Postgraduate Endodontics Course Descriptions

NOTE: • Postgraduate Endodontics courses are designated PEND.
• 200-level Postgrad Endodontics course do not carry CGHS credit.
• 800-level courses carry CGHS credit.

PEND 800 – MDS (Endodontics) Research & Manuscript

This course provides postgraduate students with the experience of engaging in research in dental and related sciences, and to pursue a Masters of Dental Science (MDS) degree in the UTHSC College of Graduate Health Sciences. In this course, students will work on individual research projects under the supervision of an individual advisor experienced in research methodologies and scientific writing. Students will work on the inception, implementation, and submission for publication of a research project with an individual advisor. The time commitment is 4 hours per week. However, the exact schedule is to be determined by the student and their advisor. Student activities include library research, writing a literature review, developing a research protocol, hands-on research, gathering and analyzing data, interpreting experimental results, developing conclusions, and publishing outcomes. Submission for publication of the original research is required. This course can be repeated up to 6 times for a total of 24 credit hours. [Course Director: Dr. David Clement; MDS Credit Hours: 4; Offered: Spring & Fall]

PEND 810 – Classic Endodontic Literature Review

This course consists of continuous weekly seminars devoted to review of endodontic and related literature and discussion of research methods. Selected articles in a particular topic are carefully reviewed and analyzed. The residents learn to critically read and evaluate the scientific evidence that supports endodontic principles and practice. This course can be repeated up to 6 times for a total of 24 credit hours. [Course Director: Dr. David Clement; MDS Credit Hours: 4; Offered: Fall & Spring]

PEND 811 – Contemporary Evidence-Based Endodontic Journal Club

This course has a basic journal club format, and involves surveying major dental periodicals to identify important articles, reviewing those articles, and discussing each article in an open face to face format. Journal Club provides a mechanism for surveying dental periodicals with high impact factors to identify important articles, reviewing those articles, and discussing each article in an open seminar format. Contemporary Evidenced-Based Journal Club I will meet for 2 hours weekly. This schedule is necessary to stay abreast of the ever-expanding volume of endodontic literature. This course can be repeated up to 6 times for a total of 12 credit hours. [Course Director: Dr. Adam Lloyd; MDS Credit Hours: 2; Offered: Fall & Spring]

PEND 220 – Introduction to Clinical Endodontics Lecture and Lab

This course is designed to review current philosophies and techniques of endodontic practice as presented in current textbooks in order to give the students the opportunity to demonstrate their current endodontic clinical skills, and to allow the residents the opportunity to modify their philosophies and techniques and improve their skills. [Course Director: Dr. David Clement; MDS Credit Hours: NA; Offered: Summer]

PEND 222 – Teaching Methodology and Lecture Skills

A series of seminars aiming to introduce teaching methodologies and lecturing/public speaking. The resident is involved in dynamic interactive discussions concerning teaching strategies and is taken through a series of lecturing exercises. [Course Director: Dr. Adam Lloyd; MDS Credit Hours: NA; Offered: Fall]

PEND 225 – Case Presentation Seminar

The purpose of this seminar is to provide a forum in which clinical experiences can be shared and in which discussion of clinical cases presented will benefit not only the presenter, but all in attendance. [Course Director: Dr. David Clement; MDS Credit Hours: NA; Offered: Fall & Spring]
PEND 227 - VAMC Hospital Dentistry

This ten-hour course is designed to orient the student to situations and conditions encountered in hospital patients and procedures necessary to safely evaluate and treat this population on an inpatient or outpatient basis. Procedural topics include consent; consultation; physician’s orders; patient admission; pre-operative, post-operative, and discharge notes. Medically related topics include: hemostasis and coagulation; radiation therapy of the head and neck; medical management of patients with cardiovascular disease; diabetes; pulmonary disease; liver disease; interpretation of laboratory tests; odontogenic infections; and management of dental emergencies. [Course Director: Dr. Dan Reeves; MDS Credit Hours: NA; Offered: Fall]

PEND 260 - Seminars in Endodontics

These seminar series in endodontics are presented in a variety of formats (literature/textbook review and discussion, lecture, student presentations, invited speaker demonstrations and seminar) and are designed to provide an in-depth level of knowledge in contemporary endodontic treatment modalities that are developing at a pace which is not reflected in the current endodontic literature. Invited guests who are recognized leaders in their respective fields present lectures, seminars, interactive group discussions and hands-on experiences for the most up to date clinically relevant topics. [Course Director: Dr. David Clement; MDS Credit Hours: NA; Offered: Fall & Spring]

PEND 266 - Clinical Endodontic Practice

The clinical emphasis is on developing proficiency with a single basic technique, although competence with alternative techniques is demanded. Clinical experience will include the complete scope of endodontic practice. Medically compromised patients, as well as healthy patients, are treated under appropriate supervision. The range of treatment includes emergency and diagnostic treatment; conservative and surgical therapy; vital and non-vital bleaching procedures; implants, replants, and root-extrusion techniques. A minimum of 180 clinical cases must be completed. These cases must demonstrate a clinically acceptable result. There must be a variety of treatment modalities. Cases are reviewed with all students monthly during Case Presentation Seminar. Grades are determined by the resident's progress in developing stated competencies and proficiencies and by progress toward completion of the required minimum number of cases. [Course Director: Dr. David Clement; MDS Credit Hours: NA; Offered: Fall & Spring]

PEND 293 - Teaching Clerkship in Endodontics

All endodontic residents serve as teaching assistants in the Department of Endodontics. As teaching assistants, residents are involved in the organized instruction of pre-doctoral dental students (D2-D4). Experience is gained in both pre-clinical endodontic laboratory courses and pre-doctoral endodontic clinics. Residents are subjectively monitored for content and quality of teaching. [Course Director: Dr. Adam Lloyd; MDS Credit Hours: NA; Offered: Fall & Spring]

Postgraduate Oral & Maxillofacial Surgery Course Descriptions

NOTE: • Postgraduate Oral & Maxillofacial Surgery courses are designated POMS.
• No POMS courses carry CGHS credit.

