

Dental General Science (DEGD)

DEGD 7110 Introduction to Dental Disease and Diagnosis (1 credits)

Encompasses practical and clinical correlations of foundational restorative dentistry and biomaterials knowledge. Didactic lectures cover the biologic basis of operative dentistry, classification and measurement of dental caries, cariology and epidemiology. The laboratory portion emphasizes the introduction to dental materials/armamentarium and hand skill development in the field of operative dentistry.

Level of Study: Dental

Schedule of Classes (<https://bulletin.marquette.edu/class-search/?details&code=DEGD%207110>)

DEGD 7113 Dental Anatomy and Occlusion 1 (2 credits)

Presents techniques to identify the proper name of deciduous or permanent teeth per quadrant, arch and in total. Students provide the proper or select the correct definition or description for any morphological structure presented in the sections covering general anatomy and anatomical structures. Students make applications of these terms to diagrams or situations and also perform laboratory exercises in which they duplicate the form and function of selected anterior and posterior teeth in wax as it relates to dental morphology of the teeth. Serves as the foundation for subsequent restorative dentistry courses, including the fixed prosthodontic and removable prosthodontic preclinical courses.

Level of Study: Dental

Schedule of Classes (<https://bulletin.marquette.edu/class-search/?details&code=DEGD%207113>)

DEGD 7122 Preservation and Restoration of Tooth Structure 2 (3 credits)

This didactic and laboratory course introduces first year dental students to principles and dental biomaterials necessary for the preservation and restoration of a tooth that has been adversely affected by dental disease or other processes. In laboratory settings, students prepare artificial and natural teeth for different types of dental restorations. While hand skill development is emphasized, the importance of proper diagnosis and treatment planning, including material selection is also stressed. The didactic portion of the course provides the scientific and clinical basis for laboratory projects. This is a continuation of DEGD 7113.

Level of Study: Dental

Schedule of Classes (<https://bulletin.marquette.edu/class-search/?details&code=DEGD%207122>)

DEGD 7123 Dental Anatomy and Occlusion 2 (2 credits)

Presents occlusion as part of the biomechanical system, emphasizing the mechanical relationships between anterior and posterior anatomy, anterior guidance and certain parameters of the jaw joint. Students perform laboratory exercises in which they duplicate the form and function of selected anterior and posterior teeth in wax as it relates to mandibular movement. Serves as the foundation for subsequent restorative dentistry courses, including the fixed prosthodontic and removable prosthodontic preclinical courses. Continuation of DEGD 7113.

Level of Study: Dental

Schedule of Classes (<https://bulletin.marquette.edu/class-search/?details&code=DEGD%207123>)

DEGD 7125 Preservation and Restoration of Tooth Structure 1 (3 credits)

Encompasses practical and clinical correlations of foundational restorative dentistry and biomaterials knowledge. Didactic lectures cover the biologic basis of operative dentistry, in addition to the principles of direct preparation and restoration placement for both dental amalgam and light-cured composite resin. Laboratory work emphasizes hand skill development in the area of operative dentistry for the adult patient.

Level of Study: Dental

Schedule of Classes (<https://bulletin.marquette.edu/class-search/?details&code=DEGD%207125>)

DEGD 7134 Digital Dentistry 1 (2 credits)

Designed to build on the basic principles presented in the dental anatomy and the operative dentistry course. Consists of a series of lectures and laboratory projects. Presents various aspects of digital dentistry including intraoral/laboratory scanning, computer-aided design of dental restorations. Also introduces a basic concept of indirect partial coverage restorations (inlay/onlay).

Level of Study: Dental

Schedule of Classes (<https://bulletin.marquette.edu/class-search/?details&code=DEGD%207134>)

DEGD 7135 Preservation and Restoration of Tooth Structure 2 (3 credits)

A continuation of DEGD 7125. Encompasses practical and clinical correlations of foundational restorative dentistry and biomaterials knowledge. Didactic lectures cover the biologic basis of operative dentistry, in addition to the principles of direct preparation and restoration placement for both dental amalgam, light-cured composite resins, glass ionomer-based materials and dental bonding systems. The laboratory emphasizes hand skill development in the area of operative dentistry for the adult patient.

