

DDDS - DOCTOR DENTAL SURGERY

DDDS 011 Anterior Composites and Esthetics Credits 0.

Advanced concepts including diagnosis, preparation and restoration of anterior teeth utilizing composite materials.

DDDS 013 Orthodontic Clinical Selective Credits 0.

Clinical selective course in which D4 students will provide limited (adjunctive) orthodontic treatment to patients as one component of a comprehensive treatment plan; treatment will be provided in conjunction with a third year orthodontic resident and under the supervision of an orthodontic department faculty member.

DDDS 015 Interdisciplinary C.A.R.E. and Collaboration Credits 0.

Spring semester course provides an opportunity for D-3 students to become more proficient at evaluating and integrating emerging trends in clinical care and identifying factors that differentiate one case from another; clinical examples of interdisciplinary cases presented by post-doctoral residents that highlight a specific discipline (including contributions of other disciplines when appropriate); both conventional and unconventional treatment methods.

DDDS 017 Advanced Topics in Endodontics Credits 0. 0 Lab Hours.

Advanced information and training in current endodontic topics including some of the state-of-the-art equipment used by endodontists today; discussion of complex diagnostic cases, advanced cleaning and shaping techniques (new rotary instrumentation systems), advanced obturation techniques (warm vertical gutta-percha), notions of the utilization of an endodontic surgical microscope and endodontic retreatment; does not require clinic but does require 2 hours of lab; class time and location announced by course director; participation by invitation only.

DDDS 018 Orthodontic Externship Credits 0. 0 Other Hours.

Seminar portion provides an opportunity to enhance skills in the diagnosis and recognition of malocclusion and craniofacial anomalies and the ramifications of these diagnoses in the development of comprehensive treatment plans; examples of new cutting edge technologies that are rapidly changing the approach to treatment of orthodontic patients; externship provides an opportunity to discuss management considerations and other issues involved in the operation of a specialty practice; selective does not require clinic; class time and location to be announced by course director; class is limited to 10 D4 students only.

DDDS 024 Externship in Pediatric Dentistry Credits 0. 0 Other Hours.

Introduction to the Advanced Education Program in Pediatric Dentistry; the delivery of dental care to medically and mentally compromised children and the delivery of dental care to children under various forms of sedation and general anesthesia. Participation in this selective course is by invitation only. Class is limited to 5 D4 students.

DDDS 025 Dental Ceramics Credits 0. 0 Lab Hours.

Introduction to theory and fabrication of ceramo-metal and all-ceramic prosthodontic restorations; does not require clinic, but does require 25 hours of lab; class time and location to be announced by course director; participation in this selective is by invitation only and restricted to D4 students.

DDDS 027 Enteral Conscious Sedation and Emergency Protocols Credits 0. 0 Lecture Hours.

Information regarding Level 1 permit rules and regulations, physical assessment, pharmacology of enteral agents, local anesthesia/nitrous implications, pediatric assessment and clinical protocols related to the safe delivery of Enteral Conscious Sedation; satisfies the didactic requirements for a Level 1 - Minimal Sedation Permit in the State of Texas.

DDDS 034 Dental Implantology Credits 0. 1 Other Hour.

A clinical (treatment of patient who received dental implants), laboratory, surgical and restorative exercise; familiarization with patient management of dental implants; require clinic time; class time and location to be announced by course director; limited to 12 D4 students per semester.

DDDS 042 Athletic Mouthguards Credits 0. 1 Lab Hour.

Attend seminars and fabricate athletic mouth guards for a community athletic team; does not require clinic but does require 15 hours of lab; spring and summer course will be held on the 3rd and 6th floors; class time and location to be announced by course director; limited to 25 D3/ D4 students only per semester.

DDDS 043 Tutoring Skills Seminar Credits 0. 1 Lecture Hour.

Trains individuals nominated by course directors to become effective peer tutors by developing skills in instructional technique; class time and location to be announced by course director; limited to D3 and D4 students only.

DDDS 065 Introduction to CEREC 3D Bluecam System Credits 0. 0 Lecture Hours.

Exposure to and training on the CEREC system for CAD/CAM indirect restorations (crowns, onlays or inlays).

DDDS 092 Craniofacial Research Credits 0. 1 Other Hour.

For research participants in the Short Term Training Program only; introduction to dental and craniofacial research and the recognized values of biomedical research ethics.

DDDS 098 Dental Public Health Credits 0. 0 Other Hours.

Observation of oral health care services for at least four days in a private dental office; does not require class participation; by invitation only; limited to 50 D4 students.

DDDS 099 Public Health Sciences Community Preceptorship Program Credits 0. 1 Other Hour.

Offers observation and/or provision of oral health care services for at least four days in private practice, Indian Health Service, Veterans Administration hospital or other public health settings; does not require clinic time; class time and location to be announced by course director; class participation is by invitation only; limited to 30 D4 students.

DDDS 591

Credits 1 to 10. 1 to 10 Other Hours.

DDDS 601 Biological Foundations of Dentistry**Credits 2. 2 Lecture Hours.**

Introductory concepts that form the foundation for the dentistry; general principles of biochemistry, cellular and molecular biology, anatomy, histology, pharmacology and developmental biology; traditional structural-functional approaches and newer concepts from cell and molecular biology research.

DDDS 602 Human Structure, Function and Disease I**Credits 8. 8 Lecture Hours.**

An integrated organ/system-based approach to the human body in terms of macro and micro structural organization; basic functional relationships of the cells, tissues and organ systems of the human body, mechanisms of body physiological functions and growth and development and their importance in understanding normal, pathological and emergency functions related to the practice of dentistry; combination of anatomy, histology, medical physiology, embryology, growth and development and neuroscience to provide the foundation for the understanding of pathophysiology and pharmacology and the development of essential skills for diagnosing problems and understanding the etiology of disease.

