

# School of Dentistry (DENT)

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Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

**DENT D001. 1st Yr Dental Sch Prog. 12 Credit Hours.**

**Repeatability:** This course may not be repeated for additional credits.

**DENT D002. 2nd Yr Dental Sch Prog. 12 Credit Hours.**

**Repeatability:** This course may not be repeated for additional credits.

**DENT D003. 3rd Yr Dental Sch Prog. 12 Credit Hours.**

**Repeatability:** This course may not be repeated for additional credits.

**DENT D004. 4th Yr Dental Sch Prog. 12 Credit Hours.**

**Repeatability:** This course may not be repeated for additional credits.

**DENT D100. Biochemistry. 4 Credit Hours.**

The goal of Biochemistry is to permit students to understand human biochemistry in health and disease. The student must become familiar with the basic biochemical pathways and the structures of important metabolites since this basic information underlies discussions of biochemical regulation throughout the course. Some emphasis is given to nutritional concerns in dental disease and treatment.

**Repeatability:** This course may not be repeated for additional credits.

**DENT D101. General and Oral Histology. 4 Credit Hours.**

The dental histology course will be taught in the following sequence. First you should read the textbook prior to coming to laboratory. The next part of the sequence is the laboratory. The laboratory portion of the course is taught in Lecture Room A. The histology laboratory is also on Canvas. The Canvas site contains the Laboratory, which is a series of exercises with text and pictures that we will go through during each laboratory session. Students will work in groups and will go through the Lab under the guidance of the laboratory instructor. The instructor will project the images and if students have laptop computers they can bring them into lab to facilitate the learning process. Otherwise you should bring in a copy of the images for the lab and you will label these images in class. The laboratory is the place where we will be discussing the basic structure of cells, tissues and organs. The next part of course is the lecture. During the lecture the lecturer will be building upon the material that was learned in laboratory and add the functional and cell biological information that you need to know.

**Repeatability:** This course may not be repeated for additional credits.

**DENT D108. Science in Dental Practice I. 1 Credit Hour.**

Students receive face to face and online instruction in the scientific method of inquiry and research methodology including how research is conducted, evaluated and applied to patient care. The practicum component of the course requires that each student attend and participate in four annual Scholarly Activity and Research (SAR) Days during the four years of dental education.

**Repeatability:** This course may not be repeated for additional credits.

**DENT D120. The Practice and Profession of Dentistry. 2 Credit Hours.**

The primary goal of the Practice and Profession of Dentistry course is to introduce the new dental student to the many aspects of the profession. Upon entrance into the clinic, the student will be expected to not only apply the knowledge and skills obtained during the first two years of their education, but also to manage an entire host of other factors. This course, which is divided into learning modules, will introduce the new professional student to the topics of ethics and professionalism as a student and a practitioner; legal and regulatory aspects of dentistry; the dental team; and practice management.

**Repeatability:** This course may not be repeated for additional credits.

**DENT D131. Behavioral Sciences. 1 Credit Hour.**

**Repeatability:** This course may not be repeated for additional credits.

**DENT D139. DPH I: Cariology, EBD and Principles of Prevention. 1 Credit Hour.**

The Dental Public Health I course is designed to provide foundation knowledge and experiences on the important role that dentists play in promoting health not only for their patients but also in the communities where they work. Temple University Kornberg School of Dentistry has had a long history of community service and engagement with different population groups. In this course you will learn in lectures, discussions and exercises the foundation knowledge of evidence-based practice to promote oral health among your patients and the community where you will practice.

**Repeatability:** This course may not be repeated for additional credits.

**DENT D150. Dental Materials I. 1 Credit Hour.**

This course presents the basic science foundation for understanding the behavior and evaluation of dental materials, specific properties for dental materials presented in the course, and practical properties of these materials for application clinically. The course includes thirteen lectures, four of which are focused on properties of materials and nine on specific dental materials. A required group project involves creating an online wiki site through Blackboard involving critical thinking and evidence-based evaluation of dental materials.

**Repeatability:** This course may not be repeated for additional credits.

**DENT D161. Restorative Dentistry I for Advanced Standing. 4 Credit Hours.**

The goal of the summer session course D161, Restorative Dentistry I for Advanced Standing, is to prepare the advanced standing student to integrate into the sophomore class of the traditional dental curriculum in the fall semester. Pre-requisite subjects and skills for future classes are covered, which will orient the advanced standing student to instrumentation, materials, and procedures used in RDIII and RDIV. Student's previous knowledge in dental anatomy and occlusion will be assessed. Normal TMJ anatomy is considered in relationship to centric relation and maximum intercuspation. The different possible occlusal schemes in static and dynamic occlusion are studied. Students learn the principles and application of the dental articulator and face bow. The subjects of cariology and caries risk assessment are introduced and the ICDAS system of caries classification is reviewed. Students learn the principles of tooth preparation that contribute to resistance, retention, and convenience form and practice the application of these principles in the preparation of direct composite and amalgam restorations, as well as crown and fixed partial dentures.

**Repeatability:** This course may not be repeated for additional credits.

**DENT D162. Restorative Dentistry I - Lecture. 2 Credit Hours.**

Course D162 is designed to provide foundation knowledge and experiences of the anatomy of the primary and permanent dentitions and the surrounding structures. In addition, it is expected that the student will learn occlusion and the anatomy of the temporomandibular joint through lectures.

**Repeatability:** This course may not be repeated for additional credits.

**DENT D163. Restorative Dentistry I - Lab. 2 Credit Hours.**

The laboratory course D163 is designed to learn and develop hand skills to restore typodont teeth to proper shape and function using wax. The course will provide foundation knowledge and experiences of the anatomy of the primary and permanent dentitions and the surrounding structures. In addition, students will learn occlusion and the anatomy of the temporomandibular joint through laboratory preclinical sessions.