POMS 301 - Oral & Maxillofacial Clinical Rotations

In addition to the oral & maxillofacial surgery service, residents rotate through the following disciplines during the 4-year training program: internal medicine, cardiology, general anesthesia, pediatric anesthesia, pathology, general surgery, trauma, reconstructive surgery, craniofacial surgery, otolaryngology, oculoplastics, and OMS private practice. [Course Director: Dr. Jim Christian; MDS Credit Hours: NA; Offered: Fall & Spring]
POMS 303 - Head and Neck Anatomy

An intense study of gross structures of the head and neck by systematic dissection supplemented by UT medical school lectures and demonstrations oriented toward practical surgical applications. [Course Director: Dr. Randall Nelson; MDS Credit Hours: NA; Offered: Fall & Spring]

POMS 305 - Physical Diagnosis

This comprehensive week long course is provided by the University of Tennessee Internal Medicine Department four first year residents every July. Lecture, demonstration, and clinical participation are used to familiarize the student with patient evaluation and techniques of physical examination. [Course Director: VAMC Dept. of Internal Medicine; MDS Credit Hours: NA; Offered: Summer]

POMS 307 - Radiography

Technological proficiency and interpretation of extra-oral radiographic procedures of the head and its temporomandibular joint as they relate to oral surgery are the goals of this course. Special intra-oral techniques are also presented. Radiologist directed study, slides, and lecture format with actual resident participation are utilized. [Course Director: Dr. Jeff Brooks; MDS Credit Hours: NA; Offered: Fall & Spring]

POMS 310 - Oral & Maxillofacial Literature Review Seminar

A two hour seminar held monthly, in which articles from the current literature are reviewed. Experience in evaluation of written material and verbal presentation before a group is the purpose of this seminar. [Course Director: Dr. Jim Christian; MDS Credit Hours: NA; Offered: Fall & Spring]

POMS 315 - Grand Rounds

This triweekly conference series allows the residents to make presentations on various academic topics and formal case presentations of interesting patients being treated on the service. [Course Director: Dr. Jim Christian; MDS Credit Hours: NA; Offered: Fall & Spring]

POMS 320 - Case Conference

This triweekly conference series is dedicated to the review and discussion of current patient cases with emphasis in mortality and morbidity review. [Course Director: Dr. Jim Christian; MDS Credit Hours: NA; Offered: Fall & Spring]

POMS 325 - Oral Pathology Conference

Tri-weekly 1.5-hour conference designed to familiarize the resident with information and knowledge within the scope of OMS presented in lecture and CPC format. [Course Director: Dr. Mark Anderson; MDS Credit Hours: NA; Offered: Fall & Spring]

POMS 330 - Orthognathic Case Conference

This is a monthly conference held in conjunction with the Department of Orthodontics involving joint surgical-orthodontic cases. [Course Director: Dr. Jim Christian; MDS Credit Hours: NA; Offered: Fall & Spring]
Postgraduate Orthodontics Course Descriptions

NOTE: • Postgraduate Orthodontics courses are designated POPT.
• 400-level courses are Postgrad Orthodontics course without CGHS credit.
• 800-level courses carry CGHS credit.

PORT 800 - MDS (Orthodontics) Research & Manuscript

This course provides postgraduate students with the experience of engaging in research in dental and related sciences, and to pursue a Masters of Dental Science (MDS) degree in the UTHSC College of Graduate Health Sciences. Involvement in this course is arranged to meet individual student needs. Time commitment will average 4-hours per week during each semester of pursuit. Students work with advisors experienced in research methodology and scientific writing. Research mentorship is provided by faculty members gathered to satisfy the needs of the student and the research project being pursued. Student activities include topic-specific review of literature, research protocol development, hands-on research, data acquisition, statistical analysis and interpretation of experimental results, drawing conclusions, and publication of outcomes. Public defense of the research effort and submission of a manuscript to a professional journal in accordance with regulation established by the College of Graduate Health Sciences are required. Research, public defense, and manuscript submission accomplished during this course are in partial fulfillment of the requirements for the Master of Dental Science degree awarded by the UTHSC, College of Graduate Health Sciences. [Course Director: Dr. Ed Harris; MDS Credit Hours: Variable; Offered: Fall & Spring]

PORT 810 - Classic Orthodontic Literature Review

This course is a companion to clinical training in orthodontics and involves faculty and student evaluations of historically significant orthodontic literature. Key historical literature based on reading lists compiled by the American Association of Orthodontists, the American Board of Orthodontics and the faculty is presented in lecture format by the graduate students. The students are also exposed to the historical development of orthodontics, additional treatment philosophies through guest speakers and relevant new developments in treatment. Students in the Advanced Orthodontic Program participate in this seminar each semester of their three-year residency. [Course Director: Dr. Edward Harris; MDS Credit Hours: 2; Offered: Fall & Spring]

PORT 811 - Contemporary Evidence-Based Orthodontic Journal Club

This course is a companion to clinical training in orthodontics and involves faculty and student evaluations of contemporary orthodontic literature. Current research articles in the key journals in orthodontics are reviewed as they are published. The assessment of current literature for its evidence-based value is critical. Journal Club provides a mechanism for surveying major orthodontic periodicals to identify important articles, reviewing those articles and discussing each article in an open seminar format. Students in the Advanced Orthodontic Program participate in this seminar each semester of their three-year residency. [Course Director: Dr. Nathan Harmman; MDS Credit Hours: 2; Offered: Fall & Spring]

