Endodontics, MS

Dean: William K. Lobb, D.D.S., M.S., M.P.H.

School of Dentistry website (http://www.marquette.edu/dentistry/)

Degrees Offered

Master of Science degrees in five disciplines

Graduate Program Overview

The School of Dentistry offers graduate programs in dental biomaterials, endodontics, orthodontics, periodontics and prosthodontics. These programs can be modified to allow conjoint interdisciplinary graduate work to be undertaken in any other unit of the university, and a master of science or doctoral degree can be obtained through an appropriate graduate degree-granting department of the university or through the interdisciplinary Ph.D. program. Faculty for each dental graduate program are drawn both from full-time Dental School faculty and from practicing specialists in the field who serve as adjunct faculty (part-time faculty).

The full-time dental biomaterials program is a non-accredited 2-year program leading to a master's degree.

The master of science programs in endodontics, orthodontics, periodontics and prosthodontics are clinically and research based, offering specialty certification with the master's degree. Graduates are prepared to handle complex clinical cases and to work effectively with both general dentists and other dental specialists. Full-time programs in endodontics is 24-months, orthodontics is 26.5-months, and periodontics and prosthodontics are 36 months each. Tuition for the specialty programs is charged at a flat rate as per the Tuition, Fees and Housing section of this bulletin. Any applicable instrument or service fees are charged during the fall term each year.

Course work requirements for each graduate program are determined by the director of the specific program in accordance with accreditation standards. Courses include study in basic health sciences, dental biomaterials, research methodology, clinical dental specialties and other related science disciplines, as appropriate.

Non-Degree Students in Dentistry Courses

Normally, students with non-degree status are not permitted to enroll in dentistry courses. Graduate students from approved dental residency programs may enroll in any dental graduate courses but need prior approval from the School of Dentistry's associate dean for research and graduate studies.

Dental Graduate Didactic Core Curriculum

The Dental Graduate Didactic Core Curriculum (DENT 6001 Dental Graduate Didactic Core Curriculum 1-DENT 6003 Dental Graduate Didactic Core Curriculum 3, DENT 6953 Seminar in Interdisciplinary Dentistry) is designed to cover all didactic content areas applicable to the advanced practice of general dentistry and to each of the specialty areas of dentistry. The content areas are sequenced to present:

- 1. material of interest for the general dentist seeking additional training beyond predoctoral dental education
- 2. material of interest for each of the dental specialty areas
- 3. advanced material of interest for those intending to pursue academic/research careers.

The presentations are organized to emphasize the overlapping nature of scientific foundational material and each of the dental specialties. Additionally, the presentations are designed to accommodate those students entering the program immediately after undergraduate education as well as those students returning from varying years of private dental practice. The course of study is comprised of yearly repeating content cycles (sections) within the summer session and fall/spring terms. The Dental Graduate Didactic Core Curriculum (DENT 6001 Dental Graduate Didactic Core Curriculum 1-DENT 6003 Dental Graduate Didactic Core Curriculum 3) is offered from 8-9 a.m. Monday–Friday. Beyond the required classes for their program, students may register for as many DENT 6001 Dental Graduate Didactic Core Curriculum 1-DENT 6003 Dental Graduate Didactic Core Curriculum 3 sections as they wish during their graduate education. The sections covered in DENT 6001 Dental Graduate Didactic Core Curriculum 1-DENT 6003 Dental Graduate Didactic Core Curriculum 3 are listed below and a detailed description of section content is maintained in the form of comprehensive section syllabi available in the School of Dentistry office of the associate dean for research and graduate studies. Not all specialty/certificate programs are required to take every content area section of the core, but only those which are required by their CODA standards. Students may register repeatedly for any grading period containing material of interest and are free to rotate in and out of the courses as desired to obtain sections containing such material. Repeated registration for DENT 6001 Dental Graduate Didactic Core Curriculum 3 is differentiated through the use of section numbers that appear on official transcripts. Examinations and credit hours are variable and are determined by selected course sections.

The content area sections covered annually by the Graduate Didactic Core Curriculum are as follows:

1. Emergency Medicine – A comprehensive review of the pathophysiology and treatment of the most common medical emergency states. Emphasis is placed on prevention, diagnosis, and patient stabilization.

