# **CENTER FOR ADVANCED DENTAL EDUCATION (CAD)**

## CAD 5010 - Pain: Anatomy, Physiology, Psychology, Treatment 1 Credit

Explores multiple topics of pain with special emphasis on head and neck pain and conditions and/or syndromes that mimic dental pain. Protocols for dealing with both dental and non-dental "pain patients" will be addressed. Offered every year.

# CAD 5030 - Advanced Oral Microbiology

## 2 Credits

Examines the interface of human host and its microbial inhabitants converging to cause disease. Describes oral ecosystems resulting from interaction between human anatomy and physiology and microbial populations and their physiology with emphasis on the pulpal, periapical, and periodontal regions. Includes factors that maintain population balance and health or cause population imbalance and disease in these ecosystems. Includes management and prevention of oral microbial disease. Offered every year.

# CAD 5050 - Introduction to Statistical Inference 3 Credits

Nature of measurement in graduate dentistry. Basic principles and techniques of research analysis, particularly in graduate dental research. Introduction to probability theory and sampling theory; criteria of reliability and validity. Fundamental concepts of descriptive and inferential statistics, introduction to levels of measurements and application of parametric and non parametric tests. Offered every year.

## CAD 5060 - Ethics and Dentistry

# 1 Credit

IN general, the course studies the cross-cultural context for ethics discourse in dental education and practice. In particular, the course considers relevant ethical methods, principles, and codes of professional conduct as well as ethical decision making processes to engage and resolve applied ethical issues in dentistry. Offered every year.

## CAD 5070 - Bone Physiology

## 1 Credit

An interactive overview of key topics in bone and tooth physiology with a focus on evidence based applications to clinical decision making in dentistry.

## **Restrictions:**

Enrollment limited to students in the Center for Advanced Dental Ed college.

## CAD 5080 - Multidis Diag + Trtmnt Plan I

## 1 Credit (Repeatable for credit)

Diagnosis and treatment planning of various types of multidisciplinary dental problems through case studies. Various diagnostic and treatment modalities are discussed in order to render the most efficacious plan of patient treatment. Application of biomedical sciences to clinical oro-facial problems at the dental specialty level. Offered every year.

## CAD 5100 - Dental Therapeutics

# 1 Credit

A comprehensive review of the pharmacological considerations of clinical dentistry. Special emphasis is placed on dentally prescribed medications and their effects on systemic disease and associated systemic drugs. Offered every year.

# CAD 5110 - Small Business Basics

## 1 Credit

This second of two practice management courses will cover a broad range of business-management topics with an emphasis on application of concepts. Offered every year.

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## CAD 5140 - Temporomandibular Disorders

#### 0 or 1 Credits

A lecture series to improve the understanding of TMJ disease and related disorders and to provide a rationale for differential diagnosis and treatment. Offered every year.

# **Restrictions:**

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## CAD 5170 - Advanced Oral Pathology

#### 1 Credit

Oral diseases with similar clinical appearances are presented. A differential diagnosis will be developed. For each entry, the etiology, biologic history, clinical features, histologic characteristics, progress, and current treatment will be identified. Offered every other year.

#### CAD 5175 - Advanced Oral Pathology & Medicine 2 Credits

The goals of this course are 1) develop the resident's understanding of common systemic conditions that patients may present with or that may affect the treatment provided by the resident's speciality 2) develop the resident's ability to recognize, formulate a differential diagnosis and, when appropriate, treat common conditions of the oral cavity. **Restrictions:** 

Enrollment limited to students in the Center for Advanced Dental Ed college.

## CAD 5190 - Advanced Head and Neck Anatomy

## 2 Credits

Discussion and laboratory demonstrations of the anatomy of specific areas of the head and neck that relate to dental practice. Emphasis will be placed upon the interrelationships, clinical significance, and variation of the structures studied. Offered every year.

## CAD 5220 - Clinical Immunology

## 1 Credit

A comprehensive review of inflammation and immunity and how they harm or protect the host with special emphasis on clinical dentistry. Offered every year.

## CAD 5240 - Temporary Skeletal Anchorage

## 1 Credit

To introduce the orthodontic and periodontic resident to prosthetic implants and to miniscrews and mini-bone plates for orthodontic anchorage; toward evaluation of the patient holistically, the site, the local physiology, and biocompatibility in anticipation of implant-surgery; to become familiar with placement-surgery, loading the implant (or temporary anchorage-device), maintenance, implant-removal surgery, and bone -regeneration; to review the biomechanics involving use of temporary anchorage devices in orthodontic therapy; and to discuss autotransplantation for various dental purposes.

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