ORAL BIOLOGY (ORBI)

**ORBI 304 ORAL RADIOLOGY FOR DENTAL HYGIENE** 2 Credit Hours
This course consists of a study of intraradicular radiographic techniques and radiation safety practices. It will also provide the students the information in radiation physics and biology necessary for safe, effective exposure and processing of radiographic/digital images in dental practice.
Typically Offered: SPRING

**ORBI 314 CLINICAL DENTAL RADIOLOGY FOR DENTAL HYGIENE** 1 Credit Hour
This course is designed to assess the student's competency in dental radiographic technique, quality evaluation and recognition of normal and abnormal anatomy. The course also serves to provide feedback and/or remedial instruction to help the student master and improve their skills.
Typically Offered: FALL/SPR

**ORBI 315 OSTEOLOGY OF THE SKULL** 1 Credit Hour
A study of the osteology of the skull as an introduction to the anatomy of the head and neck.
Typically Offered: FALL

**ORBI 316 HEAD & NECK ANATOMY** 2 Credit Hours
A systematic study of the structures of the head and neck.
Prerequisite: ORBI 315 or Permission of Course Director.
Typically Offered: SPRING

**ORBI 317 SPECIAL TOPICS IN ORAL BIOLOGY** 2 Credit Hours
A didactic course with selected topics in oral biology, including aspects of oral biochemistry, physiology, pharmacology, and microbiology followed by an overview of gross anatomy topics.
Typically Offered: FALL

**ORBI 318 ORAL RADIOLOGY** 3 Credit Hours
This course consists of a study of intraoral radiographic techniques and radiation safety practices. It will also provide the students the information in radiation physics and biology necessary for safe, effective exposure and processing of radiographic/digital images in dental practice.
Typically Offered: SPRING

**ORBI 319 GENERAL/ORAL HISTOLOGY** 2 Credit Hours
An introductory course in general and oral histology describing the morphology of cells, tissues and selected organ systems. A brief description of the embryology of the head and neck is also included.
Typically Offered: FALL

**ORBI 325 INTRODUCTION TO IMMUNOLOGY** 1 Credit Hour
A brief general course on the immune system and how it relates to health and disease.
Typically Offered: SPRING

**ORBI 366 GENERAL/ORAL PATHOLOGY FOR DENTAL HYGIENE** 3 Credit Hours
Fundamental principles of the etiology, clinical features, histopathology, treatment and prognosis of principal oral lesions and their relationship with the general pathology disease processes.
Typically Offered: SPRING

**ORBI 401 INTRODUCTION TO PHARMACOLOGY** 2 Credit Hours
A study of the mechanism of action, therapeutic indications and major side effects of drugs used in human therapeutics. The medications most commonly used in dentistry are emphasized.
Typically Offered: FALL

**ORBI 415 CLINICAL DENTAL RADIOLOGY FOR DENTAL HYGIENE** 1 Credit Hour
This course is designed to assess the student's competency in dental radiographic technique, quality evaluation and recognition of normal and abnormal anatomy. The course also serves to provide feedback and/or remedial instruction to help senior dental hygiene students master and improve their skills.
Prerequisites: ORBI 304 ORBI 314
Typically Offered: FALL/SPR

**ORBI 471 A REVIEW OF BIOMEDICAL/DENTAL SCIENCES** 1 Credit Hour
A brief review of the biomedical sciences and dental materials to assist senior dental hygiene students in studying for the National Board Dental Hygiene Examination.
Typically Offered: SPRING

**ORBI 491 CLINICAL ORAL PATHOLOGY** 2 Credit Hours
Presentation by individual case study of common clinical, radiographic and histopathologic material. Students learn to recognize, manage and develop a useful differential diagnosis for the lesions through classroom exercises.
Prerequisite: ORBI 366 or Permission of Course Director.
Typically Offered: FALL

**ORBI 505 HUMAN ANATOMY** 3 Credit Hours
A combined regional and systemic approach is adopted for a thorough study of the gross structures of the upper extremity, thorax, and abdomen. The lower extremity and pelvis are minimally studied. The last two weeks of the semester is devoted to introduction of osteology of the head and neck.
Typically Offered: FALL

**ORBI 506 HEAD & NECK ANATOMY** 3 Credit Hours
Human Anatomy 505 continued. Thorough study of head and neck regions including an introduction to neuroanatomy.
Prerequisite: ORBI 505 or Permission of Course Director.
Typically Offered: SPRING

**ORBI 514 INTRODUCTION TO IMMUNOLOGY** 1 Credit Hour
A brief general course on the immune system and how it relates to health and disease.
Typically Offered: SPRING

**ORBI 518 HUMAN PHYSIOLOGY** 5 Credit Hours
A study of the physiology of cells and organ systems. Provides an in-depth survey of cell membrane, neural, respiratory, cardiovascular, renal, gastrointestinal, and endocrine physiology. Topics are presented to provide a basis for understanding normal and abnormal function in the human, with an emphasis on the oral cavity.
Typically Offered: SPRING

**ORBI 519 GENERAL HISTOLOGY** 3 Credit Hours
A lecture-laboratory course emphasizing the identification and structure of cells, tissues and organ systems.
Typically Offered: FALL

**ORBI 522 ORAL HISTOL&EMBRYOL** 2 Credit Hours
A lecture-laboratory course covering microscopic anatomy and development of oral structures and tissues. The embryonic development of the head and neck is included.
Prerequisite: ORBI 519 or Permission of Course Director.
Typically Offered: SPRING