- 2. **Dental Biomaterials** Physical, mechanical, chemical, biologic behavior, properties, characterization, and testing of dental biomaterials. Biocompatibility of dental materials as well as advanced clinical concepts for general dentistry.
- 3. Prosthodontic Biomaterials Advanced biomaterials and clinical concepts specific for prosthodontics.
- 4. Endodontic Biomaterials Advanced biomaterials and clinical concepts specific for endodontics.
- 5. Orthodontic Biomaterials Advanced biomaterials and clinical concepts specific for orthodontics.
- 6. Interdisciplinary Dentistry Endodontic techniques as they relate to other areas of dental practice. Structure/function of the periodontium. Periodontal disease and therapy as it relates to all other aspects of dentistry emphasizing surgical approaches, occlusion, splinting, and periodontic/ endodontic pathosis. A comprehensive discussion of prosthodontic procedures as they relate to other areas of dental practice emphasizing removable complete/partial dentures, fixed partial dentures, maxillofacial prosthetics and implants. A comprehensive discussion of orthodontic techniques as they relate to other areas of dental practice emphasizing cephalometrics, biomechanics of tooth movement, and tissue response to orthodontic procedures.
- Technology and Informatics A review of the current computer-based technologies available for independent self-directed learning, research, teaching approaches, patient care and professional communication. Emphasis is placed on biomedical applications and laboratory exercises are included to reinforce didactic concepts.
- 8. Craniofacial Growth and Development Dental and facial growth and development from the embryonic period through adult life.
- Advanced Oral Pathology Principles and concepts of histopathology presented through review and microscopic study of surgical material and biopsy specimens of craniofacial lesions emphasizing pathogenesis of disease and histologic diagnosis. Laboratory exercises are included to reinforce didactic concepts.
- Head/Neck Anatomy and Osteology Systemic and regional approaches to the study of head/neck anatomy. Emphasis is placed on vasculature, musculature, innervation, lymphatic drainage, and morphology/anatomical landmarks of the various bones of the head/neck. Laboratory dissection and demonstration reinforce didactic concepts.
- Pharmacology and Pain/Anxiety Management The pharmacology of drugs commonly used for treatment of non-dental conditions that may
 affect the delivery of dental care either through direct action or through interaction with drugs commonly used in dental care. Emphasizes the
 neurophysiology of pain, control of pain by various classes of pharmacologic agents, and the behavioral management of dental fears.
- 12. Research Methodology/Design An introduction to the research process. The scientific method is discussed. Emphasis is placed on selection of a suitable research topic, research ethics, simple study designs, and thesis preparation.
- Biostatistics An introduction to the various aspects of biostatistics. Emphasis is placed on data display and summary, summary statistics, populations and samples, probability and confidence intervals, power, type I and II errors, diagnostic tests, correlation and regression, and various test statistics.
- Oral Microbiology, Infection, and Immunology Inflammation, immunity, and oral microbiology emphasizing the mechanisms of microbial colonization and invasion, host response and pathogenesis of dental diseases. Molecular techniques used in diagnostics are also covered in these sections.
- 15. Biochemistry and Physiology of Mineralized Tissues The chemical and cellular constituents of mineralized tissues and modern methods for their study. Emphasis is placed on bone physiology and metabolism.
- 16. Radiology and Imaging Advanced concepts in radiology and modern imaging techniques applied to all aspects of dentistry.
- 17. Craniomandibular Function, Disorders and Treatment of the TMD Patient- Neuromuscular and occlusal physiology, diagnosis, and treatment of functional disturbances involving the craniofacial region.
- 18. **Temporomandibular Disorders in Orthodontics** Neuromuscular and occlusal physiology, diagnosis, and treatment of functional disturbances involving the temporomandibular articulation specific to orthodontics.
- 19. Oral Pathophysiology Current topics in salivary function/dysfunction, gingival crevicular fluid, de- and remineralization, and dentin sensitivity, and taste.
- 20. Pediatrics The special management and treatment concerns of pediatric patients emphasizing prevention and trauma.
- 21. Inflammation and Wound Healing Current concepts in the cell/molecular biology of inflammation and wound healing emphasizing predictable manipulation of the wound environment.
- 22. Speech Pathology A review of the various speech pathologies emphasizing the interdisciplinary and integrative nature of treatment involving the dental professional.
- Public Health/Public Service The epidemiology of dental disease and access to care emphasizing the role of the dental professional in community health. A review of current local, state and federal programs for dental services.
- 24. **Practice Management** A review of the current business aspects of dental practice for all aspects of dental specialties, with special emphasis on solo practice, group practice, dental clinics, and community health centers/institutionalized care.
- Practice Law/ Jurisprudence A review of the current legal aspects of dental practice for all areas of dentistry emphasizing patient care, infection control and employee relations.
- 26. Ethics A review of various ethical dilemmas in practice settings including case studies for group discussion.
- 27. **Implantology** Basic concepts for implant placement including review of relevant maxillary/mandibular anatomy, evaluation and screening of patients, augmentation considerations, surgical techniques, surgical complications/management and relevant emergency procedures.
- Restorative Treatment Planning Principles and concepts of complex Perio-prosthesis and implant prosthesis through case-based presentations with supporting literature.

