

Curriculum

591- Clinical Pediatric Dentistry

Diagnosis, planning of treatment, and modified operative procedures for children's teeth are practiced. The following procedures are taught: control of caries, observation and treatment of problems in occlusion, specialized treatment for dental anomalies, the management of vital exposed pulps, and the treatment of fractured teeth. The complexity and difficulty of the technical procedures are adjusted to the student's progress.

592- Seminars in Pediatric Dentistry

The most recent developments in dental research as they relate to manage/guidance of the behavior of children in the dental setting is presented. Lectures by specialists, reviews of scientific literature, and written reports are used.

593- Current Literature in Pediatric Dentistry

Students are assigned articles from current pediatric dentistry and related literature in the areas of pulp biology/therapy, restorative materials/techniques, and cariology/prevention. Students summarize selected literature before the group at each section.

594- Investigation Leading to Thesis

A problem in original research is assigned in which literature is reviewed, material collected, experiments are conducted, or data checked, and conferences arranged with the heads of the departments concerned in the investigation of the problem.

595- Seminar in Problems of Children's Health, Growth, Development, and Behavior

These seminars are a forum for an in-depth discussion of the factors that define and influence the treatment of the pediatric patient who is medically compromised, chronically ill, and/or physically or mentally challenged. Topics discussed include the role of the dental professional in a multidisciplinary professional team, protocols for referring patients, requesting and responding to consultations, understanding the family of the special patient, and discussion of common and rare pediatric conditions, disorders, and diseases that require modification delivering care in the private dental practice and hospital. Among the conditions studied are mental retardation, autism, epilepsy, childhood cancer, cardiac defects, epidermolysis bullosa, and various craniofacial syndromes. Graduate students become familiar with clinical provisions for the care of these patients through required rotations in the hospital dental clinic and departments including craniofacial anomalies, nephrology, hematology and oncology, bone marrow transplantation, and anesthesiology. Graduate students will also be trained in delivery of care and hospital wards and in the operating room.

596- Seminar in Advanced Pediatric Dentistry

A literature and lecture course that incorporates a review of the classic literature and contemporary science.

598- Standards of Care of Pediatric Dentistry

A literature, lecture, and case-based presentation course that incorporates clinical policies and guidelines from the American Academy of Pediatric Dentistry.

599- General Anesthesia for Infants and Children

Provides both lecture and practical experience in the principles and application of general anesthesia for the infant, child, and adolescent.

763- Orthodontics for the Pediatric Dentist

Orthodontic clinic is held for the graduate students in the pediatric dentistry program. Students will participate in the diagnosis and treatment of Class I and Class II malocclusions in the pediatric patient.

770-Principles of Occlusal Development

The establishment, maturation, and maintenance of dental occlusion, emphasis is placed on the relationship of occlusal development and facial growth. The etiology of malocclusion is discussed.

772- Introduction to Cephalometrics (Core Course)

An introduction to the measurement of the lateral and posteroanterior head film is provided. This laboratory and lecture course introduces the student to various methods of cephalometric analysis.

775- Introduction to Orthodontic Diagnosis

This introductory course requires the student to gather diagnostic records leading to the diagnosis and treatment planning of the orthodontic patient.

778- Management of Children with Craniofacial Anomalies

This seminar course considers the needs of children with craniofacial anomalies. The services of the plastic surgeon, oral surgeon, pediatric dentist, orthodontist, prosthodontist, pediatrician, and speech therapist are presented and discussed throughout the course and integrated into a comprehensive plan of treatment.

603- Craniofacial Development and Growth (Core Course)

This course provides the dental specialty student a broad, systemic survey of contemporary thought in the field of craniofacial development and growth. Starting with the molecular biology of the gene, the course then progresses to an examination of craniofacial morphogenesis and teratogenesis. It examines basic concepts of physical growth and region by region, the mechanisms of postnatal craniofacial growth and adaptation and their interaction with common modalities of treatment. The course ends with an overview of a variety of craniofacial anomalies, malformations, and syndromes.

610- Scientific Communications (Core Course)

This course addresses a variety of issues in scientific communications. Topics include development of research proposals, writing styles, literature review, preparation of abstracts and manuscripts, the publication process and oral presentation. Opportunities will be provided for the practice of these various forms of communications.

612- Molecular Biology in Clinical Dentistry (Core Course)

The practice of contemporary clinical dentistry will require an increasing knowledge of molecular biology, since paradigms of modern therapeutics are shifting towards the biological regeneration of tissues and pharmacogenetics. The focus of this course is to translate basic molecular biology

into the daily practice of contemporary clinical dentistry. It is a course designed for clinical dentists that is ministered by clinical dentists who are involved in research.

614- Oral Maxillofacial Pathology (Core Course)

This is a lecture-based course aiming at a thorough review of oral and maxillofacial pathology with extensive discussions on differential diagnosis and clinical management.