PORT 820 - Radiology and Cephalometrics

The course provides a thorough understanding of craniofacial radiographic techniques with emphasis on cephalometric roentgenography. The course is designed to acquaint the student with the use of radiographs, radiation hygiene, radiographic evidence of pathology, and cephalometric techniques to assure proficiency in technical skills and in interpretation as needed for diagnostic procedures. This course consists of lecture and laboratory instruction. [Course Director: Dr. Holland Maness; MDS Credit Hours: 2; Offered: Fall]

PORT 840 - Special Topics in Orthodontics

Directed readings or special course in topics of current interest. Student will select a specific topic. Approval must be obtained from student's advisor and course instructor prior to enrollment. [Course Director: Dr. Terry Trojan; MDS Credit Hours: 1; Offered: Fall & Spring]
PORT 850 - Craniofacial Growth

This course provides an overview of the events of human growth and the analytic approaches used to study growth, particularly from birth to adulthood. Discussions center around the nature of growth, mechanisms of growth, general body development, and genetic and environmental influences on growth. Emphasis is given to the head and neck region. Topics in growth malformations and dysplasias are presented. The etiology, presentation, differential diagnosis, and orthodontic treatment of comparatively common pharyngeal arch syndromes and sequences are described, with extended discussion of cleft lip and palate. [Course Director: Dr. Ed Harris; MDS Credit Hours: 2; Offered: Spring]

PORT 855 - TMD and Occlusal Concepts

Orthodontic treatment has many ramifications for the stomatognathic system. The temporomandibular joint depends on proper occlusion for health and function. This course requires the student to read the appropriate literature, understand the intricacies of the interrelationship of the occlusion and the TMJ, and apply these principles to the correction of orthodontic malocclusion. [Course Director: Dr. Joe Wasson; MDS Credit Hours: 1; Offered: Fall & Spring]

PORT 860 - Craniofacial Anomalies

The orthodontic graduate student must be trained to deal with and to competently treat patients who present with various skeletal and dental anomalies. This course’s purpose is to cover the literature on the various syndromes and developmental anomalies that affect the teeth and the face. Visiting lecturers from across the spectrum of healthcare delivery address the class and explain the intricacies of dealing with these problems from the perspective of their respective specialty. [Course Director: Dr. William Parris; MDS Credit Hours: 1; Offered: Spring]

PORT 865 - Orthodontic History and Ethics

This course is an introduction to the history of the development of the specialty of orthodontics, with an emphasis on the personalities involved in the development and evolution of the specialty. There are also ethical dilemmas in orthodontics that are discussed and studied. [Course Director: Dr. David Crowder; MDS Credit Hours: 1; Offered: Fall]

PORT 870 - Biomechanical Principles

This course is a comprehensive survey of biomechanical principles utilizing Newtonian Mechanics to define the interplay between forces applied by fixed and removable orthodontic appliances and the resulting movement of teeth. [Course Director: Dr. David Crowder; MDS Credit Hours: 1; Offered: Spring]

PORT 875 - Scientific Writing and MDS Research Protocol

The theory and practice of writing a scientifically based manuscript are presented. The purpose, structure, and style of all the parts of a manuscript are described. The practical application of this series of lectures is the development of the student's MDS manuscript. The theory and practice of preparing a sound protocol preparatory to MDS-level research is discussed in detail. Various research designs are discussed. Additionally, style and content of a grant proposal are reviewed [Course Director: Dr. Ed Harris; MDS Credit Hours: 1; Offered: Fall & Spring]

PORT 880 - Speech and Myofunctional Therapy

The objective of this course is to provide an understanding of speech development and production and diagnostics and therapeutic interventions for speech-related disorders, primarily in children. Attention will be directed toward detailed definition, description, evaluation, and treatment, providing an overall understanding of the profession and available services; thereby, enhancing the process of collaboration between the professions of dentistry, orthodontics and speech-language pathology. [Course Director: Dr. Kristin King; MDS Credit Hours: 1; Offered: Spring]
PORT 885 - Surgical Correction of Dentofacial Deformities

This course is designed to provide a basic understanding of options available to patients who require surgical correction of significant dentofacial deformities. Attention will be directed towards the surgical diagnosis of such patients and review of the common surgical procedures required to treat these patients. [Course Director: Dr. Jim Christian and Dr. Terry Trojan; MDS Credit Hours 1; Offered: Spring]

PORT 490 - Principles of Early Treatment Orthodontics

This course provides a comprehensive overview of principles and concept of early orthodontic treatment with emphasis on the usage of specific appliances. The objective of this course is to prepare students for clinical treatment of patients in the mixed dentition. [Course Director: Dr. Jere Yates; MDS Credit hours: NA; Offered: Fall & Spring]

Postgraduate Pediatric Dentistry Course Descriptions

NOTE: • Postgraduate Pediatric Dentistry courses are designated PPED. • 500-level courses are Postgrad Pediatric Dentistry course without CGHS credit. • 800-level courses carry CGHS credit.

PPED 800 - MDS (Pediatric Dentistry) Research & Manuscript

This course provides postgraduate students with the experience of engaging in research in dental and related sciences, and to pursue a Masters of Dental Science (MDS) degree in the UTHSC College of Graduate Health Sciences. Involvement in this course is arranged to meet individual student needs. Time commitment will average 4-hours per week during each semester of pursuit. Students work with advisors experienced in research methodology and scientific writing. Research mentorship is provided by faculty members gathered to satisfy the needs of the student and the research project being pursued. Student activities include topic-specific review of literature, research protocol development, hands-on research, data acquisition, statistical analysis and interpretation of experimental results, drawing conclusions, and publication of outcomes. Public defense of the research effort and submission of a manuscript to a professional journal in accordance with regulation established by the College of Graduate Health Sciences are required. Research, public defense, and manuscript submission accomplished during this course are in partial fulfillment of the requirements for the Master of Dental Science degree awarded by the UTHSC, College of Graduate Health Sciences. [Course Director: Dr. Steve Hackmyer; MDS Credit Hours: Variable; Offered: Spring & Fall]

