

# ENDODONTICS (ENDO)

## Courses

### **ENDO 5010. Clinical Endodontics 1. 2.5 Credit Hours.**

An extensive clinical experience in the broad spectrum of endodontic practice is offered on the graduate level. Each student has the opportunity to maintain a comprehensive endodontic practice under the supervision of the director and staff of the postdoctoral program in endodontics.

### **ENDO 5011. Clinical Endodontics 1. 3 Credit Hours.**

An extensive clinical experience in the broad spectrum of endodontic practice is offered on the graduate level. Each student has the opportunity to maintain a comprehensive endodontic practice under the supervision of the director and staff of the postdoctoral program in endodontics.

### **ENDO 5015. Dental Photography. 0.5 Credit Hours.**

This course is designed to expose the student to the principles of effective dental photography. Students are given the opportunity to make clinical photographs that are critiqued in class.

### **ENDO 5017. Clinical Seminar 1. 2 Credit Hours.**

These seminars provide the opportunity to discuss matters pertaining to clinical endodontics by exposing the student to a wide variety of clinical cases. The seminars provide information to give students the opportunity to become sophisticated diagnosticians and skillful clinicians. Students are provided the opportunity to achieve these goals through student case presentations, faculty case presentations, topical lectures by faculty and consultant visits.

### **ENDO 5018. Clinical Seminar 1. 2 Credit Hours.**

These seminars provide the opportunity to discuss matters pertaining to clinical endodontics by exposing the student to a wide variety of clinical cases. The seminars provide information to give students the opportunity to become sophisticated diagnosticians and skillful clinicians. Students are provided the opportunity to achieve these goals through student case presentations, faculty case presentations, topical lectures by faculty, and consultant visits.

### **ENDO 5020. Introduction to Advanced Endodontics. 2.5 Credit Hours.**

This course is a laboratory and lecture review of endodontic concepts and techniques starting at the basic level and progressing to the advanced. Various techniques of access preparation, chemomechanical canal preparation and obturation will be taught. Students will have an opportunity to prepare and obturate the root canal system using a variety of techniques and materials. Procedures are performed under simulated clinical conditions in a mannequin. Following completion of obturation, students dissect and photograph tooth roots under a dissecting microscope to evaluate the effectiveness of the various canal preparation and obturation techniques.

### **ENDO 5052. Endodontic Surgical Anatomy. 1.5 Credit Hour.**

This course consists of a series of four four-hour seminar sessions devoted to an in-depth discussion of endodontic surgical anatomy, surgical indications and techniques, and wound healing. This is followed by twenty hours of laboratory during which students practice actual surgical procedures on anterior, premolar and molar teeth in teeth mounted on manikins using contemporary endodontic microsurgery techniques. Emphasis is given to the correct use of the surgical microscope for these procedures and adequate management of soft and hard tissues.

### **ENDO 5060. Current Concepts In Endo. 1 Credit Hour.**

Modern thoughts and concepts in endodontics will cover diagnosis, the dental pulp and periapex, pulpalgia and referred pain; vital pulp therapy; treatment of the acute apical abscess, cellulitides, restorative considerations for the endodontically treated tooth, endodontic surgery, and the cracked tooth. Other topics include avulsions, endodontic-periodontic interrelationships, current concepts in endodontics and an overview of endodontic research.

### **ENDO 5071. Supervised Teaching. 1 Credit Hour.**

The goal of this course is to teach the student how to be an effective teacher. This course involves the student in teaching a sophomore lecture and laboratory course where dental students receive their initial exposure to endodontics. The student is given the opportunity to be actively involved in laboratory supervision of a small group of sophomore students as they perform specific endodontic procedures on extracted teeth. The student functions as an instructor side by side with endodontic faculty members who observe and critique the student's performance.

### **ENDO 5073. Literature Review 1. 5 Credit Hours.**

This course is designed to familiarize the student with pertinent articles, both topical and current, related to endodontics. The articles, selected from the dental, medical and basic science literature, are assigned to the student to critically abstract and evaluate for research design, findings and conclusions.

### **ENDO 5075. Literature Review 1. 4 Credit Hours.**

This course is designed to familiarize the student with pertinent articles, both topical and current, related to endodontics. The articles, selected from the dental, medical and basic science literature, are assigned to the student to critically abstract and evaluate for research design, findings and conclusions.

### **ENDO 5080. Case Presentations 1. 4.5 Credit Hours.**

This course is designed to provide faculty evaluation of endodontic cases treated by students. Critical evaluation will be made of the diagnosis, treatment plan and treatment methodology. Differential diagnosis will be considered along with alternate treatment plans and treatment methods. Reasons for any complications will be determined, and methods for preventing them will be discussed. The need for post-treatment follow-up examinations will be determined. The positive feedback provided by these courses is intended to increase student confidence and competence.

### **ENDO 5082. Case Presentations 1. 4 Credit Hours.**

This course is designed to provide faculty evaluation of endodontic cases treated by students. Critical evaluation will be made of the diagnosis, treatment plan and treatment methodology. Differential diagnosis will be considered along with alternate treatment plans and treatment methods. Reasons for any complications will be determined, and methods for preventing them will be discussed. The need for post-treatment follow-up examinations will be determined. The positive feedback provided by these courses is intended to increase student confidence and competence.

