

Graduate Endodontic (ENDG)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

ENDG 8111. Pain in Dentistry: Diagnosis and Control. 2 Credit Hours.

Pathophysiology of orofacial pain, including transmission mechanisms, role of neurotransmitters and neuroregulators, neurology and classification of head and neck pain, differential diagnostic procedures, and a survey of pain control measures. May be repeated for credit.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

ENDG 8112. Pulp Biology. 2 Credit Hours.

Development, structure, histology, biochemistry, and physiology of tooth pulp tissues in health and disease. May be repeated for credit.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

ENDG 8113. Periapical Biology. 2 Credit Hours.

Development, structure, histology, biochemistry, and physiology of the tooth root apex and surrounding periapical tissues in health and disease.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

ENDG 8114. Biologic Basis of Disease. 2 Credit Hours.

Basic biologic structures and processes underlying growth and destruction of human body tissues, including fundamentals of acute and chronic inflammation, the complement cascade, mechanisms of cell-mediated and humoral immune responses, ligand-cell receptor complexes, and receptor diseases.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

ENDG 8115. Current Clinical Concepts. 2 Credit Hours.

In this course, students learn to describe the characteristics and variations of ideal root canal access using proper instruments as well as the details of floor anatomy and the location of orifices. They will gain the ability to analyze, synthesize and evaluate data and knowledge related to various aspects of clinical endodontics.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

ENDG 8116. Endodontic Microbiology/Immunology. 2 Credit Hours.

Microbial structure, genetics, disinfection/sterilization, immunology, biology, and virulence relative to pulpal and periapical infections.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

ENDG 8117. Systemic Diseases. 1.5 Credit Hour.

The student will be able to understand the significance of how different diseases and medical conditions may impact Endodontic treatment and prognosis, appreciate the relevance of an understanding of different diseases and medical conditions, and thoroughly learn and discuss the different diseases and medical conditions that may be encountered in treating their patients.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

ENDG 8118. Endodontic Microsurgery. 2.5 Credit Hours.

This course enables students to understand the rationale for different surgical procedures, adequately and competently perform various endodontic surgical procedures, have a thorough knowledge of the different types of flap designs, and have a complete understanding of how and when to use the different types of guided tissue and bone regeneration materials.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

ENDG 8119. Teaching for Sophomore Preclinical Lab. 2 Credit Hours.

The graduate students participate in teaching the sophomore students in hands-on endodontics prior to their entry into the clinic. This is done on a weekly basis in the Spring semester

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

ENDG 8120. Clinical Seminar in Endodontology. 2 Credit Hours.

Students will become proficient in presenting evidence-based cases at the level of expectation/standard of the American Board of Endodontics.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may be repeated for additional credit.

ENDG 8122. Dental Traumatology. 1 Credit Hour.

Upon completion of this course, the student should be able to classify, provide a comprehensive treatment regiment, and provide opportunities for analysis, synthesis, and evaluation of data and knowledge on the different types of dental injuries.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

ENDG 8123. Endodontic Methods and Materials I. 2 Credit Hours.

This course is intended to provide the student with a deep appreciation in Endodontic methods and materials, and obtain knowledge in the various materials and methods used in clinical endodontics, and differential interpretation of lesions and normal anatomic structures through radiographs or digital images; understand and be familiar with all the medicaments and obturation materials that are being used in endodontics.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

ENDG 8124. Endodontic Methods and Materials II. 2 Credit Hours.

This course is intended to provide the student with a deep appreciation in Endodontic methods and materials, and obtain knowledge in the various materials and methods used in clinical endodontics. Provide the student with the deep appreciation with the outcomes of endodontic treatment, and understand the relationship between endodontics and other dental specialty such as orthodontics, periodontics, and pediatrics.

Repeatability: This course may not be repeated for additional credits.

ENDG 8130. Current Endodontics Literature Review. 1 Credit Hour.

Critical review of recent basic science and clinical literature pertinent to endodontics. May be repeated for credit.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may be repeated for additional credit.

ENDG 8131. Endodontic Topics I. 2 Credit Hours.

This course contains the following major topics: 1) Endodontic microbiology, 2) Inflammation, 3) Traumatic injury of the teeth. This course is intended to provide the student with a deep appreciation of the nature of microorganisms, and their role in pulpal and periapical disease; with a profound understanding of the biologic structures and processes underlying the growth and destruction of the tissues of the human body; understand the use of antibiotics in Endodontics; and obtain knowledge of various types of traumatic injury of teeth and their management.

Repeatability: This course may not be repeated for additional credits.

ENDG 8132. Endodontic Topics II. 2 Credit Hours.

This course contains the following major topics: 1) Systemic diseases and endodontics, 2) Essential endodontic literatures, 3) Pain and management, 5) Tooth with open apex. This course is intended to provide the student with a deep appreciation of common systemic diseases and their correlations with endodontic diseases, as well as their impact on the outcomes of endodontic treatment; help the student understand the essential and classic endodontic literatures; provide the student with a deep appreciation of nature of dental pain, especially the endodontic pain; and also learn how to manage the tooth with open apex that has endodontic disease.

Repeatability: This course may not be repeated for additional credits.

ENDG 8140. Classical Endodontics Literature Review. 1 Credit Hour.

Critical evaluation of classical scientific literature in endodontics and pulp biology. May be repeated for credit.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may be repeated for additional credit.

ENDG 8212. Pulp Biology II. 2 Credit Hours.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may be repeated for additional credit.

ENDG 8213. Periapical Biology II. 2 Credit Hours.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

ENDG 9185. Emergency Endodontics Clinic. 3 Credit Hours.

Everyday, two endodontic students are assigned to emergency duty to perform emergency Endodontic procedures. This is done on a rotation basis.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may be repeated for additional credit.

ENDG 9285. Endodontics Clinic. 1 to 12 Credit Hour.

This course focuses on the treatment of patients in the clinic. The student is expected to demonstrate graduate level of proficiency in Endodontic diagnosis, treatment skills, and management of patients. Special clinical emphasis is placed on endodontic re-treatment, periapical surgery, and contemporary management of complex and/or refractory endodontic lesions.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may be repeated for additional credit.