29. Tissue Engineering - Basic concepts in scaffold generation, stem cell and growth factor seeding for craniofacial defects with exposure to the tissue engineering laboratory.

Endodontics Master of Science

A student in the endodontics program must complete a minimum of 30 credit hours of course work, including four credit hours in clinical practice per academic year (a total of eight credit hours for each program) and six credit hours of thesis work. The remaining credits may be divided among courses specific to the specialty discipline and elective courses. The endodontics program requires two full years of patient care. Satisfactory completion of the didactic and clinical components of the program results in a specialty certification through the Marquette University Graduate School. Satisfactory completion of the research component of the programs results in a master's degree through the Marquette University Graduate School.

Master of science degree applicants may only be admitted to the program under Plan A, which has two options: the traditional thesis option and the publication option. In partial fulfillment of the requirements to obtain the master of science degree, all candidates must complete the relevant sections of the graduate core curriculum with a grade of B- or above, conduct a research project on an appropriate clinical or basic science topic, and successfully defend their research project. Format and content of the public defense is determined by the advisory committee.

Candidates are encouraged to pursue research that originates in their chosen dental specialty. Research projects are selected in consultation with the graduate program director. Where possible, graduate students are encouraged to do clinically relevant research.

Graduate students who choose the thesis option will have their research and thesis preparation supervised by a primary adviser and approved by a thesis advisory committee that consists of at least three members. The publication option, in addition, culminates in the acceptance of a first author. original, peer-reviewed publication based on a research project. Selection of the publication option requires completion of a traditional thesis in the event the submitted manuscript is not accepted by the submission deadline listed in this bulletin. All graduate students are required to present their research formally.

Endodontics

TYPICAL TWO-YEAR PROFESSIONAL PHASE - Master of Science

Code	Title	Hours
FIRST YEAR		
Summer Term		
ENDO 6000	Clinical Patient Care-Endodontics	
ENDO 6011	Advanced Endodontology 1	
DENT 6001	Dental Graduate Didactic Core Curriculum 1 (Dental Biomaterials)	
DENT 6001	Dental Graduate Didactic Core Curriculum 1 (Emergency Medicine)	
DENT 6001	Dental Graduate Didactic Core Curriculum 1 (Endodontic Biomaterials)	
DENT 6001	Dental Graduate Didactic Core Curriculum 1 (Management of Myofascial Pain)	
DENT 6001	Dental Graduate Didactic Core Curriculum 1 (Research Methods and Design)	
DENT 6980	Teaching Experience in Dentistry	
DENT 6999	Master's Thesis (1 Credit)	
Fall Term		
ENDO 6000	Clinical Patient Care-Endodontics	
ENDO 6012	Pulp Biology	
ENDO 6301	Endodontics Clinic and Case Review 1	
ENDO 6371	Endodontics Literature and Book Review 1	
DENT 6002	Dental Graduate Didactic Core Curriculum 2 (Advanced Oral Pathology)	
DENT 6002	Dental Graduate Didactic Core Curriculum 2 (Biostatistics)	
DENT 6002	Dental Graduate Didactic Core Curriculum 2 (Ethics)	
DENT 6002	Dental Graduate Didactic Core Curriculum 2 (Oral Microbiology (Odd Years) or Immunology (Even Years))	
DENT 6002	Dental Graduate Didactic Core Curriculum 2 (Pharmacology and Pain Management)	
DENT 6002	Dental Graduate Didactic Core Curriculum 2 (Radiology and Imaging)	
DENT 6002	Dental Graduate Didactic Core Curriculum 2 (Technology/Informatics)	
DENT 6003	Dental Graduate Didactic Core Curriculum 3 (Practice Management)	
DENT 6953	Seminar in Interdisciplinary Dentistry	
DENT 6999	Master's Thesis (1 Credit)	
Spring Term		