PPED 810 - Classic Pediatric Dentistry Literature Review

This seminar provides exposure to historically relevant, scientific literature in various subject areas associated with pediatric dentistry and related sciences. Continuous weekly seminars are devoted to reviewing related literature and discussing research methods. Students in the Pediatric Dentistry Program participate in this seminar each semester of their two-year residency. Nine broad topics pertinent to pediatric dentistry are covered on a rotational basis over a two-year period. The residents learn to critically read and evaluate the scientific evidence that supports pediatric dentistry principles and practice. Seminars are led by the Pediatric Dentistry faculty. Other outside guest and members of the University of Tennessee Health Science Center faculty are invited to participate when their expertise on the seminar topic is considered beneficial to the learning experience. [Course Director: Dr. Jennifer Lou; MDS Credit Hours: 2; Offered: Fall & Spring]
PPED 811 - Contemporary Evidence-Based Pediatric Dentistry Journal Club

This seminar is an ongoing review of current, pertinent, professional literature in various subject areas associated with pediatric dentistry and related sciences. For postdoctoral students, knowledge of current professional literature is essential to developing theoretical and practical patient management skills. The assessment of current literature for its evidence-based value is critical. Journal Club provides a mechanism for surveying major dental periodicals to identify important articles, reviewing those articles, and discussing each article in an open seminar format. Students in the Pediatric Dentistry Program participate in this seminar each week throughout their two-year residency in order to stay abreast of the ever-expanding volume of pediatric dentistry literature. Seminars are led by the Pediatric Dentistry faculty. Other guests and members of the University of Tennessee Health Science Center faculty are invited to participate when their expertise on the seminar topic is considered beneficial to the learning experience. [Course Director: Dr. Hamid Yazdi; MDS Credit Hours: 2; Offered: Fall & Spring]

PPED 813 - Introduction to Pediatric Dentistry

This course given the first eight weeks of the first year of the program provides the pediatric postgraduate student with a comprehensive introduction to a variety of subjects and topics pertinent to advanced pediatric dentistry. The topics that are covered include conscious sedation, pulp therapy, traumatic dental injuries, cariology and prevention, space maintenance, speech and language development, craniofacial growth and development periodontal problems, ethics, advocacy, special patient care, infection control, restorative materials and techniques, behavior management pediatric medicine hospital dentistry, radiographic principles of pediatric psychosocial growth and development, pediatric oral pathology, nutrition, pharmacology and pediatric dental practice. Biomedical sciences topics are integrated in the lectures. First year students in the Advanced Pediatric Dental Program participate in this course. Eleven broad topics pertinent to will introduce the postgraduate student the knowledge beyond the pre-doctoral dental education to the level required of the specialty. Topics are led by the Pediatric Dentistry faculty. In addition, guest lecturers and other members of the University of Tennessee Health Science Center faculty will participate. [Course Director: Dr. Martha Wells; MDS Credit Hours: 2; Offered: Fall]

PPED 815 - Pediatric Dentistry Case Presentation Seminar

This seminar is an ongoing review of current, pertinent, various clinical case and didactic subject areas associated with pediatric dentistry and related sciences. For postdoctoral students, knowledge of clinical relevant topics is essential to developing theoretical and practical patient management skills. The assessment of clinical related topics from an evidence-based perspective is critical. This seminar helps to provide a mechanism to better prepare the postgraduate pediatric dental student clinical knowledge beyond the pre-doctoral dental education to the level required of the specialty. Students in the Pediatric Dentistry Program participate in this seminar each week throughout their two-year residency. Seminars are led by the Pediatric Dentistry faculty. Other guests and members of the University of Tennessee Health Science Center faculty are invited to participate when their expertise on the seminar topic is considered beneficial to the learning experience. [Course Director: Dr. Martha Wells; MDS Credit Hours: 2; Offered: Fall]

PPED 817 - Contemporary Pediatric Dentistry

This course given over the two years provides the pediatric postgraduate student with comprehensive lectures on a variety of subjects and topics pertinent to advanced pediatric dentistry. The topics that are covered include conscious sedation, pulp therapy, traumatic dental injuries, cariology and prevention, space maintenance, speech and language development, craniofacial growth and development periodontal problems, ethics, advocacy, special patient care, infection control, restorative materials and techniques, behavior management pediatric medicine hospital dentistry, radiographic principles of pediatric, dental photography, psychosocial growth and development, pediatric oral pathology, nutrition, pharmacology, physical diagnosis and pediatric dental practice. Biomedical sciences topics are integrated over the two years. Students in the Advanced Pediatric Dental Program participate in this seminar each semester of their two-year residency. Twelve broad topics pertinent to will provide the postgraduate student the knowledge beyond the pre-doctoral dental education to the level required of the specialty. Topics are covered on a rotational basis over a two-year program period. Seminars are led by the Pediatric Dentistry faculty. In addition, guest lecturers and other members of the University of Tennessee Health Science Center faculty will participate. [Course Director: Dr. Steve Hackmyer; MDS Credit Hours: 4; Offered: Fall & Spring]
PPED 819 - Special Topics in Pediatric Dentistry

This course includes directed readings or special course in topics of current interest and can include laboratory and clinical assignments as well as Lecture. The topics that are covered include sedation and emergency management, pulp therapy, traumatic dental injuries, cariology and prevention, space maintenance, speech and language development, craniofacial growth and development periodontal problems, ethics, advocacy, special patient care, restorative materials and techniques, behavior management, pediatric medicine, hospital dentistry, radiographic principles, pediatric oral pathology, nutrition, pharmacology and pediatric dental practice. [Course Director: Dr. Martin Donaldson; MDS Credit Hours: 1; Offered: Fall & Spring]

Postgraduate Periodontology Course Descriptions

NOTE:
- Postgraduate Periodontology courses are designated PPER.
- 600-level courses are Postgrad Periodontology course without CGHS credit.
- 800-level courses carry CGHS credit.