**Repeatability:** This course may not be repeated for additional credits.

**DENT D164. Projects in Restorative Dentistry Advanced Standing. 8 Credit Hours.**

This is a combined lecture and laboratory course, which prepares the advanced standing student to enter the Restorative Dentistry curriculum. The focus is on laboratory skills essential to the fabrication of custom trays, primary and secondary models, articulation, waxing, and casting of a gold crown. Additional exercises in tooth preparation and provisionalization are included. Information is distributed by use of assignments in textbook, laboratory manual, hand out, and lectures.

**Repeatability:** This course may be repeated for additional credit.

**DENT D200. Inflammation, Infection and Wound Healing. 3 Credit Hours.**

The course provides the foundation knowledge (physiology, microbiology, immunology and pathology) necessary for clinical decision making related to the conditions of inflammation, infection and wound healing. Emphasis is on the oral and maxillofacial complex and the dental management of patients with these conditions, including pharmacologic therapies.

**Repeatability:** This course may not be repeated for additional credits.

**DENT D202. Gross Anatomy. 6 Credit Hours.**

The subject matter for Dental Gross Anatomy has been divided into three units: Unit I - Back, Spinal Cord, Posterior Triangle of the Neck, and Upper Extremity; Unit II - Head and Neck; Unit III - Thorax and Abdomen. The pelvic-perineal regions and lower extremity will not be studied. You are responsible for knowing all material you are directed to study in the "Dental Gross Anatomy Course Dissection Guide" and all material presented in the Conferences and Lectures.

**Repeatability:** This course may not be repeated for additional credits.

**DENT D203. Neuroanatomy. 2 Credit Hours.**

Neuroanatomy for the undergraduate dental student provides a foundation of fundamental knowledge from which the student may develop an appreciation of the nervous system in both health and disease. The student will acquire a general understanding of structure and function of the nervous system that will be neither exhaustive in scope nor superficial in approach.

**Repeatability:** This course may not be repeated for additional credits.

**DENT D204. The Nervous System and Pain. 3 Credit Hours.**

The course provides the foundation knowledge (physiology, microbiology, immunology and pathology) necessary for clinical decision making related to the normal and abnormal function of the nervous system. Emphasis is on the oral and maxillofacial complex, physical diagnosis and dental management of patients with pain and pathologic conditions of the nervous system, including pharmacologic therapies.

**Repeatability:** This course may not be repeated for additional credits.

**DENT D210. Postnatal Craniofacial Growth and Cephalometrics. 2 Credit Hours.**

Postnatal Craniofacial Growth & Cephalometrics is a lecture series which includes one workshop and one problem based learning experience. Objectives of the course are to introduce the predoctoral student to the processes of normal craniofacial growth and development in order to recognize and identify deviations from normal.

**Repeatability:** This course may not be repeated for additional credits.

**DENT D211. Behavioral Science I. 1 Credit Hour.**

This course is provided in the freshman year of the DMD program. The course consists of classroom lecture and discussion. It is the first course in a two-course sequence designed to introduce students to the importance of behavioral science as it relates to dentistry.

**Repeatability:** This course may not be repeated for additional credits.

**DENT D250. Dental Materials II. 1 Credit Hour.**

The overall goal of this course is for the freshman dental student to continue to attain dental biomaterials competency through the development and application of foundation knowledge in materials science and in specific dental materials (gypsum materials for investments and die stones, high temperature investment materials, hydrocolloid/alginate and elastomeric impression materials, casting alloys, casting procedures, soldering materials and procedures, porcelain and ceramic materials, ceramic-metal systems, cements and luting materials, polymer and denture base resins, and dental implants/tissue engineering materials) necessary for completing the preclinical, clinical and laboratory phases of the dental curriculum. This didactic material also involves attainment of a working knowledge of these dental materials including their selection, use and limitations.

**Repeatability:** This course may not be repeated for additional credits.

**DENT D251. Dental Materials I & II. 2 Credit Hours.**

This two credit course presents the basic science foundation for understanding the behavior and evaluation of dental materials, specific properties for dental materials presented in the course, and practical properties of these materials for application clinically. This blended course includes assigned readings, online asynchronous PowerPoint presentations, selected online class capture lecture presentations, and completion and review of assigned study questions. Three current materials-oriented journal articles are assigned. Two live class sessions are conducted, one at the beginning of the course for orientation and initial presentations, and one toward the end of the course for seminar-style discussion and review of assigned materials. Assessment is by an in-class written multiple short essay examination based on study questions. Grading is Pass/Fail. Required text is: von Fraunhofer A. Dental Materials at a Glance. Wiley-Blackwell. Ames, Iowa. 2010. ISBN 978-0-8138-1614-2.

**Repeatability:** This course may not be repeated for additional credits.

**DENT D252. Advanced Standing Behavioral Science I. 1 Credit Hour.**

Behavioral Science I blended learning course consists of classroom lecture and discussion. It is the first course in a two-course sequence designed to introduce students to the importance of behavioral science as it relates to dentistry.

**Repeatability:** This course may not be repeated for additional credits.

**DENT D253. Advanced Standing Periodontology. 1 Credit Hour.**

Periodontology is a blended learning lecture series examining the structural biology of the periodontium in health and disease, with consideration of clinical, histologic, biochemical, microbiologic and immunologic features and risk factors. An overview examination of plaque-related periodontal diseases as specific microbial infections in susceptible human hosts is provided, with emphasis on gingivitis.

**Repeatability:** This course may not be repeated for additional credits.

**DENT D254. Advanced Standing Dental Public Health. 1 Credit Hour.**

The Dental Public Health blended learning course is designed to provide foundation knowledge and experiences on the important role that dentists play in promoting health not only for their patients but also in the communities where they work. Temple University Kornberg School of Dentistry has had a long history of community service and engagement with different population groups. In this course you will learn in lectures, discussions and exercises the foundation knowledge of evidence-based practice to promote oral health among your patients and the community where you will practice. This course will cover three areas: 1) Foundation knowledge for the field of community oral health and dental practice, 2) Principles of oral health promotion, and 3) Prevention of dental caries.