ENDO 6000	Clinical Patient Care-Endodontics
ENDO 6013	Advanced Endodontology 2
ENDO 6302	Endodontics Clinic and Case Review 2
ENDO 6372	Endodontics Literature and Book Review 2
DENT 6003	Dental Graduate Didactic Core Curriculum 3 (Head and Neck Anatomy)
DENT 6003	Dental Graduate Didactic Core Curriculum 3 (Implantology)
DENT 6003	Dental Graduate Didactic Core Curriculum 3 (Inflammation/Wound Healing)
DENT 6003	Dental Graduate Didactic Core Curriculum 3 (Mineralized Tissues)
DENT 6003	Dental Graduate Didactic Core Curriculum 3 (Oral Physiology)
DENT 6003	Dental Graduate Didactic Core Curriculum 3 (Pediatric Dentistry)
DENT 6003	Dental Graduate Didactic Core Curriculum 3 (Practice Law/Jurisprudence)
DENT 6953	Seminar in Interdisciplinary Dentistry
DENT 6999	Master's Thesis (1 Credit)
SECOND YEAR	
Summer Term	
ENDO 6000	Clinical Patient Care-Endodontics
DENT 6999	Master's Thesis (1 Credit)
Fall Term	
ENDO 6000	Clinical Patient Care-Endodontics
ENDO 6303	Endodontics Clinic and Case Review 3
ENDO 6373	Endodontics Literature and Book Review 3
DENT 6002	Dental Graduate Didactic Core Curriculum 2 (Oral Microbiology (Odd Years) or Immunology (Even Years))
DENT 6953	Seminar in Interdisciplinary Dentistry
DENT 6999	Master's Thesis (1 Credit)
Spring Term	
ENDO 6000	Clinical Patient Care-Endodontics
ENDO 6304	Endodontics Clinic and Case Review 4
ENDO 6374	Endodontics Literature and Book Review 4
DENT 6953	Seminar in Interdisciplinary Dentistry
DENT 6999	Master's Thesis (1 Credit)

University Policies

- Academic Censure Graduate School (https://bulletin.marquette.edu/policies/academic-censure/graduate/)
- Academic Integrity (https://bulletin.marquette.edu/policies/academic-integrity/)
- Academic Misconduct (https://bulletin.marquette.edu/policies/academic-misconduct-policy/)
- · Academic Program Definitions (https://bulletin.marquette.edu/policies/academic-programs-defined/)
- Accelerated Degree Programs (https://bulletin.marquette.edu/policies/accelerated-degree-programs/)
- Attendance Graduate School (https://bulletin.marquette.edu/policies/attendance/graduate/)
- Awarding Diplomas and Certificates (https://bulletin.marquette.edu/policies/awarding-diplomas-certificates/)
- Background Checks, Drug Testing (https://bulletin.marquette.edu/policies/background-checks-drug-testing/)
- Class Rank (https://bulletin.marquette.edu/policies/class-rank/)
- · Commencement (https://bulletin.marquette.edu/policies/commencement/)
- · Conferral of Degrees and Certificates (https://bulletin.marquette.edu/policies/conferral-degrees-certificates/)
- · Course Levels (https://bulletin.marquette.edu/policies/course-levels/)
- Credit Hour (https://bulletin.marquette.edu/policies/credit/)
- Credit Load Graduate School (https://bulletin.marquette.edu/policies/credit-load/graduate/)
- Faculty Grading (https://bulletin.marquette.edu/policies/faculty-grading/)
- Family Education Rights and Privacy Act-FERPA (https://bulletin.marquette.edu/policies/ferpa/)
- Grade Appeals (https://bulletin.marquette.edu/policies/grade-appeals/)
- Grading System Graduate School and Graduate School of Management (https://bulletin.marquette.edu/policies/grading-system/graduatemanagement/)