PPER 800 - MDS (Periodontology) Research & Manuscript

This course provides postgraduate students with the experience of engaging in research in dental and related sciences, and to pursue a Masters of Dental Science (MDS) degree in the UTHSC College of Graduate Health Sciences. Involvement in this course is arranged to meet individual student needs. Time commitment will average 4-hours per week during each semester of pursuit. Students work with advisors experienced in research methodology and scientific writing. Research mentorship is provided by faculty members gathered to satisfy the needs of the student and the research project being pursued. Student activities include topic-specific review of literature, research protocol development, hands-on research, data acquisition, statistical analysis and interpretation of experimental results, drawing conclusions, and publication of outcomes. Public defense of the research effort and submission of a manuscript to a professional journal in accordance with regulation established by the College of Graduate Health Sciences are required. Research, public defense, and manuscript submission accomplished during this course are in partial fulfillment of the requirements for the Master of Dental Science degree awarded by the UTHSC College of Graduate Health Sciences. [Course Director: Dr. Sidney Stein; MDS Credit Hours: Variable; Offered: Spring & Fall]

PPER 810 - Classic Periodontology Literature Review

This seminar is conducted regularly throughout the first two years of the residency program under the direction of the postgraduate periodontics staff. The purpose of this seminar is exposure to classic and current concepts in various subject areas, as well as written and verbal evaluation of the literature reviewed. [Course Director: Dr. Rania Livada; MDS Credit Hours: 4; Offered: Fall and Spring]

PPER 811 - Contemporary Evidence-Based Periodontology Journal Club

This seminar is conducted regularly throughout the three year residency period. Major journals devoted to periodontics are reviewed selectively. Selected articles are also reviewed from other major journals. The purpose of this seminar is to provide experience in reading, abstracting and evaluating the most recently published ideas and concepts in the field of periodontics. [Course Director: Dr. Swati Rawal; MDS Credit Hours: 2; Offered: Fall and Spring]
PPER 613 - Hospital Dentistry

This ten-hour course is designed to orient the student to situations and conditions encountered in hospital patients and procedures necessary to safely evaluate and treat this population on an inpatient or outpatient basis. Procedural topics include consent, consultation, physician’s orders, admission, pre-operative, post-operative and discharge notes. Medically related topics include: hemostasis and coagulation, radiation therapy of the head and neck, medical management of patients with cardiovascular disease, diabetes, pulmonary disease, liver disease, interpretation of laboratory tests, odontogenic infections, and management of dental emergencies. [Course Director: Dr. Daniel Reaves; MDS Credit Hours: NA; Offered: Fall]

PPER 814 - Research in Periodontal Pathobiology

This course will provide each resident with the opportunity to engage in periodontal research. It may include both clinical and laboratory research, with the emphasis in one or the other research areas. Each resident will be assigned a research mentor who is trained and experienced in research methodologies and writing of scientific papers. Instruction will be given by appropriate faculty members on an individualized basis. Resident activities will include research of relevant literature, writing of appropriate literature reviews, hands on research, gathering and analysis of data, interpretation of results, drawing conclusions and writing papers appropriate for publication. The course will integrated with the remainder of the curriculum throughout the 36 month duration of the program. [Course Director: Dr. Sidney Stein; MDS Credit Hours: 3; Offered: Fall and Spring]

PPER 815 - Orthodontics-Periodontics Seminar

This seminar course is conducted by members of the Orthodontics and Periodontology faculties. Included are lectures on the interrelationships of orthodontic and periodontic approaches to common treatment situations. Emphasis is placed on the basic science mechanisms underlying periodontic and orthodontic therapies. Selected literature of common interest to the students of Orthodontics and Periodontics is reviewed. Graduate students present cases for diagnosis and treatment planning as well as cases treated in an interdisciplinary manner. The purpose of this seminar is to encourage greater interaction and understanding between orthodontist and periodontist, including the identification of patients to be treated jointly by graduate students in orthodontics and periodontics. [Course Director: Dr. Swati Rawal; MDS Credit Hours: 1; Offered: Fall]

PPER 622 - Lectures in Periodontal Surgery

This twenty-four hour lecture course is devoted to the indications, advantages, limitations and contraindications, as well as the technical approach to the management of periodontal diseases and conditions using standard periodontal surgical procedures. [Course Director: Dr. Les Binkley; MDS Credit Hours: NA; Offered: Fall]

PPER 625 - UTHSC Periodontics Case Presentation Seminar

This seminar is conducted by the postgraduate and undergraduate faculty, during the three year residency, on a regular basis. The purpose of this seminar is to allow the resident to present all relevant findings, to formulate one or more approaches to treatment, and the evaluation of therapeutic results before a critical and knowledgeable audience. [Course Director: Dr. Paul Bland; MDS Credit Hours: NA; Offered: Fall and Spring]
**PPER 626 - UTHSC Clinical Periodontics**

Approximately fifty percent of the resident’s clinical time is spent in the University of Tennessee Health Science Center dental school postgraduate periodontics clinic where advanced experience is gained in the management of all types of periodontal treatment situations. Emphasis is given to detailed case workup, analysis of all dental and periodontal problems, providing experience in a wide variety of approaches to periodontal treatment, clinical and photographic documentation of all treatment procedures performed and a careful evaluation of post-treatment results, including maintenance therapy for all patients treated in the postgraduate periodontics clinic. Experience is gained in the treatment planning, placement and maintenance of dental implants, as well as various approaches to anxiety control and sedation. [Course Director: Dr. Rania Livada; MDS Credit Hours: NA; Offered: Fall and Spring]

