

Masters in Forensic Dentistry Curriculum

Year I

Term 1

PFOR 802: Introduction to Forensic Science* (2) A survey of the American Academy of Forensic Science forensic specialties and provides basic information on morgue protocols. This course provides the basic medico-legal knowledge and understanding of morgue protocols necessary to perform duties in a medical examiner's office.

STAT 537: Statistics for Research I* (3) Principles and application of statistical methodology, integrated with considerable use of major statistical computing system. Probability and probability distributions, forming and testing hypotheses using parametric and nonparametric inference methods. Matrix-based simple linear regression and correlation. (Main Campus)

PFOR 803: Radiology* (2) This course offers the fundamentals of theory and practice that constitute a working knowledge of the radiologic sciences as they apply to general and forensic dentistry. Laboratory exercises will be utilized to develop practical skills in the area of dental radiographic procedures which serve as the foundation for intraoral radiographic image acquisition and interpretation. The course will cover basic principles and anatomy revealed by intraoral and panoramic imaging as well as cone beam computed tomography (CBCT).

PDSC 820: Research Methods* (2) This course is a hybrid course, combining both lecture and on-line material. 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 research methods aspect of this course serves as an introduction to research, including methods for handling experimental data.

PFOR 801: Forensic Science Journal Club* (1) An evaluation and discussion of relevant historical and current methodology and trends in forensic dentistry and forensic science (focus choice of faculty).

10 hours

Term 2

PFOR 804: Forensic Odontology I* (3) This course is a historical and practical demonstration of the theory and practice in human forensic identification procedures and age assessment methodology. Its aim is to prepare the student to perform human identifications and age assessments in a medical examiner office setting as well as in mass disaster situations. It provides the basic medico-legal knowledge necessary to perform these duties in its application to law and the U.S. legal system.

STAT 538: Statistics for Research II* (3) General linear model as applied to multiple regression and analysis of variance. Diagnostic and influence techniques. One-way, factorial, blocking, and nested designs, preplanned versus post hoc contrasts. Random factors and repeated measures. (Main Campus)

PDSC 821: Dental Ethics* (1) Sixteen online modules available through the American College of Dentists identified as particularly relevant to postgraduate dental education and the specialty practice of dentistry will constitute this course. Following completion of online activities, students review modules with individual Postgraduate Program Directors to explore and reinforce ties between ethics concepts learned and specific applications in dental specialty practice.

PDSC 825: Clinical Head & Neck Anatomy* (3) 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' clinical correlates and imagery.

PFOR 800 MDS (Forensic Dentistry) Research and Manuscript (1) This course provides postgraduate students with the experience of engaging 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. 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.

11 hours

Year II

Term 1

PFOR 807: Dental Specialties Review* (2) This course is a review of the current dental school level standards and trends in the areas of biomaterials, endodontics, pedodontics, periodontics, prosthodontics, orthodontics, oral/maxillofacial surgery, and oral medicine. It provides basic knowledge in recognition of dental materials, restorations, prostheses, and oral pathology in order to assist the forensic dentist perform duties in application to the law and medico-legal system.

PFOR 805: Forensic Odontology II* (3) A continuation of Forensic Odontology I with emphasis on the role of the forensic dentist in pattern injury recognition, analysis and comparison; human abuse; civil litigation; court room dynamics and their role as an expert witness. It provides the basic medico-legal knowledge necessary to perform these duties in its application to law and the U.S. legal system.

PFOR 806: Forensic Science II* (3) An advanced exposure to specific forensic science protocols including autopsy and report findings, crime scene procedures including clandestine grave excavation, legal proceedings of criminal investigations, crime scene rules, corporeal evidence, expert testimony, and courtroom dynamics.

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9 hours

Year II

Term 2

PFOR 800 MDS (Forensic Dentistry) Research and Manuscript (6) This course provides postgraduate students with the experience of engaging 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. 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.

“Project Option” Thesis (6) and above courses to total 36 hours

(Project Option is defined as research performed under the direction of a faculty advisor which will culminate in an oral defense and article submission for publication in a peer reviewed journal.)

The UTGSM Forensic Dentistry Faculty recognizes that completion of the Project Option Thesis is ambitious in the proposed two (2) year Program. Masters students may elect to extend the Program to five (5) terms with three (3) hours of Project Option Thesis taken in Year 2 Term 2 and in Year 3 Term 1.