**Repeatability:** This course may not be repeated for additional credits.

**DENT D255. Advanced Standing Restorative Dentistry I Projects. 8 Credit Hours.**

Projects in Restorative Dentistry for Advanced Standing students is a combined lecture and laboratory course, which prepares the student to enter the Restorative Dentistry curriculum. The focus is on laboratory skills essential to fabrication of custom trays, primary and secondary models, articulation, waxing and casting of a gold crown. Additional exercises in tooth preparation and provisionalization are included. Information is distributed by use of assignments in textbook, laboratory manual, hand out and lectures.

**Repeatability:** This course may not be repeated for additional credits.

**DENT D261. Restorative Dentistry II for Advanced Standing. 4 Credit Hours.**

The goal of the fall semester course D261, Restorative Dentistry II for Advanced Standing, is to review and update the basic concepts required for restorative procedures utilizing dental amalgam and composite resin, in preventive procedures, minimally invasive restorations, conservative and conventional preparations, veneers, and foundations for full coverage crowns. Students apply the principles of caries removal and tooth preparation that contribute to resistance, retention, and convenience form. Students practice the application of these principles in the preparation of direct composite and amalgam restorations, as well as foundations for crowns and fixed partial dentures. Students will be afforded the opportunity to learn and demonstrate knowledge and technical skills required for academic advancement and patient treatment.

**Repeatability:** This course may not be repeated for additional credits.

**DENT D262. Restorative Dentistry II Lecture. 4 Credit Hours.**

The primary goal of Restorative Dentistry II Courses D262 and D263 is to introduce basic concepts required for restorative procedures utilizing dental amalgam, composite resin, and full coverage cast restorations. Special emphasis will be placed on cavity preparation design and correct manipulation of dental materials. Students will be afforded the opportunity to learn and demonstrate knowledge and technical skills required for academic advancement and patient treatment. Course material will be presented in lectures, reading assignments, demonstrations, and laboratory exercises. To use time efficiently and for laboratory projects to be meaningful learning experiences, it is necessary that you complete the reading assignments prior to the session in which the information is utilized.

**Repeatability:** This course may not be repeated for additional credits.

**DENT D263. Restorative Dentistry II Lab. 4 Credit Hours.**

The primary goal of Restorative Dentistry II Courses D262 and D263 is to introduce basic concepts required for restorative procedures utilizing dental amalgam, composite resin, and full coverage cast restorations. Special emphasis will be placed on cavity preparation design and correct manipulation of dental materials. Students will be afforded the opportunity to learn and demonstrate knowledge and technical skills required for academic advancement and patient treatment. Course material will be presented in lectures, reading assignments, demonstrations, and laboratory exercises. To use time efficiently and for laboratory projects to be meaningful learning experiences, it is necessary that you complete the reading assignments prior to the session in which the information is utilized.

**Repeatability:** This course may not be repeated for additional credits.

**DENT D267. Oral Radiology. 1 Credit Hour.**

**Repeatability:** This course may not be repeated for additional credits.

**DENT D300. Human Systems and Disease I. 5 Credit Hours.**

The course provides the foundation knowledge (physiology, microbiology, immunology, pathology and pharmacology) necessary for clinical decision making related to the normal and abnormal function of the cardiovascular, respiratory and renal systems. Emphasis is on dental management and history taking for patients with diseases of these systems. The physical examination techniques commonly used in dentistry that relate to the cardiovascular and respiratory systems are taught and practiced.

**Repeatability:** This course may not be repeated for additional credits.

**DENT D301. Human Systems and Disease II. 5 Credit Hours.**

The course provides the foundation knowledge (physiology, microbiology, immunology, pathology and pharmacology) necessary for clinical decision making related to the normal and abnormal function of the endocrine-reproductive, gastrointestinal, hematologic and musculoskeletal systems. Emphasis is on dental management and history taking for patients with diseases of these systems.

**Repeatability:** This course may not be repeated for additional credits.

**DENT D339. Oral Surgery I. 1 Credit Hour.**

This course concentrates on fundamentals of Oral and Maxillofacial Surgery.

**Repeatability:** This course may not be repeated for additional credits.

**DENT D350. Dental Materials II. 1 Credit Hour.**

**Repeatability:** This course may not be repeated for additional credits.

**DENT D360. Restorative Dentistry III Lecture. 4 Credit Hours.**

The Restorative Dentistry III (D360) lecture course is a continuation and further development of the material presented in freshman year Restorative Dentistry I & II. This course is closely integrated with the laboratory course (D361), both being designed to introduce fundamental concepts required for restorative dentistry procedures utilizing metal-ceramic and all-ceramic crowns, porcelain laminate veneers, fixed partial dentures, cast gold onlays, restoration of endodontically treated teeth and single tooth implants. Emphasis will be placed on principles of tooth preparation and fabricating provisional and permanent restorations along with correct manipulation of dental materials related to these restorations, providing integration of clinical and basic sciences. Problem solving, critical thinking, metacognitive and self-directed learning skills are incorporated.

**Repeatability:** This course may not be repeated for additional credits.

**DENT D361. Restorative Dentistry III Lab. 4 Credit Hours.**

The Restorative Dentistry III (D361) laboratory course is a continuation and further development of the material presented in freshman year Restorative Dentistry I & II. This course is closely integrated with the lecture course (D360), both being designed to introduce fundamental concepts required for restorative dentistry procedures utilizing metal-ceramic crowns, porcelain laminate veneers, fixed partial dentures, cast gold onlays, restoration of endodontically treated teeth and single tooth implants. Emphasis will be placed on principles of tooth preparation and fabricating provisional and permanent restorations along with correct manipulation of dental materials related to these restorations, providing integration of clinical and basic sciences. Problem solving, critical thinking, metacognitive and self-directed learning skills are incorporated.