**PPER 629 - VAMC Treatment Planning Seminar**

This one hour per week seminar is conducted during all semesters of the first two years of the residency program, by staff members from the Department of Prosthodontics, General Dentistry, Oral Surgery and Periodontology. The multi-disciplinary approach to the etiology, diagnosis, prognosis, treatment planning and therapy is the purpose of this seminar. [Course Director: Dr. Michael Savage; MDS Credit Hours: NA; Offered: Fall and Spring]

**PPER 632 - VAMC Clinical Periodontics**

Approximately one third of the resident’s clinical time is spent at the Veterans Administration Hospital Dental Clinic in the first two years of the residency program. This time commitment will be reduced in the third year of the program. Experience is gained in the treatment of all types of periodontal conditions. Emphasis is placed on evaluation and management of periodontal conditions in the medically compromised patient. Experience is also gained in the use of intravenous sedation techniques. [Course Director: Dr. Jeffery Wingo; MDS Credit Hours: NA; Offered: Fall and Spring]

**PPER 633 - VAMC General Anesthesia Rotation**

This is a variable rotation period during which the resident gains experience in intravenous sedation and general anesthesia for all types of operations performed by general surgery. Supervision is by staff anesthesiologists. Didactic presentations by the anesthesiology staff include medicine, technology, pharmacy, physiology and physical diagnosis. [Course Director: Dr. Susan Calhoun; MDS Credit Hours: NA; Offered: Spring]

**PPER 635 - Sedation in the Periodontal Office**

This course provides an introduction to the spectrum of various methods for anxiety control and stress reduction as an adjunct to local anesthesia in the practice of periodontics. The advantages, indications, disadvantages and limitations for psychosedation, oral rectal, intramuscular, inhalation and intravenous sedation are presented. A review of the nature of pain and pain perception, cardiopulmonary physiology, patient physical evaluation, the pharmacology of nitrous oxide, barbiturates, benzodiazepines, opiates and reversal agents, as well as technical aspects of inhalation and intravenous sedation procedures, and the management of untoward reaction is presented. The course serves as the core for the development of clinical experience in stress reduction and management of patient anxiety in the periodontal office. It is supplemented by the various courses, seminars and rotations in anatomy, pharmacology, internal medicine and general anesthesia. [Course Director: Dr. Les Binkley; MDS Credit Hours: NA; Offered: Fall]
PPER 636 - Advanced Implant Dentistry

This seminar provides a detailed look at modern dental implant therapy using topic-oriented presentations, treatment planning presentations, and treatment follow-up discussions provided by both faculty members and residents. Current advances in the field of dental implant therapy are highlighted. Topics covered include, the rationale for implant therapy, indications, pre-surgical implant site development, surgical implant placement, implant restorative procedures, pre- and post-surgical radiographic assessment, dental implant maintenance, outcomes assessment, and management of complications. The review of important topics and current literature related to implant therapy is incorporated whenever possible. Residency programs in Periodontics, Oral Surgery, Prosthodontics, and Advanced Education in General Dentistry are involved. [Course Director: Dr. Cimara Ferreira; MDS Credit Hours: NA; Offered: Spring]

PPER 637 - Lectures in Internal Medicine

This series of lectures-seminars, is combined with a variable length rotation in internal medicine to provide the resident with the opportunity to review with medical experts, certain common medical conditions which may relate directly or indirectly to the severity and management of the patient’s periodontal condition. Included are presentations in transplant therapy, the pharmacologic management of the transplant patient, psychiatric conditions and their impact on management of the dental patient, hemotologic considerations for the dental patient, management of the hypertensive dental patient and anaphylaxis and drug reactions. [Course Director: Dr. Sidney Stein; MDS Credit Hours: NA; Offered: Fall and Spring]

PPER 638 - Practice Management

This seminar and demonstration course is designed to prepare the student for all phases of the “business” of periodontics as well as the responsibility of being a professional. This course essentially covers the management of private practice (office location and layout, staff policies and procedures, office forms, bookkeeping systems, case presentation, ethics, etc.), office visitations (observing the activities of community periodontists and their auxiliary personnel) and the relationship of the specialist to other professionals. Guest lecturers (lawyer, accountant, banker, investment counselor, insurance agent, estate planner, and representatives of organized dentistry) also provide information concerning business and ethics. The course is supplemented with guest lectures by practicing periodontists from various geographical areas. [Course Director: Dr. Les Binkley; MDS Credit Hours: NA; Offered: Fall and Spring]

Postgraduate Prosthodontics Course Descriptions

NOTE: • Postgraduate Prosthodontics courses are designated PPRO.
• 700-level courses are Postgrad Prosthodontics course without CGHS credit.
• 800-level courses carry CGHS credit.

PPRO 800 - MDS (Prosthodontics) Research & Manuscript

This course provides postgraduate students with the experience of engaging in research in dental and related sciences, and to pursue a Masters of Dental Science (MDS) degree in the UTHSC College of Graduate Health Sciences. Involvement in this course is arranged to meet individual student needs. Students work with advisors experienced in research methodology and scientific writing. Research mentorship is provided by faculty members gathered to satisfy the needs of the student and the research project being pursued. Student activities include topic-specific review of literature, research protocol development, hands-on research, data acquisition, statistical analysis and interpretation of experimental results, drawing conclusions, and publication of outcomes. Public defense of the research effort and submission of a manuscript to a professional journal in accordance with regulation established by the College of Graduate Health Sciences are required. Research, public defense, and manuscript submission accomplished during this course are in partial fulfillment of the requirements for the Master of Dental Science degree awarded by the UTHSC, College of Graduate Health Sciences. [Course Director: Dr. David Cagna; MDS Credit Hours: Variable; Offered: Fall & Spring]
**PPRO 810 - Classic Prosthodontic Literature Review**