- · Graduation Graduate School (https://bulletin.marquette.edu/policies/graduation/graduate/)
- Immunization and Tuberculosis Screening Requirements (https://bulletin.marquette.edu/policies/immunization-and-tuberculosis-screening/)
- Last Date of Attendance/Activity (https://bulletin.marquette.edu/policies/last-dateof-attendance-activity/)
- Military Call to Active Duty or Training (https://bulletin.marquette.edu/policies/militarycall-active-duty-training/)
- Registration Graduate School (https://bulletin.marquette.edu/policies/registration/graduate/)
- Repeated Courses Graduate School (https://bulletin.marquette.edu/policies/repeated-courses/graduate/)
- Student Data Use and Privacy (https://bulletin.marquette.edu/policies/student-data-use-privacy/)
- Transcripts-Official (https://bulletin.marquette.edu/policies/transcripts-official/)
- Transfer Course Credit Graduate School (https://bulletin.marquette.edu/policies/transfer-course-credit-policy/graduate/)
- Withdrawal Graduate School (https://bulletin.marquette.edu/policies/withdrawals/graduate/)

Graduate School Policies

- Academic Performance (https://bulletin.marquette.edu/graduate/policies/academic-performance/)
- Academic Programs Overview (https://bulletin.marquette.edu/graduate/policies/academic-programs-overview/)
- · Advising (https://bulletin.marquette.edu/graduate/policies/advising/)
- Assistantships and Fellowships (https://bulletin.marquette.edu/graduate/policies/assistantships-andfellowships/)
- Certificate Concurrent Enrollment (https://bulletin.marquette.edu/graduate/policies/certificate-concurrent-enrollment/)
- Conduct (https://bulletin.marquette.edu/graduate/policies/conduct/)
- Confidentiality of Proprietary Information (https://bulletin.marquette.edu/graduate/policies/confidentiality-proprietary-information/)
- · Continuous Enrollment (https://bulletin.marquette.edu/graduate/policies/continuous-enrollment/)
- · Courses and Prerequisites (https://bulletin.marquette.edu/graduate/policies/courses-prerequisites/)
- Cross-listed Courses (https://bulletin.marquette.edu/graduate/policies/cross-listed-courses/)
- Deadlines (https://bulletin.marquette.edu/graduate/policies/deadlines/)
- · Graduate Credit (https://bulletin.marquette.edu/graduate/policies/graduate-credit/)
- · Graduate School Policies (https://bulletin.marquette.edu/graduate/policies/)
- Independent Study (https://bulletin.marquette.edu/graduate/policies/independent-study/)
- Intellectual Property (https://bulletin.marquette.edu/graduate/policies/intellectual-property/)
- Research Involving Humans, Animals, Radioisotopes or Recombinant DNA/Transgenic Organisms (https://bulletin.marquette.edu/graduate/policies/ research-involving-humans-animals-radioisotopes-recombinant-dnatransgenic-organisms/)
- Temporary Withdrawal from Graduate Program (https://bulletin.marquette.edu/graduate/policies/temporary-withdrawal-graduate-program/)
- Time Limitations (https://bulletin.marquette.edu/graduate/policies/time-limitations/)
- · Working with Minors (https://bulletin.marquette.edu/graduate/policies/working-minors/)

Graduate Dental Programs

- Dental Biomaterials, MS (https://bulletin.marquette.edu/graduate/dental-biomaterials-ms/)
- Endodontics, MS (p. 1)
- · Orthodontics, MS (https://bulletin.marquette.edu/graduate/orthodontics-ms/)
- · Periodontics, MS (https://bulletin.marquette.edu/graduate/periodontics-ms/)
- Prosthodontics, MS (https://bulletin.marquette.edu/graduate/prosthodontics-ms/)

DENT 6001 Dental Graduate Didactic Core Curriculum 1 (0.5-1 credits)

The Dental Graduate Didactic Core Curriculum (DENT 6001-6003) is designed to cover all didactic content areas applicable to the advanced practice of general dentistry and to each of the specialty areas of dentistry. The content areas are sequenced to present: material of interest for the general dentist seeking additional training beyond predoctoral dental education; material of interest for each of the dental specialty areas; and advanced material of interest for those intending to pursue academic/research careers.

