evidence-based care increasingly requires dentists to evaluate multidisciplinary "evidence." The integrative nature of IB70X coursework casts basic science in the multidisciplinary terms that may be expected to provide future dentists with a stronger foundation upon which to build their evidence-based practices.

## **PER 711 Introduction to Periodontology**

PER 711, Introduction to Periodontology, provides the student a broad overview to the field of periodontics. It includes an introduction to periodontal etiology, pathology, classification, examination, risk factors, nonsurgical treatment and oral self care. Concurrently the student will have the opportunity to apply this knowledge and principles in the pre-clinical laboratory course, PER 712, Introduction to Periodontal Instrumentation.

## **PER 712 Periodontology Instrumentation I**

This course is the beginning of a two term sequence designed to present the student with the opportunity to learn the application of the basic principles of periodontal data collection, prevention, and non-surgical periodontal instrumentation on a typodont followed by application on a student partner. Upon completion of the course, students will be prepared to begin clinical application of periodontal data collection and periodontal instrumentation at a novice level in PER 713 and PER 721.

## **REST 701 Occlusion I**

REST 701 is the study of anatomy, function, and parafunction of the gnathostomatic system and relevance of occlusion in all phases of general dentistry. The course starts with an introduction to the pertinent anatomy. Other important topics include the basic arrangement of the teeth and the interrelation of the temporomandibular anatomy with anterior teeth to develop an ideal occlusion. The course continues with discussions concerning centric relation, mutually protected occlusion, applying knowledge of lever systems to occlusion, and understanding the basics of the importance of the Frankfort-Mandibular Plane angle.

## **REST 712 Restorative II**

This course is a continuation of REST 711 and builds on tooth preparation and beginning dental laboratory skills. The student will be introduced to final impressions, preformed provisionals and master casts. Upon completion of the course the student will cast a metal dental restoration starting with a working die. This includes making a full contour wax-up, remargination, investing, casting, divesting and fitting and finishing the restoration.

## **RO 712 Principles of Oral Radiology I**

RO 712, Principles of Radiology I, is the first of two courses that prepares the student in the basic principles of radiology that are required of all radiation workers using x-radiation. It is an introductory didactic course that will begin the process of providing the knowledge and understanding of radiology including the physics of radiology, radiology biology and radiographic technique. Concurrently the student has the opportunity to practice techniques hands on in a coordinated laboratory course, RO 715. Upon completion of the radiology course series the student will be a competent operator of dental x-ray machines with the ability to produce the highest quality diagnostic images with the minimum amount of radiation.

## **RO 715 Oral Radiographic Technique Lec/Lab**

This lecture / laboratory technique course supports and amplifies those principles, techniques, and procedures covered in the didactic course -- RO 712 Principles of Oral Radiology. DXTTR manikins are utilized in this laboratory training for the development of skills to attain preclinical laboratory competency using primarily paralleling, receptor-size collimation intraoral techniques to produce images of the highest possible diagnostic quality, utilizing the lowest possible prudent exposures. Emphasis is given to exposing, processing, mounting, critiquing, and evaluating intraoral periapical and bitewing images. Students are introduced to interpretation basics, radiographic landmarks & dental materials, film errors & corrections, localization techniques, occlusal projections, pediatric techniques, bisecting angle techniques, and demonstrations of alternate techniques for various difficult cases. Radiation health & safety, recognition of common medical history risks, infection control, and good record keeping are reinforced.