DDDS 603 Human Structure, Function and Disease II**Credits 9.5. 9.5 Lecture Hours.**

An integrated organ/system-based approach to the human body in terms of macro and micro structural organization; basic functional relationships of the cells, tissues and organ systems of the human body, mechanisms of body physiological functions, diseases and growth and development and their importance in understanding normal, pathological and emergency functions related to the practice of dentistry; combination of essential elements of anatomy, histology, medical physiology, embryology, growth and development, neuroscience and pathology.

DDDS 604 Human Defenses and Responses to Infectious Disease**Credits 4. 4 Lecture Hours.**

Integration of immunology and microbiology to elucidate the mechanisms by which the body responds to a variety of stressors such as infectious organisms and the pathophysiological conditions that may result from these responses; organization and function of the immune system; immunopathological states that result from failure of the immune system such as immunodeficiency, hypersensitivity and autoimmune diseases and challenges that normal immune reactions can pose in modern medicine such as blood transfusion reactions and graft rejection; core concepts underlying organisms of infectious disease, disease vectors, modes of transmission, mechanisms of pathogenesis and pharmacologic principles of treatment; clinical evaluation, diagnostic testing and laboratory methodology for the identification and classification of microorganisms; characteristics of the patient and infectious organisms that influence therapeutic protocols; strategies for the management of resistance and infection control.

DDDS 605 Pathologic Basis of Disease**Credit 1. 1 Lecture Hour.**

Basic mechanisms of pathology as the foundation for understanding the diseases affecting different organ systems of the body including the oral cavity; correlation with clinical features which are the phenotypical presentation of those cellular and/or molecular changes and how they might impact the management of the dental patient; foundation for learning diseases occurring in the oral cavity and specific diseases of each organ system.

DDDS 611 Ethical Practice**Credits 3. 3 Lecture Hours.**

Foundations of the ethical practice of dentistry including cultural competency, academic and professional ethics and integrity, human behavior in dentistry and the basis of evidence based clinical practice.

DDDS 612 Integrated Practice of Dentistry**Credits 2.5. 2.5 Lecture Hours.**

Clinical skills and terms necessary to thoroughly assess a dental patient including principles of infection control, digital dental record platform (AXIUM), digital radiology platform (MIPACs), patient assessment tools; patient interviewing skills, extra-oral/intra-oral dental examinations, vital signs, screening laboratory tests; introduction to dental specialties, tray selection/alginate impressions, coronal tooth polishing, ergonomics, basic medical emergency training and effective use of oral hygiene instruction and fluorides.

DDDS 613 Introduction to Restorative Dentistry**Credits 6. 6 Lecture Hours.**

Form and function of primary and permanent teeth, concepts of ideal occlusion, dental caries and its effect on tooth structure and indications, materials and techniques associated with the restoration of teeth.

DDDS 614 Introduction to Restorative Dentistry I**Credits 5. 4 Lecture Hours. 4 Lab Hours.**

Operative dentistry, dental anatomy, dental materials, occlusion, cariology, preventive dentistry, tooth development, histology of enamel, dentin and pulp and tooth eruption/exfoliation; evidence-based approach to restorative dentistry.

DDDS 615 Introduction to Restorative Dentistry II**Credits 7. 4 Lecture Hours. 8 Lab Hours.**

Counterpart to DDDS 614. Introduction to Restorative Dentistry II is an integrated course that includes didactic and laboratory portions covering Operative Dentistry, Dental Anatomy, Dental Materials, Occlusion, Cariology, Preventive Dentistry, Tooth Development, Histology of Enamel, Dentin and Pulp, and Tooth Eruption/Exfoliation. This course stresses an evidence-based approach to restorative dentistry.

DDDS 6510 Biochemistry/Cell and Molecular Biology**Credits 3. 3 Lecture Hours.**

Chemical, metabolic cellular and molecular processes in the human body with applications to the practice of dentistry. Also includes cellular and molecular mechanisms that control gene expression and metabolic processes in human cells and tissues with an emphasis on dental examples.

DDDS 6520 Cariology and Prevention**Credit 1.5. 1.5 Lecture Hour.**

Cariology, identification, progress, prevention and management of dental decay and tobacco-related oral disease; oral hygiene index and clinical utilization of plaque removal materials and techniques.

DDDS 6540 Dental Anatomy**Credits 2. 2 Lecture Hours.**

Form and function of the human dentition.

DDDS 6543 Dental Anatomy-C**Credits 2. 2 Lab Hours.**

Drawing and carving teeth to scale; restoring tooth form in wax to normal relation with adjacent and opposing teeth; identification of extracted natural teeth.

DDDS 6580 Dental Materials**Credit 1. 0.5 Lecture Hours. 0.5 Lab Hours.**

Introduction to the effects of physical, chemical and mechanical properties on the manipulation of materials used in dentistry; laboratory exercises to demonstrate clinical applications.

DDDS 6600 General Histology**Credits 3. 1.5 Lecture Hour. 1.5 Lab Hour.**

Microscopic and ultrastructural characteristics of cells, tissues and organ systems of the human; a brief introduction to function; light- and electron-microscopic study of human tissues.

DDDS 6640 Gross Anatomy**Credits 6. 3 Lecture Hours. 3 Lab Hours.**

Gross morphology of the human with special emphasis on the head and neck; dissection of the cadaver.

DDDS 6660 Growth and Development**Credit 1.5. 1.5 Lecture Hour.**

Prenatal growth of craniofacial structures; postnatal physical growth and maturation; development of the dentition and malocclusion; postnatal craniofacial development.

DDDS 6690 Human Behavior in Dentistry**Credits 0.5. 0.5 Lecture Hours.**

Application of principles of communication and motivation relevant to doctor-patient relations, patient compliance, stress management, and management of dental anxiety and fear.

DDDS 6724 Introduction to Clinical Practice I-C**Credits 0.5. 0.5 Other Hours.**

Observation and assistance of students in delivering dental services in preventive dentistry, oral diagnosis, periodontics and general dentistry, dental health education, patient interviewing, history taking and record management.