**Repeatability:** This course may not be repeated for additional credits.

**DENT D373. Principles of Periodontology I. 2 Credit Hours.**

Principles of Periodontology I (DENT D373) is a lecture series that examines the structural biology of the periodontium in health and disease, with consideration of clinical and histologic features. This course also discusses the local, behavioral, and systemic etiological and predisposing factors of periodontal diseases, and the impact of periodontal infection on systemic health. The second half of the course includes the methods used in clinical and radiographic evaluation of the patient's periodontal health, periodontal risk assessment and prognosis, and development of a treatment plan of the diagnosed periodontal disease. Periodontal treatment of medically compromised patients and the management of periodontal emergencies will also be covered.

**Repeatability:** This course may not be repeated for additional credits.

**DENT D401. Dental Ethics and Jurisprudence. 1 Credit Hour.**

Lectures and case presentations provide information about relevant areas of the law, including: contracts, employment issues, malpractice, risk management, informed consent, recordkeeping, and legal obligations. Students are instructed on the scope of practice, prescription writing limitations, Drug Enforcement Agency issues, and the impact of federal, state and local laws on the dental profession.

**Repeatability:** This course may not be repeated for additional credits.

**DENT D402. DPH II - Health Promotion in Populations. 1 Credit Hour.**

This course provides an introduction to the public health and dental public health principles, practices, and achievements. The oral health status and the needs of the U.S. population across the lifespan, including underserved populations are discussed. Students are introduced to the dental health care delivery systems in the U.S. and various factors influencing these systems. This course provides the student the basic understanding of oral health policies, how they are developed and implemented. Dental professions' role in advocating for optimal oral health will be discussed. An overview of the definition of health literacy, how health literacy and oral health literacy are measured, and the role of oral health literacy in promoting oral health and accessing dental care in both private practice and in public health settings will be elaborated.

**Repeatability:** This course may not be repeated for additional credits.

**DENT D403. Advanced Restorative Dentistry Lecture and Lab. 3 Credit Hours.**

Advanced technique in Restorative Dentistry, including those related to replacement of missing teeth, CAD/CAM technology and other advances in modern dental care.

**Repeatability:** This course may not be repeated for additional credits.

**DENT D408. Oral Pathology I. 3 Credit Hours.**

diseases and developmental abnormalities that commonly affect the oral and maxillofacial complex. When appropriate, the radiographic and histologic features of pathologic processes are discussed. Students are taught to formulate appropriate clinical differential diagnoses for soft tissue abnormalities of the oral and perioral region. Students receive instruction in the management of patients with common oral mucosal diseases. Indications for patient referral to medical or dental specialists for diagnostic evaluation or disease management are presented. When applicable, information related to basic and clinical sciences will be discussed. Integration of the principles learned in clinical sciences and basic sciences (general and systems pathology, histology, embryology, etc.) will be addressed as applicable. Critical thinking is emphasized in case-based small group modules.

**Repeatability:** This course may not be repeated for additional credits.

**DENT D420. Intro Clinical Dentistry. 2 Credit Hours.**

**Repeatability:** This course may not be repeated for additional credits.

**DENT D421. Treatment Planning. 2 Credit Hours.**

The sophomore course in Treatment Planning is designed to impart a foundation level of knowledge required in creating fully functional dental records, collecting and evaluating all pertinent medical and dental findings for the establishment of proper diagnosis, and the development of a sequential treatment plan in accordance with comprehensive general dental practice care.

**Repeatability:** This course may not be repeated for additional credits.

**DENT D422. Medical Emergencies. 1 Credit Hour.**

This course presents medical emergencies that may arise during routine dental care and how to treat them.

**Repeatability:** This course may not be repeated for additional credits.

**DENT D442. Pre-Clinical Radiography. 2 Credit Hours.**

The fundamentals of periapical, bitewing, and occlusal radiographic techniques are presented in a pre-clinical laboratory model.

**Repeatability:** This course may not be repeated for additional credits.

**DENT D452. Endodontology Lecture. 2 Credit Hours.**

The Preclinical Endodontology lecture series encompasses the biology of the dental pulp and the management of pulpal and periapical pathological conditions using evidence based presentations. The pulp and periapical tissues are examined from the healthy state through the progression of inflammation and infection. Symptomatology and endodontic differential diagnosis through the use of communication with the patient, clinical examination, etiology determination, diagnostic testing and radiology are discussed. Variations of tooth and pulpal anatomy are examined. The rationales for the need of Endodontic therapy are considered from a biologic viewpoint. Patient management and the importance of informed consent are also discussed. The materials and methods of endodontic procedures are discussed including instruments, medicaments, pretreatment, access preparation, instrumentation, obturation and post-treatment techniques. Aspects of pediatric endodontics and endodontic emergencies are examined including management of cases which include the psychological aspects of pain. Case selection is appraised as it relates to associated systemic and local conditions including errors which could occur through treatment. Students are encouraged to use critical thinking throughout the course through class interaction such as small group sessions, discussion and in-class assignments.

**Repeatability:** This course may not be repeated for additional credits.

**DENT D453. Endodontology Laboratory. 1 Credit Hour.**

This is a preclinical technique course in which each student will perform various nonsurgical endodontic techniques on a series of extracted human teeth. The techniques will be taught with the aid of lectures, tapes, assigned reading in textbooks and demonstrations. Supervision will be by the staff of the Advanced Education and Predoctoral Divisions of the Department of Endodontology.

**Repeatability:** This course may not be repeated for additional credits.

**DENT D456. Restorative Dentistry IV Lecture. 3 Credit Hours.**

Complete and removable partial denture prosthodontics - lecture phase.