Level of Study: Dental

Schedule of Classes (<https://bulletin.marquette.edu/class-search/?details&code=DEGD%207135>)

DEGD 7212 Preclinical Fixed Prosthodontics 1 (3 credits)

Designed to provide a comprehensive knowledge of the basic principles and techniques of fixed prosthodontics, occlusion and related dental materials with a clinical correlation to achieve competency in the fabrication of fixed single tooth supported restorations. Provides instruction and experience in the necessary clinical and laboratory procedures using conventional and digital workflows involved in the fabrication of full coverage ceramic and zirconia restorations and provisional crowns for the restoration of extensively debilitated teeth. Lays the foundation for advanced work involving fabrication of fixed prosthodontic restorations on multiple units.

Level of Study: Dental

Schedule of Classes (<https://bulletin.marquette.edu/class-search/?details&code=DEGD%207212>)

DEGD 7213 Preclinical Removable Prosthodontics 1 (4 credits)

Introduces students to the clinical and laboratory steps necessary to fabricate conventional complete dentures for a patient. Emphasis is placed on accurate diagnosis, the ability to formulate a treatment plan and understanding the clinical and laboratory aspects of each step in the complete denture fabrication process. Students are able to demonstrate cognitive skills by showing the ability to evaluate laboratory work and procedures associated with complete denture prosthesis fabrication. Students learn to demonstrate psychomotor (hand) skills through the satisfactory completion of simulation laboratory projects. Provides the basis for the treatment of edentulous patient rehabilitation. Covers the clinical and laboratory aspects of conventional complete denture treatment using lectures, required readings, and classroom, laboratory and homework assignments. Introduces students to new digital denture technology, helping them understand the differences between conventional and digital workflows.

Level of Study: Dental

Schedule of Classes (<https://bulletin.marquette.edu/class-search/?details&code=DEGD%207213>)

DEGD 7215 Preservation and Restoration of Tooth Structure 3 (3 credits)

A continuation of DEGD 7135, encompasses practical and clinical correlations of foundational restorative dentistry and biomaterials knowledge. Didactic lectures cover the biologic basis of operative dentistry, in addition to the principles of direct preparation and restoration placement for dental amalgam, composite resins, glass ionomer based materials and dental bonding systems. Laboratory work emphasizes hand skill development in the area of operative dentistry and fixed prosthodontics for the adult patient. Students are taught the fundamentals of direct and indirect preparations and restorations.

Level of Study: Dental

Schedule of Classes (<https://bulletin.marquette.edu/class-search/?details&code=DEGD%207215>)

DEGD 7222 Preclinical Fixed Prosthodontics 2 and Clinical Occlusion (3 credits)

Builds on the fundamentals taught in preclinical fixed prosthodontics. Students achieve competency in the clinical procedures involved in the fabrication of full-coverage cast metal and porcelain fused to metal restorations, and the restoration of partial edentulous areas with a fixed tooth supported restoration involving multiple units. Provides instruction and/or experience in the restoration of endodontically treated teeth, indirect esthetic restorations and laboratory communication.

Level of Study: Dental

Schedule of Classes (<https://bulletin.marquette.edu/class-search/?details&code=DEGD%207222>)

DEGD 7223 Preclinical Removable Prosthodontics 2 (2 credits)

A continuation of DEGD 7213; introduces students to the clinical and laboratory steps necessary to fabricate removable partial dentures for a patient. Students perform all the steps from diagnosis through post-placement management in a patient-simulation environment. A newly designed edentulous dentoform is fabricated to be utilized. Designed as a manikin-based course in a state-of-the-art simulation lab. Emphasis is on placement and treatment planning, selection of correct abutment teeth, analysis of occlusal relationships, surveying and design.

Level of Study: Dental

Schedule of Classes (<https://bulletin.marquette.edu/class-search/?details&code=DEGD%207223>)

DEGD 7234 Digital Dentistry 2 (2 credits)

Builds on the basic principles presented in the Preclinical Fixed and Preclinical Removable Prosthodontics courses. Consists of a series of lectures and advanced hands-on scanning exercises. Covers various aspects of digital dentistry including advanced intraoral/laboratory scanning, manufacturing of dental restorations and clinical applications of CAD/CAM technology.