DDDS 6730 Introductory Ethics and Academic Integrity**Credits 0.5. 0.5 Lecture Hours.**

Contemporary introduction to ethics in the dental profession and academic integrity in dental education.

DDDS 6740 Immunology**Credit 1. 0.5 Lecture Hours. 0.5 Lab Hours.**

A lecture course to teach the basic principles of immunology as it relates to the practice of dentistry and the process of infectious disease.

DDDS 6770 Neuroscience**Credit 1.5. 1.5 Lecture Hour.**

Gross structural features and functions of the human nervous system; emphasis on physiology of nerve membrane and receptors, neural pathways for the major sensory and motor systems; the cranial nerves; and the autonomies of the head and neck.

DDDS 6800 Occlusion**Credit 1. 1 Lecture Hour.**

Temporomandibular joint occlusal function; intercusp relationships; mandibular movements; record transfer; use of a semi-adjustable articulator.

DDDS 6804 Occlusion - C**Credit 1. 1 Lab Hour.**

Preclinical laboratory to accompany course 6800.

DDDS 6820 Oral Histology**Credits 2. 1 Lecture Hour. 1 Lab Hour.**

Normal development and structure of tissues associated with the tooth proper, its adnexa and the oral cavity; light-, scanning electron-, and transmission electron- microscopy; emphasis on clinical aspects of oral histology.

DDDS 6840 Operative Dentistry**Credit 1. 1 Lecture Hour.**

Introduction to the treatment of diseased and injured teeth; emphasis on principles of cavity preparation; principles and manipulation of restorative materials.

DDDS 6844 Operative Dentistry - C**Credits 2. 2 Lab Hours.**

Preclinical laboratory to accompany course 6840.

DDDS 6850 Cultural Competence in Dental Health Care and Education**Credits 0.5. 0.5 Lecture Hours.**

Explores cultural differences and similarities while increasing awareness of values and beliefs that impact health care and communication. Must be taken on a satisfactory/unsatisfactory basis.

DDDS 6860 Introduction to Evidence Based Dentistry and Clinical Research**Credits 2.5. 2.5 Lecture Hours.**

Lecture and group sessions to introduce the functional principles of how to formulate a focused research question and how to search the literature to identify and evaluate evidence to answer that question.

DDDS 6870 Physiology**Credits 5.5. 2.8 Lecture Hours. 2.8 Lab Hours.**

Theory and principles of human body function; detailed study of the cell membrane, skeletal muscle, blood, heart, lungs, gastrointestinal system, kidney and endocrine glands; demonstration of many principles in laboratory exercises.

DDDS 6880 General Pathology**Credits 4. 2 Lecture Hours. 2 Lab Hours.**

This lecture course aimed at presenting the basic mechanisms on the organ systems of the body. It is also intended to provide an understanding of the more common diseases and, where appropriate, how they might impact the management of the dental patient.

DDDS 701 Dental Pharmacology**Credit 1.5. 1.5 Lecture Hour.**

Terms and principles essential to understanding the rational use of drugs in dental practice; pharmacology of medications used in the practice of dentistry; patient drug history evaluations and prescription writing techniques; information regarding the recognition and treatment of substance abuse.

DDDS 7010 Dental Auxiliary Utilization**Credits 0.5. 0.5 Lecture Hours.**

Utilization of the chair-side dental assistant; self-study module.

DDDS 702 Oral Pathology**Credits 2.5. 2.5 Lecture Hours.**

Diseases and conditions affecting the mouth and perioral tissues; basic pathological processes and how those processes affect and are modified by their occurrence in the oral cavity; oral manifestations of systemic conditions.

DDDS 7020 Endodontics**Credit 1. 1 Lecture Hour.**

Introduction to endodontics; technical and biological bases for nonsurgical root canal therapy; access, cleaning, shaping and filling of root canals.

DDDS 7024 Endodontics - C**Credit 1. 1 Lab Hour.**

Preclinical laboratory; discussion and demonstrations of techniques for nonsurgical root canal therapy including access opening, cleaning, shaping and filling of root canals in models and extracted teeth.

DDDS 7040 Fixed Prosthodontics**Credits 3. 3 Lecture Hours.**

Instruction in the design and fabrication of fixed partial dentures and crown restorations, implants, preparations, fabrication techniques and related dental materials.

DDDS 7044 Fixed Prosthodontics - C**Credits 4. 4 Lab Hours.**

Laboratory to accompany course DDDS 7040.

DDDS 7080 Introduction to Clinical Practice II**Credit 1. 0.5 Lecture Hours. 0.5 Lab Hours.**

Introduction to Clinical Practice II. Introduction, orientation to the various clinical disciplines; concepts and implementation of quality assurance issues in dental practice, aseptic techniques, patient communications, diversity ethics, instrument management, initial introductory endodontics information, dental patient record management, rotations patient assignments, and culturally sensitive patient interviewing information.

DDDS 7084 Introduction to Clinical Practice II-C**Credit 1.5. 1.5 Other Hour.**

Clinic applications to accompany course 7080; including rotations through various discipline clinics, several simulations of clinical operative procedures using computer documentation, small group sessions where students participate in simulated culturally sensitive patient interviewing exercises.

DDDS 7100 Operative Dentistry**Credit 1. 1 Lecture Hour.**

Treatment of diseased and injured teeth; emphasis on principles of cavity preparation; principles and manipulation of restorative materials.

DDDS 7104 Operative Dentistry - C**Credits 2. 2 Lab Hours.**

Preclinical laboratory to accompany course 7100.

DDDS 711 Ethical Practice**Credit 1.5. 1.5 Lecture Hour.**

Culturally competent, professional and ethical practice of dentistry; health disparities in society and how populations are affected; ethical issues and concerns encountered in the practice of dentistry; medical-legal issues surrounding documentation in patient records and intricacies of proper patient record management.