**ORBI 525 ORAL & MEDICAL MICROBIOLOGY** 4 Credit Hours
An introduction to the structure, classification, genetics, growth, nutrition staining of microorganisms, host-parasite interactions with emphasis on oral and systemic infectious diseases and the causative microorganisms, pathogenesis, immunity, treatment, epidemiology and control, and the application of sterilization, disinfection and antimicrobial chemotherapy in dentistry.
Typically Offered: SPRING

**ORBI 535 CRITICAL THINKING** 1 Credit Hour
This is an online course that provides information and experiences for the development of the foundational knowledge and skills that are necessary for critical and integrative thinking.
Typically Offered: SUMMER
ORBI 539 GENERAL PATHOLOGY I 2 Credit Hours
A study of the basic pathologic processes of inflammation, genetic diseases, disorders of immunity and disturbances in cell growth and neoplasia.
Typically Offered: SUMMER

ORBI 540 GENERAL PATHOLOGY II 3 Credit Hours
The course includes the study of significant diseases and tumors of the various organ systems. Special emphasis is placed on oral manifestations and implications of dental treatment.
Prerequisite: ORBI 539 or Permission of Course Director.
Typically Offered: FALL

ORBI 545 BIOCHEM DENT STUDENTS 4 Credit Hours
An introductory course in biochemistry with a heavy emphasis on medical biochemistry. The practical application of biochemical principles to dental science is described. The relevance of biochemistry principles to other disciplines in the dental curriculum will also be emphasized.
Typically Offered: FALL

ORBI 561 INTRODUCTION TO ORAL RADIOLOGY 1 Credit Hour
This course consists of a study of intraoral radiographic techniques and radiation safety practices. It will also provide the dental student the information in radiation physics and biology necessary for safe, effective exposure and processing of radiographic/digital images in dental practice. Other topics include advanced imaging modalities and anatomy on intraoral radiographs.
Typically Offered: SUMMER

ORBI 562 RADIOGRAPHIC INTERPRETATION 1 Credit Hour
This course introduces the students with the systematic method of interpreting the normal and abnormal findings on radiographs. Topics covered include caries, periapical inflammatory lesion, periodontal bone loss, anomalies, fibro-osseous lesions, radiographic description, odontogenic cysts and tumors, and malignant neoplasms.
Typically Offered: FALL

ORBI 566 ORAL PATHOLOGY 3 Credit Hours
Fundamental principles of the etiology, clinical features, histopathology, treatment and prognosis of principal oral lesions.
Prerequisite: ORBI 540 or Permission of Course Director.
Typically Offered: FALL

ORBI 571 REVIEW OF BIOMEDICAL SCIENCES 1 Credit Hour
A review of the fundamental principles of the basic biomedical sciences in preparation for the National Board Dental Examination, Part 1.
Typically Offered: SPRING

ORBI 581 PATIENT COMMUNICATION AND MANAGEMENT 2 Credit Hours
This course is to explore the dynamics of human behavior by understanding ourselves and patients, communicating with patients, and guiding patient decision making. This course incorporates concepts, principles, and skills from the disciplines of dentistry, communication, sociology, psychology, and practice management.
Typically Offered: FALL

ORBI 610 PRACTICE MANAGEMENT 3 Credit Hours
Practice Management emphasizes business management. Business management includes issues such as: deciding about dental insurance participation; understanding financial statements; understanding legal aspects of dental practice; evaluating associateship opportunities; valuing practices; etc.
Typically Offered: SPRING

ORBI 620 RESEARCH, ETHICS AND PUBLIC HEALTH 1 Credit Hour
Presentation and practice on evidence-based decision making, how to design and conduct research, normative ethics, dilemma resolution, professionalism and dental public health. Students must present a research project during the Annual Student Scientific Program held each spring semester. Course emphasizes critical thinking, self-assessment, evidence-based decision making and life-long learning.
Typically Offered: SPRING

ORBI 639 GENERAL PHARMACOLOGY FOR DENTAL STUDENTS 3 Credit Hours
A didactic study of the general principles underlying the mechanisms of action, clinical uses and major adverse effects of drugs used in the diagnosis, treatment and prevention of human disease. Most major drug classes are included with an emphasis on drugs of special interest in dentistry. A primer on prescription writing is also incorporated into the course.
Typically Offered: FALL

ORBI 648 ORAL MEDICINE 2 Credit Hours
Discussion of oral manifestations of systemic disease and medical conditions with emphasis on special management and treatment delivery considerations for the dental patient.
Typically Offered: FALL

ORBI 653 ORAL PHARMACOLOGY 1 Credit Hour
This course incorporates a discussion of the clinical pharmacology of medicinal agents commonly used in dentistry and a practicum on prescription writing. Federal and state drug legislation pertaining to dental practice is also presented.
Prerequisite: ORBI 639 or Permission of Course Director.
Typically Offered: FALL

ORBI 687 SEMINAR IN PRACTICE TRANSITION 2 Credit Hours
This course is designed to provide instruction needed for students entering private practice immediately upon or within a few years after graduation, particularly students who will start, buy or associate in a private practice. These areas receive particular focus: business plans, ownership issues such as financing a practice, personal/business insurance needs, and leadership.
Typically Offered: FALL

ORBI 691 CLINICAL ORAL PATH 2 Credit Hours
Presentation by individual case study of common and somewhat unusual clinical, radiographic and, histopathologic material. Students learn to recognize, manage and develop a useful differential diagnosis for the lesions through classroom clinical exercises.
Prerequisite: ORBI 539, 540, 566, 648, or Permission of Course Director.
Typically Offered: FALL