Level of Study: Graduate

Last four terms offered: 2023 Summer Term, 2022 Summer Term, 2021 Summer Term, 2020 Summer Term Schedule of Classes (https://bulletin.marquette.edu/class-search/?details&code=DENT%206001)

DENT 6002 Dental Graduate Didactic Core Curriculum 2 (0.5-1 credits)

The Dental Graduate Didactic Core Curriculum (DENT 6001-6003) is designed to cover all didactic content areas applicable to the advanced practice of general dentistry and to each of the specialty areas of dentistry. The content areas are sequenced to present: material of interest for the general dentist seeking additional training beyond predoctoral dental education; material of interest for each of the dental specialty areas; and advanced material of interest for those intending to pursue academic/research careers.

Level of Study: Graduate

Last four terms offered: 2022 Fall Term, 2021 Fall Term, 2020 Fall Term, 2019 Fall Term

Schedule of Classes (https://bulletin.marquette.edu/class-search/?details&code=DENT%206002)

DENT 6003 Dental Graduate Didactic Core Curriculum 3 (0.5-1 credits)

The Dental Graduate Didactic Core Curriculum (DENT 6001-6003) is designed to cover all didactic content areas applicable to the advanced practice of general dentistry and to each of the specialty areas of dentistry. The content areas are sequenced to present: material of interest for the general dentist seeking additional training beyond predoctoral dental education; material of interest for each of the dental specialty areas; and advanced material of interest for those intending to pursue academic/research careers.

Level of Study: Graduate

Last four terms offered: 2023 Spring Term, 2022 Fall Term, 2022 Spring Term, 2021 Spring Term Schedule of Classes (https://bulletin.marguette.edu/class-search/?details&code=DENT%206003)

DENT 6930 Special Topics in Dentistry (1-4 credits)

In consultation with the Office of the Registrar, may be offered as an experimental course to students, in order to evaluate and determine if a course should be incorporated into the regular curriculum of a program, or can also be used for courses that are in the curriculum approval process pipeline; however, are not yet officially approved; therefore cannot appear in the Bulletin. Once the same course has been offered twice as a Special Topic, it cannot be offered again until it moves through the curriculum approval process and is approved with a regular curriculum course number or one of the standard numbers below. This course number may not be used for a single student studying a particular subject matter. *Level of Study:* Graduate

Last four terms offered: 2023 Spring Term, 2022 Fall Term, 2022 Spring Term, 2021 Fall Term Schedule of Classes (https://bulletin.marguette.edu/class-search/?details&code=DENT%206930)

DENT 6953 Seminar in Interdisciplinary Dentistry (1 credits)

Provides training in the discipline of clinical dentistry using a seminar format of content delivery. The postgraduate students learn the importance of interdisciplinary treatment of patients and enhance communication between all specialties in the Dental School. Focuses on case presentation skills, diagnostic and therapeutic decision making, outcomes assessment and knowledge of the relevant literature.

Level of Study: Graduate

Last four terms offered: 2023 Spring Term, 2022 Fall Term, 2022 Spring Term, 2021 Fall Term Schedule of Classes (https://bulletin.marquette.edu/class-search/?details&code=DENT%206953)

DENT 6980 Teaching Experience in Dentistry (1 credits)

Assigned teaching duties in the didactic, preclinical, and clinical dental sciences.

Level of Study: Graduate

Last four terms offered: 2023 Summer Term, 2022 Summer Term, 2021 Summer Term, 2020 Summer Term Schedule of Classes (https://bulletin.marquette.edu/class-search/?details&code=DENT%206980)

DENT 6995 Independent Study in Dentistry (1-3 credits)

Faculty-supervised, independent study/research of a specific area or topic in Dentistry.

Prerequisite: Cons. of instr.

Level of Study: Graduate

Last four terms offered: 2009 Spring Term, 2008 Spring Term, 2007 Fall Term, 2007 Spring Term Schedule of Classes (https://bulletin.marquette.edu/class-search/?details&code=DENT%206995)

DENT 6999 Master's Thesis (1-6 credits)

Credit hours assigned to thesis preparation and scholarship. S/U grade assessment.

Level of Study: Graduate

Last four terms offered: 2023 Summer Term, 2023 Spring Term, 2022 Fall Term, 2022 Summer Term Schedule of Classes (https://bulletin.marguette.edu/class-search/?details&code=DENT%206999)

DENT 9970 Graduate Standing Continuation: Less than Half-Time (0 credits)

Fee. SNC/UNC grade assessment. Designated as less than half-time status only, cannot be used in conjunction with other courses, and does not qualify students for financial aid or loan deferment.