**Repeatability:** This course may not be repeated for additional credits.

**DENT D457. Restorative Dentistry IV Lab. 3 Credit Hours.**

To provide the student with a basic understanding of biomechanical principles and technical skills required in the restoration of the complete and partially edentulous patient.

**Repeatability:** This course may not be repeated for additional credits.

**DENT D465. Oral Radiology. 1 Credit Hour.**

The fundamentals of the production and interaction of x rays are presented in lecture form. This is followed by the production of the radiograph (physics, chemistry and technique), special imaging techniques (digital dental radiography, CT, CBCT, MRI), selection criteria, quality assurance, basics of radiation biology and radiation protection.

**Repeatability:** This course may not be repeated for additional credits.

**DENT D466. Pediatric Dentistry Lecture and Laboratory. 3 Credit Hours.**

Pediatric Dentistry is an age-defined specialty that provides both primary and specialty comprehensive preventive and therapeutic care for infants and children through adolescence, including those with special health care needs. Pediatric Dentistry (D466) will build on aspects of restorative, endodontic, orthodontic and surgical principles so that diagnosis and treatment can be tailored to the primary and young permanent dentitions. This lecture and lab series is designed to prepare the undergraduate dental student for the clinical experience of treating children and adolescents in the Pediatric Dental Clinic and in a general practice setting.

**Repeatability:** This course may not be repeated for additional credits.



**DENT D473. Principles of Periodontology II. 2 Credit Hours.**

Principles of Periodontology II (D473) is a lecture and lab series examining plaque control techniques, manual periodontal instrumentation, sonic and ultrasonic periodontal instrumentation, periodontal re-evaluation, phase II and supportive periodontal therapy, use of local and systemic antimicrobial agents in periodontal therapy, use of host modulation agents in periodontal therapy, and use of adjunctive diagnostic aids in periodontics.

**Repeatability:** This course may not be repeated for additional credits.

**DENT D478. Local Anesthesia and Pain Control. 1 Credit Hour.**

To familiarize students with the full scope of pain control and management of the anxious patient using lectures and clinical laboratories to administer and receive injections and nitrous oxide sedation.

**Repeatability:** This course may not be repeated for additional credits.

**DENT D491. Clinical Caries Management Throughout Life: A Pragmatic Course. 2 Credit Hours.**

This clinical application course will introduce the steps in caries management from detection and classification of caries lesions using clinical, radiological, and transillumination, risk assessment of behavioral, dietary, and medical conditions, risk classification, diagnosis, and developing and executing a care plan (treatment plan) for in-office and at home care.

**Repeatability:** This course may not be repeated for additional credits.

**DENT D505. Temporomandibular Disorders (TMD) and Oral Medicine. 1 Credit Hour.**

Students will study temporomandibular disorders (TMD) of the craniofacial muscles, temporomandibular joints, masticatory system, nervous system and facial pain. Students will also study the dental management considerations of patients with systemic diseases that impact the oral condition, including but not limited to patients undergoing or with a history of head and neck cancer treatment. The acute and long-term impact of cancer therapies (especially head and neck radiation) on the various systems of the head and neck, including the oral cavity, will be studied. An emphasis will be placed on the role of the general dentist in the diagnosis and management of TMD, and medically complex patients with dental needs. Course information is routinely updated to ensure emerging information and current best evidence is integrated into the course.

**Repeatability:** This course may not be repeated for additional credits.

**DENT D506. Oral Pathology II. 3 Credit Hours.**

Students receive instruction regarding the etiology, clinical features, histopathology, pathogenesis, treatment, and prognosis of diseases and developmental abnormalities that commonly affect the oral and maxillofacial complex. When appropriate, the radiographic features of pathologic processes are discussed. Students are taught to formulate appropriate clinical and radiographic differential diagnoses for soft and hard tissue abnormalities of the oral and perioral region. Indications for patient referral to medical or dental specialists for diagnostic evaluation or disease management are presented. Critical thinking is emphasized in case-based modules. Blackboard will be used as an adjunct teaching tool for instruction (subject material and images) and posting of grades. Case based clinical pathologic correlation (CPC) sessions will be held during the course at the end of each differential diagnosis section.

**Repeatability:** This course may not be repeated for additional credits.

**DENT D510. Basic Interdisciplinary Implant. 2 Credit Hours.**

Basic Interdisciplinary Implantology is a lecture and laboratory series. This course will provide an introduction to historical and technologic development of present day dental implants. It will examine the implant-bone interface and the concept of osseointegration, along with discussion on the biomechanical consideration directed at both the dental implant and prosthesis. A review of the process for the formulation of a preoperative patient evaluation, pre surgical preparation, and comprehensive implant treatment planning will be reviewed. This will include treatment options discussed based on prosthetic need and surgical techniques. This course will also incorporate impression taking, fabrication of a surgical stent, and implant placement. Insights into potential complications, advanced surgical procedures related to dental implants, and preventative maintenance protocol will also be presented in the lectures.

**Repeatability:** This course may not be repeated for additional credits.

**DENT D552. Endodontology. 1 Credit Hour.**

Endodontology (D552) is a lecture series designed to offer the student fundamental knowledge in endodontics making emphasis in its clinical application. With a biological perspective, topics such as traumatic injuries of the tooth, endodontic surgery, as well as relationship between endodontics and other dental and medical disciplines is discussed, helping the student to make a smooth transition to the endodontic clinic.

**Repeatability:** This course may not be repeated for additional credits.

**DENT D553. Restorative Dentistry V. 2 Credit Hours.**

This course is designed to build on DENT D421 (Treatment Planning) providing a further and more detailed knowledge of comprehensive treatment planning. This includes collecting and evaluating dental records as well as pertinent medical and dental findings. Students will understand how to establish a proper diagnosis. Utilizing the obtained records and diagnoses, the student will learn how to develop treatment options and ultimately a sequential treatment plan. Through weekly small group seminars, emphasis will be placed on the thought process of gathering and evaluation of pertinent data resulting in the development of treatment options as well as techniques for communicating a treatment plan to patients. The small group meetings will be followed by the class meeting in a lecture format where treatment planning concepts as well as treatment principles used in the treatment cases will be reviewed and reinforced.