Level of Study: Dental

Schedule of Classes (<https://bulletin.marquette.edu/class-search/?details&code=DEGD%207234>)

DEGD 7310 Clinical Restorative Procedures 1 (2 credits)

Builds on the material presented in the preclinical restorative dentistry courses. Includes contemporary clinical techniques for intracoronal restoration, restorative of endodontically treated teeth, treatment planning and design for fixed partial dentures and diagnosis and clinical techniques for complete and removable partial dentures. Also presents a significant applied dental biomaterials segment.

Level of Study: Dental

Schedule of Classes (<https://bulletin.marquette.edu/class-search/?details&code=DEGD%207310>)

DEGD 7320 Clinical Restorative Procedures 2 (1 credits)

A continuation of clinical restorative procedures focusing on dental materials and clinical application of these materials in procedures related to fixed and removable prosthodontics. Involves casting dental alloys, dental ceramics, dental polymers, dental cements, dental gypsum products and dental impression materials. Includes information regarding the clinical procedures for dental impressions, cementation and fabrication of ceramic veneers, resin bonded and cantilever restorations, implant-assisted removable partial dentures, implant-assisted fixed prosthesis, immediate dentures, single complete denture, repairs/relines for complete dentures and removable partial dentures.

Level of Study: Dental

Schedule of Classes (<https://bulletin.marquette.edu/class-search/?details&code=DEGD%207320>)

DEGD 7324 Prosthodontic Clinical Practicum 1 (1 credits)

Provides the student's initial experience with the disciplines of Fixed and Removable Prosthodontics. Stresses basic principles, concepts and techniques used to treat complete and partially edentulous patients. Students provide crowns, fixed partial dentures, removable partial dentures and complete dentures to patients according to their physiological, structural and psychological needs under direct supervision of prosthodontic specialists. S/U grade assessment.

Prerequisite: Successful completion of the Prosthodontics Pre-clinical laboratory courses.

Level of Study: Dental

Schedule of Classes (<https://bulletin.marquette.edu/class-search/?details&code=DEGD%207324>)

DEGD 7330 Clinical Restorative Procedures 3 (1 credits)

Third and final course in the Restorative Dentistry Clinical continuum. Focuses mainly on the management of TMD problems and occlusion in general practice.

Level of Study: Dental

Schedule of Classes (<https://bulletin.marquette.edu/class-search/?details&code=DEGD%207330>)

DEGD 7414 Senior Clinical Practicum in Prosthodontics 1 (4 credits)

Provides students with advanced experience in the disciplines of Fixed and Removable Prosthodontics. Stresses the principles, concepts and techniques used to treat complete and partially edentulous patients. Students provide appropriate prosthodontic care to patients according to the patient's physiological, structural and psychological needs under direct supervision of prosthodontic specialists. S/U grade assessment.

Prerequisite: Satisfactory completion of first three years of dental curriculum or equiv.

Level of Study: Dental

Schedule of Classes (<https://bulletin.marquette.edu/class-search/?details&code=DEGD%207414>)

DEGD 7424 Senior Clinical Practicum in Prosthodontics 2 (1-4 credits)

Continuation of DEGD 7414. Provides the students with additional advanced experience in the disciplines of Fixed and Removable Prosthodontics. Stresses the principles, concepts and techniques used to treat complete and partially edentulous patients. Students provide appropriate prosthodontic care to patients according to the patient's physiological, structural and psychological needs under direct supervision of prosthodontic specialists. S/U grade assessment.

Prerequisite: Satisfactory completion of first three years of dental curriculum or its equiv.

Level of Study: Dental

Schedule of Classes (<https://bulletin.marquette.edu/class-search/?details&code=DEGD%207424>)

DEGD 7434 Senior Honors Clinical Practicum in Digital Dentistry and Radiology (1 credits)

Advanced course for top-performing D4 students, emphasizing advanced digital dentistry technologies and advanced radiology. Includes high-level lectures on modern digital practices such as intraoral scanning, 3D printing, and CAD/CAM systems, with a special focus on Cone Beam Computed Tomography (CBCT). Students gain hands-on clinical experience at the Technological Innovation Center, applying their knowledge to real patient cases. In addition, students participate in original research projects guided by faculty mentors, which involve detailed study and application of digital dentistry and advanced radiology in dental procedures. Augmented with guest lectures from experts and encourages collaboration on interdisciplinary projects. Equips students with the skills to become pioneers in digital dentistry and radiology. Consent required.

Level of Study: Dental

Schedule of Classes (<https://bulletin.marquette.edu/class-search/?details&code=DEGD%207434>)