Prerequisite: Cons. of dept. ch.

Level of Study: Graduate

Last four terms offered: 2013 Summer Term, 2007 Fall Term

Schedule of Classes (https://bulletin.marquette.edu/class-search/?details&code=DENT%209970)

DENT 9994 Master's Thesis Continuation: Less than Half-Time (0 credits)

Fee. SNC/UNC grade assessment. Allows a student to be considered the equivalent of less than half-time status. Requires that the student is working less than 12 hours per week on their master's thesis. All six thesis credits required for the degree should be completed before registering for non-credit Master's Thesis Continuation.

Prerequisite: Cons. of dept. ch.

Level of Study: Graduate

Last four terms offered: 2012 Spring Term, 2010 Summer Term, 2010 Spring Term, 2009 Summer Term Schedule of Classes (https://bulletin.marquette.edu/class-search/?details&code=DENT%209994)

DENT 9995 Master's Thesis Continuation: Half-Time (0 credits)

Fee. SNC/UNC grade assessment. Allows a student to be considered the equivalent of half-time status. Requires that the student is working more than 12 to less than 20 hours per week on their master's thesis. All six thesis credits required for the degree should be completed before registering for non-credit Master's Thesis Continuation.

Prerequisite: Cons. of dept. ch.

Level of Study: Graduate

Last four terms offered: 2008 Spring Term, 2007 Fall Term

Schedule of Classes (https://bulletin.marquette.edu/class-search/?details&code=DENT%209995)

DENT 9996 Master's Thesis Continuation: Full-Time (0 credits)

Fee. SNC/UNC grade assessment. Allows a student to be considered the equivalent of full-time status. Requires that the student is working 20 hours or more per week on their master's thesis. All six thesis credits required for the degree should be completed before registering for non-credit Master's Thesis Continuation.

Prerequisite: Cons. of dept. ch.

Level of Study: Graduate

Last four terms offered: 2014 Summer Term, 2008 Spring Term, 2007 Fall Term

Schedule of Classes (https://bulletin.marquette.edu/class-search/?details&code=DENT%209996)

ENDO 6000 Clinical Patient Care-Endodontics (1-7 credits)

Designed to account for time dental graduate residents spend providing patient care. Ranges from 1-7 credit hours per term. S/U grade assessment. *Level of Study:* Graduate

Last four terms offered: 2023 Summer Term, 2023 Spring Term, 2022 Fall Term, 2022 Summer Term

Schedule of Classes (https://bulletin.marquette.edu/class-search/?details&code=ENDO%206000)

ENDO 6011 Advanced Endodontology 1 (1 credits)

Advanced endodontics follows in sequence from pulp biology and covers diagnostic and treatment aspects of endodontology.

Prerequisite: Admitted to Endodontics program.

Level of Study: Graduate

Last four terms offered: 2023 Summer Term, 2022 Summer Term, 2021 Summer Term, 2020 Fall Term Schedule of Classes (https://bulletin.marquette.edu/class-search/?details&code=ENDO%206011)

ENDO 6012 Pulp Biology (1 credits)

Pulp biology is considered from the physiologic, anatomic, cellular and immunologic aspects. Also covers, in detail, neural and vascular components of the pulp tissues.

Prerequisite: Admitted to Endodontics program.

Level of Study: Graduate

Last four terms offered: 2022 Fall Term, 2021 Fall Term, 2020 Fall Term Schedule of Classes (https://bulletin.marquette.edu/class-search/?details&code=ENDO%206012)

ENDO 6013 Advanced Endodontology 2 (1 credits)

Covers advanced instrumentation in endodontic therapy as well as pulpal regeneration techniques.

Prerequisite: Admitted to Endodontics program and ENDO 6011.

Level of Study: Graduate

Last four terms offered: 2023 Spring Term, 2022 Spring Term

Schedule of Classes (https://bulletin.marquette.edu/class-search/?details&code=ENDO%206013)

ENDO 6301 Endodontics Clinic and Case Review 1 (4 credits)

Complete diagnosis and treatment of clinic cases using all available diagnostic aids and treatment modalities. Endodontic surgical cases are performed. Clinical cases are presented for discussion.

Prerequisite: Admitted to Endodontics program.