DDDS 712 Integrated Practice of Dentistry**Credits 8.5. 8.5 Lecture Hours.**

An integrated approach to developing clinical skills in periodontics, operative dentistry, fixed prosthodontics, removable prosthodontics and endodontics.

DDDS 7120 Basic Principles and Techniques of Dentoalveolar Surgery**Credit 1. 0.5 Lecture Hours. 0.5 Lab Hours.**

Introduction to the basic principles and techniques of dentoalveolar surgery; presurgical patient evaluation, risk management and assessment; surgical instrument identification and vocabulary, principles of soft tissue surgery, sterile techniques and infection control; preprosthetic surgical techniques.

DDDS 713 Integrated Practice of Dentistry - Preclinic**Credits 12. 24 Lab Hours.**

Integrated laboratory exercises for developing clinical skills in periodontics, operative dentistry, fixed prosthodontics, removable prosthodontics and endodontics.

DDDS 714 Comprehensive Dentistry Clinic**Credits 3. 3 Other Hours.**

System of clinical instruction and operation by learning to provide or be responsible for all aspects of a given patient's treatment needs in a manner that closely resembles the way care is provided in private practice after graduation.

DDDS 7140 Preclinical Diagnostic Sciences II**Credit 1. 1 Lecture Hour.**

Introduction to clinical diagnostic methods and its vocabulary that contribute to the assessment of the dental patient. Techniques of gathering diagnostic information from the patient history, the extraoral physical examination and clinical laboratory studies.

DDDS 716 Integrated Practice of Dentistry Didactic I**Credits 6. 6 Lecture Hours.**

Combination of basic level knowledge from multiple dental disciplines including periodontics, operative dentistry, fixed prosthodontics and removable prosthodontics.

DDDS 7160 Oral Pathology**Credits 2. 2 Lecture Hours.**

Etiology, pathogenesis and clinical aspect of oral disease and oral manifestations of systemic disease.

DDDS 717 Integrated Practice of Dentistry Lab I**Credits 7. 14 Lab Hours.**

Laboratory integration with multiple dental disciplines including periodontics, operative dentistry, fixed prosthodontics and removable prosthodontics; laboratory sessions for each module will be divided into A and B groups; periodontics module will have 4 laboratory groups.

Prerequisites: Successful completion of first year dentistry courses.

DDDS 7170 Oral Radiology**Credits 2. 2 Lecture Hours.**

The basic concepts of radiation physics, the generation of X-rays; operation of the X-ray unit; the control factors involved in the production of radiographic images, intraoral, extraoral and specialized radiographic acquisition techniques; and the radiographic interpretation of normal anatomy, dental caries, periodontal disease and dental anomalies.

DDDS 7173 Oral Radiography - C**Credits 0.5. 0.5 Other Hours.**

Supervised practical experience in the application of the principles of radiographic image formation.

DDDS 718 Integrated Practice of Dentistry Didactic II**Credits 4. 4 Lecture Hours.**

Combination of basic level knowledge from multiple dental disciplines including periodontics, operative dentistry, fixed prosthodontics, removable prosthodontics and endodontics.

DDDS 719 Integrated Practice of Dentistry Lab II**Credits 5. 10 Lab Hours.**

Laboratory integration and combination of basic level exercises from multiple dental disciplines including periodontics, operative dentistry, fixed prosthodontics, removable prosthodontics and endodontics.

DDDS 7190 Preclinical Diagnostic Sciences II**Credit 1. 1 Other Hour.**

Techniques and vocabulary that contribute to the diagnosis of dental diseases, abnormalities of teeth and non-dental lesions of the orofacial region. Physical and radiographic examination of oral/perioral tissues and the application of findings to diagnostic decisions are emphasized. Also, includes clinical documentation and dental treatment planning.

DDDS 721 Preclinical Diagnostic Science**Credits 4. 4 Lecture Hours.**

Vocabulary and diagnostic techniques that contribute to the physical assessment of the dental patient; an introduction to clinical medicine as well as terminology and techniques that contribute to the diagnostic process; physical and radiographic techniques; general aspects of the diagnostic method as well as the techniques of gathering diagnostic information from the patient history, physical examination and clinical laboratory studies; application of findings to assessment of common systemic diseases; basic concepts of radiation physics, generation of x rays, operation of the x-ray unit, control of factors involved in the production of radiographic images and intraoral, extraoral and specialized radiographic techniques; normal radiographic anatomy and radiographic diagnosis of dental caries, periodontal diseases and dental anomalies; tools and knowledge to safely and effectively evaluate patients prior to initiating a course of dental treatment.

DDDS 7210 Orthodontics**Credit 1. 1 Lecture Hour.**

Introductory information regarding evaluation of tooth position problems, treatment planning for minor orthodontic problems, including primary, mixed and adult dentitions. Diagnosis will be emphasized.

DDDS 7214 Orthodontics - C**Credit 1. 1 Lab Hour.**

Basic techniques of wire and acrylic manipulation, including soldering, welding, band fabrication and bonding in a laboratory setting.

DDDS 7230 Local Anesthesia / Nitrous Oxide-Oxygen Conscious Sedation
Credit 1. 0.5 Lecture Hours. 0.5 Other Hours.

Regional pain control; nitrous oxide-oxygen sedation and enteral conscious sedation, preanesthetic evaluation of patients, techniques of administration, pharmacology, side effects, complications and risk, and management of complications.

DDDS 7250 Pediatric Dentistry**Credits 2. 1 Lecture Hour. 1 Lab Hour.**

An introductory course to pediatric dentistry presented in small-group seminars, preclinical laboratory basic operative skills, diagnosis and treatment planning, behavioral management strategies, an introductory patient experience activity, and observation of clinical treatment in preparation for the pediatric clinical courses.

DDDS 7270 Periodontics**Credits 2. 2 Lecture Hours.**

Classification of periodontal disease, systemic and dysfunctional factors associated with periodontal disease, diagnosis and management of periodontal diseases, emphasis on specific therapeutic techniques.