### **ENDO 5095. Research. 6 Credit Hours.**

The course requires the student to formulate a protocol for the purpose of conducting an original investigation. Once the protocol is critically evaluated and accepted, students, under the guidance of a mentor, conduct a research project suitable for publication. The completed research paper is presented to the Endodontics Department research Committee, staff and guests for evaluation and critique.

**ENDO 5096. Research. 6 Credit Hours.**

The course requires the student to formulate a protocol for the purpose of conducting an original investigation. Following a critical evaluation and acceptance of the protocol, the student conducts a research project, suitable for publication, under the guidance of a mentor. The completed research paper is presented to the Endodontics Department Research Committee, staff and guests for evaluation and critique.

**ENDO 5097. Research. 2 Credit Hours.**

The course requires the student to formulate a protocol for the purpose of conducting an original investigation. Following a critical evaluation and acceptance of the protocol, the student conducts a research project, suitable for publication, under the guidance of a mentor. The completed research paper is presented to the Endodontics Department Research Committee, staff and guests for evaluation and critique.

**ENDO 5098. Research. 2 Credit Hours.**

The course requires the student to formulate a protocol for the purpose of conducting an original investigation. Following a critical evaluation and acceptance of the protocol, the student conducts a research project, suitable for publication, under the guidance of a mentor. The completed research paper is presented to the Endodontics Department Research Committee, staff and guests for evaluation and critique.

**ENDO 6000. Introduction to Advanced Endodontics for Interns. 1 Credit Hour.****ENDO 6010. Clinical Endodontics 2. 6 Credit Hours.**

An extensive clinical experience in the broad spectrum of endodontic practice is offered on the graduate level. Each student has the opportunity to maintain a comprehensive endodontic practice under the supervision of the director and staff of the postdoctoral program in endodontics.

**ENDO 6012. Clinical Endodontics 2. 5 Credit Hours.**

An extensive clinical experience in the broad spectrum of endodontic practice is offered on the graduate level. Each student has the opportunity to maintain a comprehensive endodontic practice under the supervision of the director and staff of the postdoctoral program in endodontics.

**ENDO 6013. Clinical Endodontics 3. 0.5 Credit Hours.**

An extensive clinical experience in the broad spectrum of endodontic practice is offered on the graduate level. Each student has the opportunity to maintain a comprehensive endodontic practice under the supervision of the director and staff of the postdoctoral program in endodontics.

**ENDO 6031. Hospital Endodontics Rotation. 1 Credit Hour.**

Conducted at the Audie L. Murphy Memorial Veterans Affairs Hospital ("VA"), this rotation consists of the diagnosis, treatment planning and clinical treatment of endodontically involved teeth and supporting structures. This rotation provides the second-year postdoctoral endodontics student the opportunity to diagnose and treat endodontic problems on all types of inpatients and outpatients in the hospital setting.

**ENDO 6032. Hospital Endodontics Rotation. 1 Credit Hour.**

Conducted at the Audie L. Murphy Memorial Veterans Affairs Hospital ("VA"), this rotation consists of the diagnosis, treatment planning, and clinical treatment of endodontically involved teeth and supporting structures. This rotation provides the second-year postdoctoral endodontics student the opportunity to diagnose and treat endodontic problems on all types of inpatients and outpatients in the hospital setting.

**ENDO 6060. Pulp Biology and Pain Pharmacology. 1.5 Credit Hour.**

The purpose of this course is to provide solid foundational knowledge in the biology of dental pulp and periradicular tissues necessary for appropriate clinical decision making in endodontic and restorative diagnosis and treatment and to ensure that residents are prepared for future change in therapy or understanding new risk factors in disease.

**ENDO 6071. Supervised Teaching. 1 Credit Hour.**

The goal of this course is to teach students how to be an effective teacher. This course allows students to teach a sophomore lecture and laboratory course where dental students receive their initial exposure to endodontics. The student is given the opportunity to be actively involved in laboratory supervision of a small group of sophomore students as they perform specific endodontic procedures on extracted teeth. The student functions as an instructor side by side with endodontic faculty members who observe and critique the student's performance.

**ENDO 6073. Literature Review 2. 5 Credit Hours.**

This course is designed to familiarize the student with pertinent articles, both topical and current, related to endodontics. The articles, selected from the dental, medical and basic science literature, are assigned to the student to critically abstract and evaluate for research design, findings and conclusions.

**ENDO 6075. Current Literature Review. 1.5 Credit Hour.**

These courses are designed to familiarize the student with pertinent endodontic literature published during the academic year. Students will be assigned specific articles for review and literature will be critically evaluated in a seminar format.

**ENDO 6077. Current Literature Review. 1 Credit Hour.**

The goal of this course is for the student to develop a biological understanding and scientific basis for the diagnosis and treatment of various endodontic subjects by a review of current literature articles. Each resident will be assigned specific articles for review. Residents will be required to prepare written abstracts of these articles and orally present them to the class.