Level of Study: Graduate

Last four terms offered: 2022 Fall Term, 2021 Fall Term, 2020 Fall Term, 2019 Fall Term

Schedule of Classes (https://bulletin.marquette.edu/class-search/?details&code=ENDO%206301)

ENDO 6302 Endodontics Clinic and Case Review 2 (4 credits)

Continuation in clinic and case review series. Complete diagnosis and treatment of clinic cases using all available diagnostic aids and treatment modalities. Endodontic surgical cases are performed. Clinical cases are presented for discussion.

Prerequisite: Admitted to Endodontics program.

Level of Study: Graduate

Last four terms offered: 2023 Spring Term, 2022 Spring Term, 2021 Spring Term, 2020 Spring Term Schedule of Classes (https://bulletin.marquette.edu/class-search/?details&code=ENDO%206302)

ENDO 6303 Endodontics Clinic and Case Review 3 (6 credits)

Continuation in clinic and case review series. Complete diagnosis and treatment of clinic cases using all available diagnostic aids and treatment modalities. Endodontic surgical cases are performed. Clinical cases are presented for discussion.

Prerequisite: Admitted to Endodontics program.

Level of Study: Graduate

Last four terms offered: 2022 Fall Term, 2021 Fall Term, 2020 Fall Term, 2019 Fall Term Schedule of Classes (https://bulletin.marquette.edu/class-search/?details&code=ENDO%206303)

ENDO 6304 Endodontics Clinic and Case Review 4 (6 credits)

Continuation in clinic and case review series. Complete diagnosis and treatment of clinic cases using all available diagnostic aids and treatment modalities. Endodontic surgical cases are performed. Clinical cases are presented for discussion.

Prerequisite: Admitted to Endodontics program.

Level of Study: Graduate

Last four terms offered: 2023 Spring Term, 2022 Spring Term, 2021 Spring Term, 2020 Spring Term Schedule of Classes (https://bulletin.marguette.edu/class-search/?details&code=ENDO%206304)

ENDO 6371 Endodontics Literature and Book Review 1 (1 credits)

Discussion of current and classic literature, library research; review current textbooks, conventions and dental meetings. Some lectures by graduate students relating endodontics to the other disciplines, systemic health and potential areas of research.

Prerequisite: Admitted to Endodontics program.

Level of Study: Graduate

Last four terms offered: 2022 Fall Term, 2021 Fall Term, 2020 Fall Term, 2019 Fall Term

Schedule of Classes (https://bulletin.marquette.edu/class-search/?details&code=ENDO%206371)

ENDO 6372 Endodontics Literature and Book Review 2 (1 credits)

Continuation in literature and book review series. Discussion of current and classic literature, library research; review current textbooks, conventions and dental meetings. Some lectures by graduate students relating endodontics to the other disciplines, systemic health and potential areas of research. *Prerequisite:* Admitted to Endodontics program.

Level of Study: Graduate

Last four terms offered: 2023 Spring Term, 2022 Spring Term, 2021 Spring Term, 2020 Spring Term Schedule of Classes (https://bulletin.marquette.edu/class-search/?details&code=ENDO%206372)

ENDO 6373 Endodontics Literature and Book Review 3 (1 credits)

Continuation in literature and book review series. Discussion of current and classic literature, library research; review current textbooks, conventions and dental meetings. Some lectures by graduate students relating endodontics to the other disciplines, systemic health and potential areas of research. *Prerequisite:* Admitted to Endodontics program.

Level of Study: Graduate

Last four terms offered: 2022 Fall Term, 2021 Fall Term, 2020 Fall Term, 2019 Fall Term

Schedule of Classes (https://bulletin.marquette.edu/class-search/?details&code=ENDO%206373)

ENDO 6374 Endodontics Literature and Book Review 4 (1 credits)

Continuation in literature and book review series. Discussion of current and classic literature, library research; review current textbooks, conventions and dental meetings. Some lectures by graduate students relating endodontics to the other disciplines, systemic health and potential areas of research. *Prerequisite:* Admitted to Endodontics program.

Level of Study: Graduate

Last four terms offered: 2023 Spring Term, 2022 Spring Term, 2021 Spring Term, 2020 Spring Term Schedule of Classes (https://bulletin.marquette.edu/class-search/?details&code=ENDO%206374)