DDDS 7274 Periodontics - C**Credit 1. 0.5 Lab Hours. 0.5 Other Hours.**

Periodontics – C. Clinical applications of course DDDS 7270.

DDDS 7290 Dental Pharmacology**Credits 2. 2 Lecture Hours.**

Terms and principles essential to understanding the rational use of drugs in dental practice; pharmacology of drugs used in dentistry; prescription writing techniques; evaluation of patient drug histories.

DDDS 731 Prevention and Management of Medical Emergencies in the Dental Office**Credit 1. 1 Lecture Hour.**

Preparations for handling emergencies; prevention, recognition and management of various emergencies; case scenarios and mock hands-on drills.

DDDS 7330 Patient Management**Credits 0.5. 0.5 Lecture Hours.**

Scientific basis for oral disease assessment and strategies for prevention and/or management of oral diseases.

DDDS 7350 Removable Prosthodontics**Credits 2. 2 Lecture Hours.**

Concepts and techniques for fabricating complete and partial dentures. Complete dentures fabricated on a manikin, theory of various denture occlusions; RPD design and construction, immediate dentures, restoration of implants, mouth preparation and laboratory communication.

DDDS 7353 Removable Prosthodontics - C**Credits 4. 4 Lab Hours.**

Preclinical laboratory to accompany course DDDS 7350.

DDDS 7400 Application of Evidence Based Dentistry I**Credits 0.5. 0.5 Other Hours.**

Small group sessions review clinically relevant articles using the foundational information from the first year evidence-based dentistry course.

DDDS 741 Basic Principles and Techniques of Exodontia and Dentoalveolar Surgery**Credit 1. 1 Lecture Hour.**

Principles and techniques of dentoalveolar surgery, with emphasis on pre-surgical patient evaluation, risk management, instrumentation and basic surgical principles; reviews and overviews of patient evaluation & risk assessment; management planning; surgical armamentarium; basic infection control and sterile technique; surgical principles of flap design; elevator and forceps selection and use.

DDDS 7410 National Dental Board Part I Review**Credit 1. 1 Lecture Hour.**

Presents discipline-based and case-based review material on the four sections of the NBDE including experience in taking practice examinations.

DDDS 742 Local Anesthesia and Nitrous Oxide/Conscious Sedations**Credit 1.5. 1.5 Other Hour.**

Dose calculations for local anesthesia throughout the oral cavity for a variety of patients; correct administration techniques; neural innervations of each area of the oral cavity and the areas anesthetized.

DDDS 7420 Microbiology**Credits 3. 3 Lecture Hours.**

Microorganism metabolism, genetics, bacteriology, virology, mycology, chemotherapy, sterilization, disinfection, and the microorganisms of oral diseases.

DDDS 761 Growth and Development Orthodontics**Credit 1.5. 1.5 Lecture Hour.**

Pre-clinical instruction in orthodontics; a systematic approach to decision making (diagnosis) and the treatment of minor orthodontic problems such as molar uprighting and diastema closure; fundamentals of treating primary and mixed dentition cases; space analysis and eruption guidance.

DDDS 771 Pediatric Dentistry**Credits 2.5. 1.5 Lecture Hour. 2 Lab Hours.**

Diagnostic, preventive and operative procedures and techniques specific to management of the pediatric patient; pediatric operative procedures; behavior guidance; local anesthesia; radiographic techniques for the child patient.

DDDS 8000 Summer Clinic - C**Credits 0. 0 Other Hours.**

All phases of clinic practice; mandatory attendance for third-year students.

DDDS 8004 Clinical Preventive Dentistry - C**Credits 0.5. 0.5 Other Hours.**

Clinical applications of disease detection, risk assessment, behavioral modification and needs-based preventative measures.

DDDS 802 Medical Pharmacology**Credit 1.5. 1.5 Lecture Hour.**

Study of commonly prescribed medications taken by patients that may impact the practice of dentistry; includes mechanisms of action, pharmacokinetics, pharmacodynamics, pharmacovigilance (adverse effects), drug interactions of these medications and recognition and treatment of substance use disorder (SUD).

DDDS 8034 Comprehensive Care Program - C**Credits 4. 4 Other Hours.**

A clinical instruction and mentoring system with seminars that allows the student-clinician to learn to provide and coordinate patient care, as defined by clinical competencies, in a setting that simulates effectively managed dental practices that are patient centered and quality assured. It includes patient management skills, professionalism, ethics, time management, record and patient audits, work habits, treatment planning and other facets consistent with complete and socially sensitive patient care.

DDDS 8044 Dental Auxiliary Utilization - C**Credit 1. 1 Other Hour.**

Utilization of chairside dental assistant, clinical applications.

DDDS 8060 Endodontics**Credit 1. 1 Lecture Hour.**

Clinical endodontic; diagnosis and management of pulpal and periradicular disease; integration of pulpal biology and clinical practice.

DDDS 8064 Endodontics – C**Credit 1. 1 Other Hour.**

Clinical application of course DDDS 8060.

DDDS 8080 Fixed Prosthodontics**Credit 1.5. 1.5 Lecture Hour.**

Biological, physiological, anatomical, and esthetic factors related to diagnosis, treatment planning and patient treatment.

DDDS 8084 Fixed Prosthodontics - C**Credits 3. 3 Other Hours.**

Clinical application of course DDDS 8080.

DDDS 811 Ethical Practice**Credits 2. 2 Lecture Hours.**

Knowledge and skills to competently manage personal and business financial issues; leadership in the dental office and in the community as part of a health delivery team.

DDDS 812 Integrated Practice of Dentistry**Credits 6. 6 Lecture Hours.**

Critical thinking skills for application to patient treatment; patient management, preventive dentistry, treatment planning, case-based studies, evidence-based dentistry and critical thinking with interdisciplinary care; includes sleep disorders, bruxism, pain management, specialties and general dentistry practice, advanced dental materials and veneers.