This seminar provides exposure to historically relevant, scientific literature in various subject areas associated with prosthodontics and related sciences. Periodic and critical abstracting of this literature is accomplished by seminar attendees in order to maintain a database of condensed, topic-oriented summaries. Students in the Advanced Prosthodontic Program participate in this seminar each semester of their three-year residency. Twenty-four broad topics pertinent to prosthodontics are covered on a rotational basis over a three-year period. Eight topics are covered during each year of the students’ three-year residency program. Seminars are led by the Assistant Director of the Advanced Prosthodontic Program. Other members of the University of Tennessee Health Science Center faculty are invited to participate when their expertise on the seminar topic is considered beneficial to the learning experience. [Course Director: Dr. David Cagna; MDS Credit Hours: 3; Offered: Fall & Spring]

**PPRO 811 - Contemporary Evidence-Based Prosthodontic Journal Club**

Ongoing review of current, pertinent, professional literature is fundamental to the successful practice of prosthodontics. For postdoctoral students, knowledge of current professional literature is essential to developing theoretical and practical patient management skills. The assessment of current literature for its evidence-based value is critical. Journal Club provides a mechanism for surveying major dental periodicals to identify important articles, reviewing those articles, and discussing each article in an open seminar format. Seminars are held twice each week for one hour throughout the three-year program. This schedule is necessary to stay abreast of the ever-expanding volume of prosthodontic literature. [Course Director: Dr. David Cagna; MDS Credit Hours: 2; Offered: Fall & Spring]

**PPRO 753 - Maxillofacial Prosthodontics Seminar**

This course presents theory and principals involved in the treatment of maxillofacial defects. Topics include evaluation of patient needs, selection of appropriate impression materials and techniques, laboratory fabrication of the prosthesis, placement of the prosthesis, and follow-up. All topics emphasize features unique to maxillofacial prosthetics, while comparing and contrasting these features with conventional prostheses. Optimal surgical outcomes related to defect design for enhance restorability are discussed. Radiation therapy and chemotherapy are considered in light of their impact on the maxillofacial patient. [Course Director: Dr. Greg Paprocki; MDS Credit Hours: NA; Offered Fall]

**PPRO 760 - Seminars in Prosthodontics**

This overview of prosthodontics is presented in a variety of formats (literature/textbook review and discussion, lecture, student presentations, and seminar). Subject areas covered include occlusion, complete dentures, removable partial dentures, anatomy and physiology, TMJ-TMD, dental impressions, tooth preparation, dental implants, laboratory procedures, dental material science, relevant topics in bioengineering, and other subjects pertinent to the practice of prosthodontics. Clinically related seminars include examination, diagnosis, prognosis, and treatment planning for patients with prosthodontics needs. A variety of approaches to treatment and the importance of supportive therapy for treated patients are emphasized. The interrelationship between basic sciences and clinical aspects of prosthodontics is emphasized. An annual review of topics relevant to the private practice of prosthodontics is provided. Appropriate reading material from standard textbooks and prosthodontic literature is often assigned for seminar meetings. [Course Director: Dr. David Cagna; MDS Credit Hours: NA; Offered: Fall & Spring]
PPRO 766 - Clinical Prosthodontics

The provision of clinical prosthodontic care occurs in the Advanced Prosthodontic Clinic at the UTHSC College of Dentistry. In this setting, prosthodontic residents gain advanced-level experience in the management of complex edentulous, partially edentulous and dentate patients, including the surgical placement and restoration of dental implants. Detailed diagnostic information gathering and analysis of all dental problems are emphasized. Diverse treatment approaches to complicated prosthodontic problems are encountered. Clinical and photographic documentation of all procedures is accomplished and careful evaluation is made of all treatment rendered. Extensive experience is gained in diagnosis and treatment planning and multidisciplinary care coordination. Prosthodontic residents plan, place, restore, and maintain and variety of different dental implant systems. [Course Director: Dr. David Cagna; MDS Credit Hours: NA; Offered: Fall & Spring]

PPRO 773 - Interdisciplinary Seminar

This postdoctoral interdisciplinary seminar addresses topics germane to effective management of complicated dental conditions. Representatives from periodontics, orthodontics, prosthodontics, oral & maxillofacial surgery, endodontics, and dental diagnostic sciences contribute to seminars activities. On a rotational basis, dental residents from the various Advanced Dental Education Programs in the College of Dentistry provide presentations and direct seminar discussions. The seminar theme is multidisciplinary management of patients. Presentation topics may include, but are not limited to, treatment planning, complications, new therapies, diagnostic technologies, encountered pathologies, treatment philosophies, novel devices and materials, emerging science/technology, improved interdisciplinary communications, interesting dental laboratory processes, or any other topic considered informative for the group. Presenters are encouraged to incorporate clinically relevant and evidence-based information. When appropriate, presentations should be designed to update seminar participants on state-of-the-art, discipline-specific concepts. Fostering an environment of open and mutually beneficial commentary on current therapeutic philosophies and procedures is the goal of the seminar. Participants should leave each seminar experience better informed about issues impacting specialty level care of patients requiring complicated therapeutic intervention. [Course Director: Dr. David Cagna; MDS Credit Hours: NA; Offered: Spring]

PPRO 793 - Teaching Clerkship in Prosthodontics

All prosthodontic residents serve as teaching assistants two half-days per week in the Department of Prosthodontics and receive annual stipends for this departmentally important activity. As teaching assistants, residents are involved in the organized instruction of pre-doctoral dental students in fixed prosthodontics, removable prosthodontics, implant prosthodontics, and dental occlusion courses. Experience is gained through instruction provided during pre-clinical prosthodontic laboratory exercises and prosthodontic clinical procedures. Teaching assignments are posted by the Department of Prosthodontics on a weekly basis. Residents are monitored for content and quality of teaching. [Course Director: Dr. David Cagna; MDS Credit Hours: NA; Offered: Fall & Spring]

Postgraduate Dental Science Core Curriculum

NOTE: • Postgraduate Dental Science Core courses are designated PDSC.
• All PDSC courses carry CGHS credit.