**ENDO 6078. Literature Review. 4 Credit Hours.**

This course is intended to introduce the endodontic resident application manuscripts related to our specialty. The articles are selected according to their impact on clinical and biological considerations pertinent to the understanding of the endodontic practice. Subjects will be broad in scope and will cover the majority of topics and treatment alternatives of classic, relevant and contemporary literature. These manuscripts will be discussed and evaluated, placing emphasis on their strength to already existing endodontic comprehension.

**ENDO 6080. Focused Regendo Research. 4 Credit Hours.**

This course is intended to provide a focused review on the most relevant scientific evidence on regenerative endodontics. Emphasis will be given to the critical appraisal of existing scientific evidence on stem cell biology and tissue engineering related to regenerative endodontics. The articles are selected according to their impact on clinical and biological considerations pertinent to the understanding of the endodontic practice.

**ENDO 6083. Case Presentations 2. 1 Credit Hour.**

This course is designed to provide faculty evaluation of endodontic cases treated by students. Critical evaluation will be made of the diagnosis, treatment plan, and treatment methodology. Differential diagnosis will be considered along with alternate treatment plans, and treatment methods. Reasons for any complications will be determined, and methods for preventing them will be discussed. The need for post-treatment follow-up examinations will be determined. The positive feedback provided by these courses is intended to increase student confidence and competence.

**ENDO 6084. Case Presentations 2. 4 Credit Hours.**

This course is designed to provide faculty evaluation of endodontic cases treated by students. Critical evaluation will be made of the diagnosis, treatment plan, and treatment methodology. Differential diagnosis will be considered along with alternate treatment plans, and treatment methods. Reasons for any complications will be determined, and methods for preventing them will be discussed. The need for post-treatment follow-up examinations will be determined. The positive feedback provided by these courses is intended to increase student confidence and competence.

**ENDO 6085. Case Presentations 2. 4 Credit Hours.**

This course is designed to provide faculty evaluation of endodontic cases treated by students. Critical evaluation will be made of the diagnosis, treatment plan, and treatment methodology. Differential diagnosis will be considered along with alternate treatment plans, and treatment methods. Reasons for any complications will be determined, and methods for preventing them will be discussed. The need for post-treatment follow-up examinations will be determined. The positive feedback provided by these courses is intended to increase student confidence and competence.

**ENDO 6086. Case Presentations 3. 2 Credit Hours.**

This course is designed to provide faculty evaluation of endodontic cases treated by students. Critical evaluation will be made of the diagnosis, treatment plan, and treatment methodology. Differential diagnosis will be considered along with alternate treatment plans, and treatment methods. Reasons for any complications will be determined, and methods for preventing them will be discussed. The need for post-treatment follow-up examinations will be determined. The positive feedback provided by these courses is intended to increase student confidence and competence.

**ENDO 6087. Case Presentations 3. 1 Credit Hour.**

This course is designed to provide faculty evaluation of endodontic cases treated by students. Critical evaluation will be made of the diagnosis, treatment plan, and treatment methodology. Differential diagnosis will be considered along with alternate treatment plans, and treatment methods. Reasons for any complications will be determined, and methods for preventing them will be discussed. The need for post-treatment follow-up examinations will be determined. The positive feedback provided by these courses is intended to increase student confidence and competence.

**ENDO 6094. Research. 4 Credit Hours.**

The course requires the student to formulate a protocol for the purpose of conducting an original investigation. Once the protocol is critically evaluated and accepted, students, under the guidance of a mentor, conduct a research project suitable for publication. The completed research paper is presented to the Endodontics Department research Committee, staff and guests for evaluation and critique.

**ENDO 6095. Research. 4 Credit Hours.**

The course requires the student to formulate a protocol for the purpose of conducting an original investigation. Once the protocol is critically evaluated and accepted, students, under the guidance of a mentor, conduct a research project suitable for publication. The completed research paper is presented to the Endodontics Department research Committee, staff and guests for evaluation and critique.

**ENDO 6098. Thesis. 4 Credit Hours.**

Completion of an acceptable thesis is required for the Master of Science degree. Registration in this course for at least one semester is required of all degree candidates. Admission to candidacy for the Master of Science degree is required in order to enroll in this course.

**ENDO 7041. Junior Endodontics Lecture. 1 Credit Hour.**

This course enhances the cognitive skills attained by the student that has successfully completed ENDO 6041 and ENDO 6142 in the Sophomore year. Topics covered include: endodontic radiography, endodontic diagnosis, endodontic irrigants and medicaments, evaluation of endodontic outcomes and retreatment, management of endodontic emergencies including pain control, diagnosis and management of tooth root resorption, endodontic treatment risk assessment, management of the immature root apex and management of traumatic tooth injuries including tooth fracture, luxation and avulsion. The importance of the inter-relationships with other dental disciplines such as periodontics and restorative dentistry are also emphasized.

**ENDO 7043. Endodontics Clinic. 1 Credit Hour.**

Students perform endodontic diagnosis and treatment procedures necessary to provide endodontic treatment as part of overall comprehensive clinical patient care.