DDDS 814 Comprehensive Dentistry Clinic**Credits 17. 17 Other Hours.**

A system of clinical instruction and operation by learning to provide or be responsible for all aspects of a given patient's treatment needs in a manner that closely resembles the way care is provided in private practice after graduation; encompasses patient care and clinical rotations through the various disciplines.

DDDS 8140 Behavioral Dentistry/Dental Public Health**Credit 1. 1 Lecture Hour.**

Behavioral management principles relevant to pain, anxiety, cultural background, etc. Management, treatment, prevention and disease control for geriatric patients. Motivational interviewing exercises for protection and management of oral health is taught. Dental public health and concepts of managing geriatric patients is included in the latter half of the course.

DDDS 815 Clinical Dentistry**Credits 5. 5 Lecture Hours.**

Integrated didactic instruction regarding general restorative dentistry, including operative dentistry, fixed and removable prosthodontics and endodontics; includes the prevention, diagnosis and management of pulpal diseases, caries and tooth structure loss; focus on the materials, techniques and procedures the competent practitioner should know for the practice of general restorative dentistry.

DDDS 816 Advanced Clinical Dentistry**Credits 5. 4 Lecture Hours. 2 Lab Hours.**

Integrated didactic, laboratory and clinicals focusing on advanced restorative dentistry, including fixed implant restorative, implant removable prosthodontics, occlusion and orthodontics; includes diagnosis and management of malocclusion, sequelae of occlusal issues, management of patients with TMD and more advanced topics in restorative dentistry including diagnosis and management of full-mouth rehabilitation; focus on materials, techniques and procedures the competent practitioner should know for advanced restorative techniques.

DDDS 8160 Anesthesia in Dentistry**Credits 0.5. 0.5 Lecture Hours.**

Indications, contraindications, risks and techniques of enteral, parenteral and general anesthesia as applicable to dentistry.

DDDS 817 Surgical Interventions, Anesthesia and Pharmacology**Credits 5. 5 Lecture Hours.**

Advanced basic surgical procedures, concepts and periodontics; odontogenic infections (recognition and initial management); maxillary sinus conditions and disease; salivary gland disease and conditions; cleft lip and palate; principles of biopsy and tenets of biopsy referral; surgical placement of osseointegrated implants; maxillofacial trauma; surgical management of TMJ disorders; sleep-disordered breathing; includes indications, contraindications, risks and techniques of enteral, parenteral and general anesthesia; medical pharmacology; drug mechanisms of action, pharmacokinetics, pharmacodynamics, pharmacovigilance (adverse effects) and drug interactions; substance abuse.

DDDS 818 Integrated Practice of Dentistry I**Credits 8. 8 Lecture Hours.**

Integration of general restorative dentistry including operative dentistry, fixed and removable prosthodontics, periodontics, endodontics, behavioral dentistry, treatment planning and EBD; focus on the materials, techniques and procedures for the practice of general dentistry.

DDDS 8180 Implant Dentistry**Credit 1. 0.5 Lecture Hours. 0.5 Lab Hours.**

Indications and evidence-based rationale for dental implants, diagnosis and treatment planning, surgical concepts of placement, prosthodontic restorative treatment for single tooth, partially edentulous and completely edentulous patients, and maintenance procedures.

DDDS 819 Integrated Practice of Dentistry II**Credits 6.5. 3.5 Lecture Hours. 8 Lab Hours.**

Integration of more advanced aspects of general dentistry including advanced periodontics, implant-fixed and removable prosthodontics, periodontics, occlusion, TMD, treatment planning and EBD; focus on the materials, techniques and procedures needed for the practice of general dentistry.

DDDS 8200 Occlusion**Credit 1. 1 Lecture Hour.**

Diagnosis and treatment of potentially pathologic and clinically pathologic occlusal conditions; etiologic factors; effects of pathofunction on oral tissues; diagnostic aids and methods of treatment.

DDDS 8204 Occlusion – C**Credit 1. 1 Other Hour.**

Laboratory exercises to accompany course DDDS 8200.

DDDS 821 Clinical Principles of Patient Evaluation**Credits 2. 2 Lecture Hours.**

Problem based study of case histories and descriptions of a variety of head and neck diseases and conditions encountered in the practice of dentistry with integration of basic biomedical science knowledge; patient evaluation in cases to determine a diagnosis; techniques of differential diagnosis; diagnostic tests; patient management and referral.

DDDS 8220 Operative Dentistry**Credit 1.5. 1.5 Lecture Hour.**

Clinical principles of operative dentistry, the art and science of treating diseased teeth; restoration of proper tooth form, function and esthetics.

DDDS 8224 Operative Dentistry - C**Credits 3. 3 Other Hours.**

Clinical application of course DDDS 8220.

DDDS 8240 Advanced Principles and Techniques of Dentoalveolar Surgery**Credit 1. 1 Lecture Hour.**

Continuation of course DDDS 7120. Emphasis on more advanced principles and techniques of dentoalveolar surgery and patient management, advanced pre-prosthetic surgery, odontogenic infections and management, maxillary sinus conditions and disease, osseointegrated implants, and principles of biopsy.

DDDS 8241 Oral and Maxillofacial Surgery: Chronic Pain and Hospital Dentistry**Credit 1. 0.5 Lecture Hours. 0.5 Lab Hours.**

Continuation of course DDDS 8240 with emphasis on more advanced surgical procedures and concepts; temporomandibular joint disease and chronic orofacial pain; peripheral nerve injuries; hospital dentistry; dentoalveolar and craniofacial trauma and management.

DDDS 8244 Oral and Maxillofacial Surgery - C**Credit 1. 1 Other Hour.**

Clinical application of course DDDS 8240.

DDDS 8264 Oral Diagnosis - C**Credit 1.5. 1.5 Other Hour.**

Provides the format for the student's practical experience in the diagnosis and treatment planning for the dental patient; clinical rotations with patient screening; the diagnosis and treatment planning for assigned clinical patients.