PDSC 820 - Dental Science Core: Research Methods

The course is composed of two sections. The biostatistics portion of this course introduces students to widely used methods for analysis of experimental and observational data with orientation toward statistical inference from dental research. The experimental design aspect of this course serves as an introduction to research, including methods for handling experimental data. [Course Director: Dr. Mark Scarbecz; MDS Credit Hours: 2; Offered: Fall]
PDSC 821 - Dental Science Core: Dental Ethics

Courses Online Dental Ethics (CODE) is a series of online courses in dental ethics and professionalism. The American College of Dentists developed and manages CODE and related resources at www.dentalethics.org. There are no registration fees or tuition and the American College of Dentists welcomes and encourages coordinated educational experiences in educational facilities. There are currently over 30 online ethics modules intended for all dental students and professional. Sixteen of the modules identified as particularly relevant to postgraduate dental education and the specialty practice of dentistry will constitute this course. [Course Director: Dr. David Cagna; MDS Credit Hours: 1; Offered: Fall]

PDSC 822 - Dental Science Core: Oral Sciences I

This course is designed to provide fundamental knowledge on the development, morphology, histology and function of basic tissue, dentofacial structures including the salivary glands, teeth, and the temporomandibular joint. The understanding of this science is essential because it lays the foundation for an insight into the form and structure of the human body in general and the orofacial and dental tissue in particular. This is a self-study course. Topic handouts are provided electronically for guidance. Reference to the highly recommended reading list is encouraged and advised. [Course Director: Dr. Y. Rawal; MDS Credit Hours: 1; Offered: Fall]

PDSC 823 - Dental Science Core: Oral Sciences II

This course is conducted by experts in the areas of biochemistry, microbiology, virology, inflammation and immunology, cell biology, and pediatric dentistry and oral biology. Included are lectures on classification, structure, and function of major periodontopathic bacteria, and virulence factors and pathogenesis of oral microbial diseases. Other microbiology topics include bacterial etiology of dental caries and the role of fluoride therapy, fungal diseases, herpesviruses, hepatitis, and HIV. Host defense topics include inflammation, basic principles of immunology, immunologic mechanisms and cytokines in periodontitis and pulpitis, and the clinical significance of immunologic and other research techniques. Lectures in oral biology address the extracellular matrix and its role in maintenance of tissue function in health and oral diseases; wound healing and repair; bone and cartilage; TMJ Pathology; stem cells, mesenchymal stem cell therapy, and oral tissue engineering; mechanisms of oral infection/ cariology; saliva and its role in oral health maintenance; pulp biology and pathology; pain management in dental practice; and oral cancer/tumor markers. Additionally, information on the expanded knowledge of physiologic and biochemical principles involved in oral function are covered. Topics are selected to develop an appreciation of the oral cavity and its associated structures as an integral part of a larger functional unit. [Course Co-Director: Drs. David Tipton & Mustafa Dabbous; MDS Credit Hours: 1; Offered: Spring]

PDSC 824 - Dental Science Core: Biomechanics & Biomaterials

Metals, polymers, and ceramics are ubiquitous throughout the various dental disciplines. Providing a high quality of oral healthcare requires basic understanding of the physical response of these materials. To stay informed and exploit contemporary and emerging insights, dental professionals must stay current with the biomaterials literature. The purpose of this course is to gain experience in the critical reading and evaluation of the biomaterials literature. Students will learn basic biomechanical and biomaterial concepts and research techniques, while practicing critical evaluations of the dental literature using selected publications relevant to dentistry and research methodology. After completion of this course, a student should be able to successfully evaluate scientific investigations of dental materials and translate this knowledge to their clinical training with the ultimate goal of improving patient treatment and care. [Course Director: Dr. Antheunis Versluis; MDS Credit Hours: 1; Offered: Fall]
**PDSC 825 - Dental Science Core: Clinical Head & Neck Anatomy**

This course presents a detailed study of anatomic structures fundamental to dental specialty training. Emphasis is placed on functional (rather than architectural) relationships as they relate to growth, development, and clinical treatment. Participants review standard texts of anatomy and radiology, and other professional literature, in order to support specialty-specific questions/topics. Instructor will guide discussion, add and source information, present clinical case(s), sample corollaries and questions. Groups, with representatives from each dental specialty, will present a topical overview followed by clinical correlates and imagery. [Course Director: Dr. Judy McGuire; MDS Credit Hours: 1; Offered: Fall]

**PDSC 826 - Dental Science Core: Advanced Dental Applied Pharmacology**

This course is designed to teach dental postgraduate students how to integrate current knowledge of pharmacology into their clinical specialties (i.e., periodontics, prosthodontics, pediatric dentistry, endodontics, and orthodontics). A wide range of drug classifications pertinent to specialty-level dental therapy are addressed. Issues of age-related alterations in pharmacodynamics, the problems of polypharmacy, and important drug-drug interactions are illustrated and discussed. The course incorporates self-study through an online instructional instrument and correlative seminar sessions devoted to evidence-based literature reviews covering topics of particular interest to dental specialists. The course is limited to postgraduate dental students currently enrolled in dental residency programs. Participants are expected to already have a basic understanding of pharmacology and pharmacokinetics. [Course Director: Dr. Trevor Sweatman; MDS Credit Hours: 2; Offered: Spring]

**PDSC 827 - Dental Science Core: Oral Diagnostics & Oral Medicine**

This course covers basic concepts of the various oral diagnostic disciplines and adds current concepts of oral medicine and patient management of common oral and maxillofacial diseases. [Course Director: Dr. Y. Rawal; MDS Credit Hours: 2; Offered: Spring]