**Repeatability:** This course may not be repeated for additional credits.

**DENT D567. Oral Radiology. 1 Credit Hour.**

This course consists of a series of lectures that deal with fundamentals of radiographic interpretation, radiation biology and protection, selection criteria of radiography, the appearances of normal radiographic anatomy, variations of normal, and abnormalities or disease processes, which are common in the oral and maxillofacial region.

**Repeatability:** This course may not be repeated for additional credits.

**DENT D568. Oral Surgery. 1 Credit Hour.**

A continuation of D339, emphasizing the basic Oral and Maxillofacial management of patients within the scope of the general practitioner. Some advanced concepts are introduced.

**Repeatability:** This course may not be repeated for additional credits.

**DENT D573. Periodontal Therapy and Treatment Planning. 1 Credit Hour.**

A team approach, lecture series course providing evidence-based principles and case based examples of the surgical treatment of periodontal disease. It will present a variety of procedures including the general principles of periodontal surgery, flap designs, gingivectomy techniques, resective osseous surgery, regenerative procedures using bone grafting materials, membranes and biologics, management of furcation problems, periodontal plastic and esthetic surgery and care before and after the surgical procedures. Emphasis will be placed on proper diagnosis and treatment planning through case presentations in class and through a Wiki project. Course prerequisites: successful completion of the sophomore year of the DMD program, and enrollment in junior year.

**Repeatability:** This course may not be repeated for additional credits.

**DENT D589. Jr. Summer Clinic I. 9 Credit Hours.**

**Repeatability:** This course may be repeated for additional credit.

**DENT D591. Jr. Practice of Dentistry. 7 Credit Hours.**

**Repeatability:** This course may be repeated for additional credit.

**DENT D599. Jr. Summer Clinic II. 6 Credit Hours.**

**Repeatability:** This course may be repeated for additional credit.

**DENT D600. Senior Summer Clinic. 12 Credit Hours.**

**Repeatability:** This course may be repeated for additional credit.

**DENT D608. Radiology. 1 Credit Hour.**

This course consists of a series of lectures that deal with the concepts of radiographic interpretation of maxillofacial abnormalities or diseases. The course goals are to provide the information and experience necessary for the student to be able to recognize abnormalities or diseases that commonly affect the maxillofacial complex. Radiographic, CT and MRI images are used extensively to demonstrate representative interpretations.

**Repeatability:** This course may not be repeated for additional credits.

**DENT D609. Orthodontics. 1 Credit Hour.**

This course introduces the student to the practice of orthodontics. Also included in the course are presentations of armamentarium and novel systems of orthodontic treatment. The Invisalign System is emphasized. Primarily, this course is designed to enable the student to interact with the orthodontic specialist and the patient for the management of complex orthodontic problems. Additionally, the student will receive practical information on managing the dental practice.

**Repeatability:** This course may not be repeated for additional credits.

**DENT D610. Adv Interdis Implant. 1 Credit Hour.**

**Repeatability:** This course may not be repeated for additional credits.



**DENT D611. Practice Management II. 1 Credit Hour.**

This course aims to inform students about different areas in Practice Management that can be applied in the practice of dentistry. Since dental students are about to enter the senior year, this course will provide information on different business models, areas or marketing, finance and accounting, as well as prepare students to practice dentistry in a successful business environment.

**Repeatability:** This course may not be repeated for additional credits.

**DENT D612. Advanced Restorative Dentistry Lecture & Lab. 1 Credit Hour.**

**Repeatability:** This course may not be repeated for additional credits.

**DENT D637. Practice Management I. 1 Credit Hour.**

The goal of Practice Management I is to inform and acquaint the junior student with basic principles and philosophies of practice management, and with the latest and most modern dental technology available today.

**Repeatability:** This course may not be repeated for additional credits.

**DENT D644. Dentistry for Patients with Special Needs. 1 Credit Hour.**

Dentistry for Patients with Special Needs integrates principles of clinical management with behavioral and communication skills needed to provide comprehensive dental care to the special needs population. This course emphasizes practical skills that are evidence based, sensitive to context and applicable in a private practice.

**Repeatability:** This course may not be repeated for additional credits.

**DENT D660. Behavioral Science II. 1 Credit Hour.**

This course will prepare students to assess and treat dental anxiety and dental pain. In addition, the major types of psychopathology that you may encounter in your patients are reviewed, with suggestions for appropriate management techniques and referrals.

**Repeatability:** This course may not be repeated for additional credits.

**DENT D662. Restorative Dentistry VI. 1 Credit Hour.**

This course emphasizes the practical application of fundamental principles of restorative dentistry with particular attention paid to evidence based decision making. The first part of this course will concentrate on how treatment outcomes are measured and assessed. The second part of the course will present several advanced concepts in restorative dentistry.

**Repeatability:** This course may not be repeated for additional credits.

**DENT D666. Pediatric Dentistry. 1 Credit Hour.**

Pediatric Dentistry is an age-defined specialty that provides comprehensive preventive and therapeutic care for infants and children through adolescence, including those with special health care needs. Pediatric Dentistry (D666) will build on and modify specific aspects of restorative, endodontic, orthodontic and surgical principles so that diagnosis and treatment can be tailored to the primary and young permanent dentitions. This course is designed to prepare the undergraduate dental student for the clinical experience of treating children and adolescents in the Pediatric Dental Clinic and ultimately in a general practice setting.

**Repeatability:** This course may not be repeated for additional credits.

**DENT D668. Oral Surgery. 1 Credit Hour.**

A continuation of D568, introducing more advanced oral and maxillofacial concepts to acquaint the student with the full scope of Oral and Maxillofacial Surgery.