DDDS 8280 Clinical Principles of Patient Evaluation**Credits 2. 2 Lecture Hours.**

Diagnostic sciences and clinical principles of patient evaluation; interactive case-based, problem-solving course requiring the utilization of differential diagnosis skills of clinical oral signs and symptoms with an emphasis on oral pathology and a variety of head and neck diseases and conditions encountered in the practice of dentistry.

DDDS 8304 Oral Radiography - C**Credits 0.5. 0.5 Other Hours.**

Application of basic principles, procedures and techniques of clinical radiology to patients.

DDDS 8320 Orthodontics**Credit 1. 1 Lecture Hour.**

Introduction to orthodontic diagnosis and treatment; biological principles of tooth movement; cephalometric analysis; fundamentals of design, selection, and use of fixed and removable appliance systems and interdisciplinary interaction.

DDDS 8324 Orthodontics - C**Credits 0.5. 0.5 Other Hours.**

Clinical application of course DDDS 8320.

DDDS 8340 Pediatric Dentistry**Credit 1.5. 1.5 Lecture Hour.**

Lectures and small-group seminars covering treatment planning and child management; special problems in pediatric dentistry; emphasis on complete dental rehabilitation of patients.

DDDS 8344 Pediatric Dentistry - C**Credit 1. 1 Other Hour.**

Clinical application of course DDDS 8340.

DDDS 8360 Periodontics**Credit 1. 1 Lecture Hour.**

Introduction to advanced periodontal techniques; periodontics as it relates to general practice and comprehensive case analysis, and treatment planning emphasizing periodontal literature and interdisciplinary concerns.

DDDS 8364 Periodontics - C**Credits 2. 2 Other Hours.**

Clinical application of course DDDS 8360.

DDDS 8370 Professional Ethics**Credit 1. 1 Lecture Hour.**

Principles and theory; case analysis and decision-making; humanizing health care; general ethics; obligations of health professionals; bioethics; review of dental-specific ethics literature; includes small group sessions.

DDDS 8380 Medical Pharmacology**Credit 1.5. 1.5 Lecture Hour.**

Pharmacology of drugs used in medicine impacting dental patient evaluation and management. Focus is on fundamental drug information necessary for patient evaluation, the drug history and understanding potential adverse events, mechanisms of action, pharmacokinetics pharmacodynamics, and drug interactions with medications prescribed for dental procedures.

DDDS 8400 Removable Prosthodontics**Credit 1.5. 1.5 Lecture Hour.**

Fabrication delivery and management of removable complete dentures, partial dentures and immediate dentures.

DDDS 8404 Removable Prosthodontics - C**Credits 3. 3 Other Hours.**

Clinical application of course DDDS 8400.

DDDS 841 Advanced Oral and Maxillofacial Surgery**Credits 2. 2 Lecture Hours.**

Advanced dental surgical procedures and concepts; recognition and initial management of odontogenic infections; maxillary sinus conditions and disease; salivary gland disease and conditions; cleft lip and palate; principles of biopsy and tenets of biopsy referral; surgical placement of osseointegrated implants; maxillofacial trauma as well as surgical management of TMJ disorders and sleep-disordered breathing and the indications, contraindications, risks and techniques of enteral, parenteral and general anesthesia as applicable to dentistry.

DDDS 8500 Office Medical Emergencies**Credits 0.5. 0.5 Lecture Hours.**

Prevention, recognition and management of medical emergencies; management of medically compromised patients.

DDDS 8600 Advanced Removable Prosthodontics**Credit 1. 1 Lecture Hour.**

Extension of course DDDS 8400 with emphasis on advanced concepts for removable complete dentures, partial dentures, immediate dentures and prosthetic restoration of implants.

DDDS 861 Orthodontics**Credit 1.5. 0.5 Lecture Hours. 2 Lab Hours.**

Orthodontic diagnosis and treatment of patients with a variety of orthodontics problems; includes concepts in biology, growth, cephalometrics, patient evaluation, mechanics and treatment.

DDDS 8610 Periodontics**Credits 0.5. 0.3 Lecture Hours. 0.3 Lab Hours.**

Intended to reinforce the principles of non-surgical management of periodontal disease and to better prepare for first clinical experiences; a review of periodontal hand instrumentation, infection control in the clinic and hands-on set-up and use of the Cavitron ultrasonic instrument; includes the relationship of periodontics and restorative dentistry and the proper usage of radiosurgery in dentistry.

Prerequisites: DDDS 7270 and DDDS 7274.

DDDS 871 Pediatric Dentistry**Credit 1.5. 1.5 Lecture Hour.**

Overview of pediatric dentistry covering topics essential to the management of and treatment planning for the child patient; topics related to evaluation and comprehensive dental rehabilitation.

DDDS 9000 Summer Clinic**Credits 0.**

All phases of clinical practice; mandatory attendance for fourth-year students.

DDDS 9004 Clinical Services Assignment - C**Credits 4.5. 4.5 Other Hours.**

Clinical Services Assignment – C. Continuing clinical experience in selected specialties; emergency treatment in a practice setting; oral and maxillofacial surgery appropriate for general practice; oral diagnosis; treatment planning.

DDDS 901 Board Review**Credits 4. 4 Lecture Hours.**

Structured review of dental and craniofacial knowledge and clinical skills in preparation for the Integrated National Dental Board Examination (INDBE) and the Western Regional Board (WREB) Comprehensive Treatment Planning (CTP) Examination and WREB Clinical Examination.

DDDS 902 Applied Pharmacology**Credits 0.5. 0.5 Lecture Hours.**

Review of commonly prescribed medications and medications used in the practice of dentistry; emphasis on principles of substance use disorder (SUD) and pain management in dental practice; practice evaluation of patient drug histories with special emphasis on drug interactions in patients with multiple drug history and co-morbidities.

