

## **PAS500 - Gross Human Anatomy**

PAS500 teaches the identification, function, and relationships of the gross structures of the human body. Knowing the parts of the body and how they interact provides a basic foundation for the study of the body's normal function and how it can be affected by injury and disease. Students will be introduced to how these structures can be visualized on clinical imaging including computerized tomography (CT), magnetic resonance imaging (MRI) and radiographic images (X-ray).

The course is organized into three blocks:

1. Block I -back and upper limbs
2. Block II -thorax and abdomen
3. Block III -head and neck

Instruction includes 9 hours of in-person laboratory per week distributed over 3 sessions, 2-3 hours of recorded instructional videos, and 1 hour of in-person active learning sessions per week. In the laboratory, students dissect cadavers and examine skeletons, medical images, and other materials to learn the morphology and spatial relationships of anatomical structures.

## **BCH500 - Dental Biochemistry**

BCH500 is a didactic course presented in the first semester of Dental School for D1 students. Through review of systems the course provides a basic understanding of normal body function and establishes a foundation in physiological principles necessary for advanced didactic and clinical courses and meeting the School of Dental Medicine (SDM) competencies.

To take care of teeth, you need to understand teeth as living tissue and be an expert in the properties and function of the oral cavity. To meet these requirements you first need a fundamental understanding of the molecular basis for the functioning and malfunctioning of living tissue. This is the goal of this Biochemistry course. It aims for you to take away a clear conceptual picture of the overall organizing principles and fundamental chemical forces that underlie life. While this course will prepare you for the Boards, it will also provide a clear view of the molecular basis of life, which will help you keep up-to-date with the advances in your field and prepare you to answer fundamental questions by future patients who want to understand the causes of their dental problems. To meet these goals, the faculty in this course place less emphasis on memorization and more emphasis on learning concepts and fundamental principles.

## **PAS504 - Histology**

The histology course consists of a series of lectures on the histology of the body, corresponding laboratory exercises (tutorials) and examinations. The purpose of the course is to introduce the morphology (microscopic anatomy) of the basic tissues and organs and the internal structure of the cell. The courses begins with a study of the cell, continues with an examination of the tissues and ends with the microscopic organization of the organs.

## **CLD800 - Introduction to the Profession**

This is a 2-credit-hour first-year, first-semester course that serves as an introduction to fundamental concepts related to dentistry as a profession. It consists of several topics related to professionalism and behavioral sciences. It is designed to encourage reflection on what it means to be a professional.

## **RDN800 - Dental Biomaterials**

This course introduces the student to information concerning the dental biomaterials that are used in current dental practice. Types of materials, material science, directions for use, handling characteristics, indications for use and clinical application will be emphasized. Product chemistries and their interactions with human tissues; teeth, gingiva, and other dental materials will be stressed.

## **RDN802 - Dental Anatomy & Intro to Lab**

This course is designed to develop technical and discriminatory skills with regard to Dental anatomy. This course presents the anatomical and functional differences of teeth and how they relate to each other. In this laboratory, students will become familiar with the morphological characteristics of the dentition and learn to replicate it in wax as precisely as possible. The position of teeth in relation to the adjacent and opposing teeth will be studied. Emphasis will be placed on teaching students how to develop the fine psychomotor skills that are necessary to practice dentistry. Students will also identify extracted human teeth.

Additionally, this course is designed to provide relevant information on biologic evolution, comparative anatomy, form and function, dental development. Anatomical variability and dental anomalies are included in this course in order to provide this perspective. Oral anatomy topics will describe the physical examination of the oral cavity including, head and neck examination and cranial nerve examination. Collectively, this information begins the vital process of learning about the anatomy, physiology, and functions of the human masticatory system.

## **RDN807 - Preclinical Basic Skills**

Preclinical basic skill course introduces proper positioning of patient and operator, maintenance and use of dental hand and rotary dental instruments to develop manual dexterity skills for tooth preparation and other applications. This course also provides an introduction to intraoral scanning (Planmeca) and the use of Compare software (Planmeca Romexis) to evaluate tooth preparation. This course incorporates a number of didactic and clinical technologies to support instruction, as follows:

- axiUm software for dental education management
- UB Learns(Blackboard) course management system
- Interoral scanning & Compare software (Planmeca Romexis)
- Online classes using Zoom meeting