**Repeatability:** This course may not be repeated for additional credits.

**DENT D671. Ortho Consideration in General Dental Practice. 1 Credit Hour.**

This didactic course introduces the student to concepts of orthodontic treatment in the young and the adult. The distinction between "orthodontic tooth movement" and "orthodontic treatment" is emphasized. Adjunctive orthodontics and the role of tooth movement in general dental practice are emphasized. Interactions between specialties and sequencing of treatment are accentuated. This course is designed for the student to make the transition from preclinical to clinical activities in orthodontics.

**Repeatability:** This course may not be repeated for additional credits.

**DENT D674. Admissions Clinic I. 1 Credit Hour.**

**Repeatability:** This course may be repeated for additional credit.

**DENT D675. Emergency/Oral Surg. Cl.. 2 Credit Hours.**

**Repeatability:** This course may be repeated for additional credit.

**DENT D676. Radiology Clinic I. 1 Credit Hour.**

This course consists of a series of duty rotations for junior dental students in Diagnosis and Radiology Clinics. Students practice radiographic techniques and interpretations in a clinical environment. Intra and extra-oral radiographic techniques and writing radiographic reports will be emphasized in the course.

**Repeatability:** This course may be repeated for additional credit.

**DENT D691. Orthodontics-Clinic. 1 Credit Hour.**

**Repeatability:** This course may be repeated for additional credit.

**DENT D692. Endodontology-Clinic. 2 Credit Hours.**

**Repeatability:** This course may be repeated for additional credit.

**DENT D693. Periodontology Clinic. 2 Credit Hours.**

**Repeatability:** This course may be repeated for additional credit.

**DENT D696. Pediatric Dent-Clinic. 2 Credit Hours.**

**Repeatability:** This course may be repeated for additional credit.

**DENT D697. Restor Dent Clinic Jr. 6 Credit Hours.**

**Repeatability:** This course may be repeated for additional credit.

**DENT D700. Summer Clinic II. 6 Credit Hours.**

**Repeatability:** This course may be repeated for additional credit.

**DENT D790. Sr. Pract of Dentistry. 12 Credit Hours.**

**Repeatability:** This course may be repeated for additional credit.

**DENT D801. Science in Dental Practice II. 2 Credit Hours.**

In this course, students receive online instruction in the scientific method of inquiry and research methodology, including how research is conducted, evaluated and applied to patient care. Students are taught lifelong learning skills on how to access, critically appraise, and apply scientific literature to evidence based oral health care. The ethics of research and ethical decision making in human and animal research is presented. Critical thinking and problem solving is emphasized, particularly as it relates to scientific inquiry, research methodology and critical appraisal of scientific evidence. Blackboard will be used as an adjunct teaching tool for instruction as needed, and for the posting of grades. Online instruction will be through Temple Blackboard site for the course.

**Repeatability:** This course may not be repeated for additional credits.

**DENT D808. Comprehensive Care. 1 to 3 Credit Hour.**

This course has two components, as follows: 1) Grand Rounds Case Presentations: Each student will prepare and present a concise and structured analysis of an intermediate or complex restorative patient care case that he/she has completed at least to point of delivery of a prosthesis. Within intermediate and complex cases, treatments that can be presented are failed treatments that are being redone or treatments where the patient was not satisfied. The analysis will include baseline assessment, treatment plan, comprehensive care provided, outcomes assessment and evaluations of Patient Wellness Reports (PWR). Each presentation will be followed by questions from a calibrated panel of multidisciplinary faculty. 2) Advanced Topics Seminars: An interdisciplinary group of faculty and guest speakers will present a senior seminar series on a review of some fundamental concepts in dentistry, including restorative dentistry, periodontology, endodontology, prosthodontics, digital dentistry, TMD, patients with special needs and disabilities, pediatric dentistry, and complex treatment planning, etc., as well as advanced topics in dentistry.

**Repeatability:** This course may not be repeated for additional credits.

**DENT D809. Practice Management III. 1 Credit Hour.**

This course applies principles of practice management through a seminar series augmented with experiential learning opportunities (Practice Management in Action/PMIA rotation). Students will work with dentists, other dental care providers and staff, from those who manage the first contact with patients to those who are responsible for billing and recall. They will learn, in real-time, about communication skills and patient management.

**Repeatability:** This course may not be repeated for additional credits.

**DENT D810. DPH III: Community Health Engagement. 2 Credit Hours.**

This course applies principles of community health engagement and aims to engender a life-long appreciation for community service. The course will be structured as a seminar series augmented with experiential learning opportunities (Community Outreach Rotation). Students will meet as a class with the course director to explore principles of community engagement and understand the core objectives of the course outreach experience.

**Repeatability:** This course may not be repeated for additional credits.

**DENT D874. Admissions Clinic II. 1 Credit Hour.**

**Repeatability:** This course may be repeated for additional credit.

**DENT D875. Emergency/Oral Surg. Cl.. 3 Credit Hours.**

**Repeatability:** This course may be repeated for additional credit.

**DENT D876. Radiology Clinic II. 2 Credit Hours.**

**Repeatability:** This course may be repeated for additional credit.

**DENT D891. Orthodontics-Clinic. 1 Credit Hour.**

**Repeatability:** This course may be repeated for additional credit.

**DENT D892. Endodontology-Clinic. 3 Credit Hours.**

**Repeatability:** This course may be repeated for additional credit.

**DENT D893. Periodontology-Clinic. 3 Credit Hours.**

**Repeatability:** This course may be repeated for additional credit.

**DENT D896. Pediatric Dent-Clinic. 3 Credit Hours.**

**Repeatability:** This course may be repeated for additional credit.

**DENT D897. Restor Dent Clinic Sr. 12 Credit Hours.**

**Repeatability:** This course may be repeated for additional credit.

**DENT D898. Oral Surgery-Clinic. 2 Credit Hours.**

**Repeatability:** This course may be repeated for additional credit.

**DENT D900. Practice of Dentistry IV. 6 Credit Hours.**

An extension of clinical responsibilities for students who are deficient in clinical requirements. This summer session clinical course will enable the student to complete degree necessary requirements.

