Department of Restorative Sciences

Division of Dental Anatomy
Courses offered:

**DANT 111-Dental Anatomy**
Credit: 3 (1 Lec., 4 Pract.)

Provides intensive knowledge about anatomical characteristics and landmarks of permanent anterior and pre-molar teeth dentition. Tooth nomenclature and numbering systems. Practical sessions; enable students to develop manual dexterity wax by carving of anterior and premolars.

**DANT 112-Dental Anatomy and Occlusion**
Credit: 3 (2 Lec., 2 Pract.) Prerequisite DANT 111

Offers profound information and practical skills of crown form and root morphology of permanent molars and primary dentition. The morphology of pulp cavities. Emphasis is placed on the prevention of dental caries and periodontal tissues based on external crown form and function of occluding tooth surfaces.

Division of Operative and Esthetic Dentistry
Courses offered:

**OPER 211-Preclinical Operative Dentistry I**
Credit: 2 (1 Lec., 2 Pract.) Prerequisite DANT 112

This course is designed to enable students to be familiar with the basic principles of intra-coronal cavity preparation used in the treatment of dental caries, identify and name the restorative instruments and equipment. Students are trained to carry out basic intra-coronal cavity preparations in the simulation laboratory on Typodont natural size teeth. Work position and accessibility are also simulated to those encountered clinically.

**OPER 212-Preclinical Operative Dentistry II**
Credit: 3 (1 Lec., 4 Pract.) Prerequisite OPER 211

This course endorses the development of the academic knowledge and abilities required to solve problems relevant to principles of cavity preparation for carious and non-carious lesions. Students can differentially diagnose between diseases of hard tooth structure as well as root carious lesions and propose proper treatment options. Besides, preventive dental treatment is introduced. Students are expected to master all types of cavity preparation and apply all measures of infection control in the simulation lab.
**OPER 311 - Preclinical Operative Dentistry III**  
Credit: 3 (1 Lec., 4 Pract.) Prerequisite OPER 212

This course provides in-depth knowledge and training on the application of various dental restorative materials under complete isolation using rubber dam. Also, they will be able to self-assess their practical skills.

**OPER 312 - Preclinical Operative Dentistry IV**  
Credit: 2 (1 Lec., 2 Pract.) Prerequisite OPER 311

The students are expected to develop solid academic background and practical proficiency on various direct and indirect restorative materials. Also, students are trained to perform extensive cavity preparations and fabricate composite inlay on study models.

**OPER 411 - Clinical Operative Dentistry I**  
Credit: 2 (1 Lec., 5 Pract.) Prerequisite Preclinical phase

Students are expected to implement their academic knowledge and understanding in patient assessment, diagnosis and treatment planning in clinical setting. They are supposed to complete the treatment needs for the assigned patients including simple to compound restorations using appropriate restorative materials in conservative approach. Students will apply basic standards of infection control followed in dental clinic. Dental ethics are strictly followed and recognized.

**OPER 412 - Clinical Operative Dentistry II**  
Credit: 3 (2 Lec., 5 Clin.) Prerequisite OPER 411

The course provides students with information regarding integration, application of skills and knowledge in areas of diagnosis, treatment planning and treatment of dental caries in the clinical setting. Also, students are expected to upgrade their clinical performance by discussing several tips and tricks in the literature to master the restorative treatments.

**OPER 511 - Clinical Operative Dentistry III**  
Credit: 2 (1 Lec., 5 Clin.) Prerequisite OPER 412

Students gain high skills to manage and restore more complex and multidisciplinary cases using appropriate sequential treatment plan. Moreover, it is to treat and manage esthetic problems and correlate their academic knowledge with their developing clinical skills.

**OPER 512 - Clinical Operative Dentistry IV**  
Credit: 2 (1 Lec., 5 Clin.) Prerequisite OPER 511

This course provides detailed information about fundamentals of esthetics in operative dentistry and smile design. Students are expected to implement their knowledge in clinical practice. Moreover, students develop solid background about how to manage badly broken down teeth and failed dental restorations and should be able to employ in the dental clinics.
Division of Endodontics
Courses offered:

**ENDO 311-Preclinical Endodontics I**
Credit: 3 (1 Lec., 4 Pract.) Prerequisite ORAD 212

This course orients the students to endodontic science, root canal anatomy and morphology, principles of access cavity preparation. Instruments: descriptions and uses, working length determination and basics of single root canal preparation.

**ENDO 312-Preclinical Endodontics II**
Credit: 2 (1 Lec., 3 Pract.) Prerequisite ENDO 311

Presents root canals instrumentation techniques in straight and curved root canals. Obturation materials and different obturation techniques. Introduction to diagnosis and pulp diseases.

**ENDO 411-Endodontics I**
Credit: 3 (1 Lec., 5 Clin.) Prerequisite Preclinical phase

This course emphasize on treatment planning, clinical and radiographic examination of pulp and periapical diseases; non traumatic endodontic emergencies: pretreatment, inter-appointment and post obturation emergencies; endodontic microbiology: association of bacteria and periapical disease, indications and techniques for culturing. Drugs used in endodontics.

**ENDO 412-Endodontics II**
Credit: 3 (1 Lec., 5 Clin.) Prerequisite ENDO 411

Introduces students to alternatives to lateral condensation technique, bleaching of discolored teeth; Vital pulp therapy: direct and indirect pulp capping, pulptomy and revascularization; traumatic injuries: classification and treatment; management of open apex: Apexification and apexogenesis in permanent teeth.

**ENDO 511-Endodontics III**
Credit: 3 (1 Lec., 5 Clin.) Prerequisite ENDO 412

Emphasizes on retreatment of failure; procedural accidents, prevention and management. Endodontic periodontal interrelationship; geriatric endodontics and surgical endodontics.

**ENDO 512-Endodontics IV**
Credit: 3 (1 Lec., 5 Clin.) Prerequisite ENDO 511

Provides students with clinical experiences necessary for restoration of endodontically treated teeth, effect of restoration on success and failure, effect of RCT and loss of tooth structure on strength of endodontically treated teeth, restoration of anterior, posterior and structurally compromised teeth; sonic and ultrasonic instruments in endodontics; root resorption.. and surgical endodontics.