**Repeatability:** This course may not be repeated for additional credits.

**DENT D903. Practice of Dentistry V. 9 Credit Hours.**

This course is designed for students who have exceeded the 4 year DMD program who are still deficient in clinical experiences. Students are required to demonstrate additional skills in all clinical disciplines towards achieving the DMD degree.

**Repeatability:** This course may not be repeated for additional credits.

**DENT D932. Perio Honors Program. 1 Credit Hour.**

**Repeatability:** This course may not be repeated for additional credits.

**DENT D982. Operative Dentistry II. 2 Credit Hours.**

Requirements for the course include completing 11 composite resin restorations, 7 Amalgam restorations, application of rubber dams, completion of "Operative Dentistry Skills" examinations, and two operative competencies (Amalgam and Composite resin).

**Repeatability:** This course may not be repeated for additional credits.

**DENT D983. Dental Public Health Science. 2 Credit Hours.**

Dental Ethics is concerned with medical ethical issues as they relate to dentistry, in the context of a patient centered educational experience. Instruction consists of lectures and class discussions of cases. Readings and cases will be made available electronically before the scheduled lecture. Students should read the material and cases before coming to class, print this material and bring it with them to class. To familiarize the entering professional with various areas of law, enabling legal, ethical, and profitable practice, with lessened risk of lawsuit. The Dental Public Health I course is designed to provide foundation knowledge and experiences on the important role that dentists play in promoting health not only for their patients but also in the communities where they work. Temple University Kornberg School of Dentistry has had a long history of community service and engagement with different population groups. In this course you will learn in lectures, discussions and exercises the foundation knowledge of evidence-based practice to promote oral health among your patients and the community where you will practice. This course will cover three areas: 1) Foundation knowledge for the field of community oral health and dental practice, 2) Principles of oral health promotion, and 3) Prevention of dental caries.

**Repeatability:** This course may not be repeated for additional credits.

**DENT D984. Endodontics. 1 Credit Hour.**

A lecture series designed to offer the student fundamental knowledge in endodontics making emphasis in its clinical application. With a biological perspective, topics such as traumatic injuries of the tooth, endodontic surgery, as well as relationship between endodontics and other dental and medical disciplines is discussed, helping the student to make a smooth transition to the endodontic clinic.

**Repeatability:** This course may not be repeated for additional credits.

**DENT D985. Oral Maxillofacial Pathology Medicine Surgery. 2 Credit Hours.**

To familiarize students with the full scope of pain control and management of the anxious patient using lectures and clinical laboratories to administer and receive injections and nitrous oxide sedation. This course presents medical emergencies that may arise during routine dental care and how to treat them.

**Repeatability:** This course may not be repeated for additional credits.

**DENT D986. Pre-Clinic Orthodontics. 1 Credit Hour.**

The candidate will be enrolled in the Temple University Blackboard Orthodontic Clinic work group which contains the educational modules Orthodontic Diagnosis Part I and Part II. These contain pre-clinical didactic information for orthodontic diagnosis and treatment planning necessary to meet requirements for the orthodontic clinical course.

**Repeatability:** This course may not be repeated for additional credits.

**DENT D988. Pediatric Dentistry. 3 Credit Hours.**

Pediatric Dentistry is an age-defined specialty that provides both primary and specialty comprehensive preventive and therapeutic care for infants and children through adolescence, including those with special health care needs. Pediatric Dentistry (D466) will build on aspects of restorative, endodontic, orthodontic and surgical principles so that diagnosis and treatment can be tailored to the primary and young permanent dentitions. This course is designed to prepare the undergraduate dental student for the clinical experience of treating children and adolescents in the Pediatric Dental Clinic and in a general practice setting. Pediatric Dentistry is an age-defined specialty that provides comprehensive preventive and therapeutic care for infants and children through adolescence, including those with special health care needs. Pediatric Dentistry (D666) will build on and modify specific aspects of restorative, endodontic, orthodontic and surgical principles so that diagnosis and treatment can be tailored to the primary and young permanent dentitions. This course is designed to prepare the undergraduate dental student for the clinical experience of treating children and adolescents in the Pediatric Dental Clinic and ultimately in a general practice setting.

**Repeatability:** This course may not be repeated for additional credits.

**DENT D989. Pediatric Dentistry. 1 Credit Hour.**

**Repeatability:** This course may not be repeated for additional credits.

**DENT D990. Periodontology. 1 Credit Hour.**

**Repeatability:** This course may not be repeated for additional credits.

**DENT D991. Orthodontics. 1 Credit Hour.**

**Repeatability:** This course may not be repeated for additional credits.

**DENT D992. O M P M S. 1 Credit Hour.**

**Repeatability:** This course may not be repeated for additional credits.

**DENT D993. Operative Dentistry Clinic. 1 Credit Hour.**

**Repeatability:** This course may not be repeated for additional credits.

**DENT D994. Fixed Prosthodontics I. 1 Credit Hour.**

**Repeatability:** This course may not be repeated for additional credits.

**DENT D995. Fixed Prosthodontics II. 2 Credit Hours.**

**Repeatability:** This course may not be repeated for additional credits.

**DENT D996. Removable Prosthodont I. 1 Credit Hour.**

**Repeatability:** This course may not be repeated for additional credits.

**DENT D997. Removable Prosthodont II. 2 Credit Hours.**

**Repeatability:** This course may not be repeated for additional credits.

**DENT D998. Endodontics I. 1 Credit Hour.**

**Repeatability:** This course may not be repeated for additional credits.

**DENT D999. Endodontic II. 1 Credit Hour.**

**Repeatability:** This course may not be repeated for additional credits.