DDDS 9030 Diagnosis and Treatment Planning Seminar**Credit 1. 1 Lecture Hour.**

Lecture and small group sessions familiarize students with “phase treatment planning,” interviewing patients, systemic disease issues, disease control, definitive treatment, maintenance and recall.

DDDS 9040 Advancements in Techniques and Materials**Credit 1.5. 1.5 Lecture Hour.**

Innovations and advancements in dental materials and techniques; advantages and disadvantages; scientific basis for selection of materials and techniques.

DDDS 9044 General Dentistry - C**Credits 20. 20 Other Hours.**

All phases of general dentistry performed as required for each assigned patient; seminars and student presentations. The General Dentistry program is inclusive of fixed prosthodontics, geriatrics, removable prosthodontics, operative dentistry, oral and maxillofacial surgery, oral diagnosis, orthodontics, pediatric dentistry, periodontics, endodontics, community health and preventive dentistry, oral radiography, and special care clinic.

DDDS 9050 Selected Advanced Topics in Oral And Maxillofacial Surgery**Credits 0.5. 0.3 Lecture Hours. 0.3 Lab Hours.**

Emphasis is on more advanced and complex oral and maxillofacial surgical concepts more typically performed by the specialist in oral and maxillofacial surgery; extending the student's capability for patient evaluation. Topics include major facial trauma, bone grafting, reconstruction of head and neck defects, orthographics, life threatening infections and others.

DDDS 9070 Orthodontics**Credit 1. 1 Lecture Hour.**

Comprehensive case analysis and treatment planning; role of the general dentist in detection, interception and treatment of orthodontic problems.

DDDS 9080 Community Dentistry Externship**Credits 0.5. 0.5 Other Hours.**

Clinical experiences with historically underserved populations throughout a community dental center, the juvenile justice center, and other public health facilities.

DDDS 9090 Pediatric Dentistry**Credit 1. 1 Lecture Hour.**

Lectures and small-group seminars, including child abuse, practice management, cleft lip/palate and case-based problem-solving exercises.

DDDS 911 Ethical Practice**Credits 2. 2 Lecture Hours.**

Obligations of the health professionals; responsibility to future practitioners; examine, define and analyze ethical problems pertinent to dental practice; common ethical problems in practice; the ADA Code and the Dental Practice Act.

DDDS 9110 Applied Pharmacology**Credit 1. 1 Lecture Hour.**

Pharmacology in dental practice; therapeutic use of drugs; toxicology; practice in evaluating patient drug histories with special emphasis on drug interactions in patients receiving multiple drug therapy.

DDDS 9120 Practice Administration**Credit 1. 1 Lecture Hour.**

Associateships, other professional practice opportunities, purchasing existing practices; locating and financing a dental practice; taxes and insurance; management, staffing and delegation of duties marketing; Occupational Safety and Health Administration; stress management; third-party consideration.

DDDS 914 Comprehensive Dentistry Clinic**Credits 28. 28 Other Hours.**

Diagnose and provide comprehensive oral health service in a professional manner; clinical experience that resembles a broadly-based general dental practice including personnel and patient management; professionalism demonstrated by word and action, the commitment to providing competent care in a timely patient-centered manner respecting the patient's values and interests; complete treatment of a group of assigned patients in a professional manner involving all dental disciplines; may include assigning patients in requested disciplines; participation in preceptorships, internships or mentoring programs provided in the Comprehensive Care Program as needed; opportunity for self-directed learning experience and the development of skills beyond competency in certain areas of clinical care; encompasses clinical rotations through various disciplines and venues.

DDDS 9140 Professional Ethics and Dental Jurisprudence**Credits 0.5. 0.5 Lecture Hours.**

Principles and theory, professional responsibility; case discussion and analysis/decision-making; humanizing health care; virtue ethics; legal aspects of dental practice; state board interactions and policies.

DDDS 915 Comprehensive Care for Medically Compromised and Special Needs Patients**Credit 1. 1 Lecture Hour.**

Advanced principles of patient evaluation, diagnostic processes and available treatment modalities.

DDDS 9160 Senior Seminar**Credit 1. 1 Lecture Hour.**

Topics and issues of special concern to dental practitioners.

DDDS 917 Dental Board Review**Credits 4. 4 Lecture Hours.**

Structured review of dental and craniofacial knowledge and clinical skills in preparation for the Integrated National Dental Board Examination (INDBE) and the Western Regional Board (WREB) Comprehensive Treatment Planning (CTP) Examination and WREB Clinical Examination.

DDDS 9190 Advanced Principles of Patient Evaluation**Credit 1. 1 Lecture Hour.**

Advanced problem-solving for complex dental diagnostic issues; case presentations with focus on medically compromised patients, uncommon dental diseases and treatment planning.

DDDS 9200 Comprehensive Care for the Medically Compromised and Special Needs Patients**Credits 0.5.**

Reviews management and treatment issues relevant to medically compromised and special needs patients. Includes health history, medication issues, treatment planning, material and techniques, clinical management and needs assessment for sedation. The information enhances the students interactions in the special care clinic and the General Dentistry Clinic.

DDDS 921 Advanced Principles of Patient Evaluation and Management**Credit 1.5. 1.5 Lecture Hour.**

Study of the comprehensive care of medically-compromised and special-needs patients and advanced principles of patient management.

DDDS 9210 Advanced Technologies in General Dentistry**Credits 0.5.**

Utilization of advanced technologies such as radiosurgery, the dental operating microscope, soft tissue lasers, CAD/CAM systems, the Isolite retraction/illumination/aspiration system and the iTero Optical impression system in order to familiarize the students with the operation and use of this equipment prior to use in the clinic.

DDDS 9220 Enteral Conscious Sedation and Emergency Protocols**Credit 1.**

Provides information regarding Level 1 permit rules and regulations, physical assessment, pharmacology of enteral agents, local anesthesia/nitrous implications, pediatric assessment and clinical protocols related to the safe delivery of Enteral Conscious Sedation; satisfies the didactic requirements for a Level 1 Minimal Sedation Permit in the State of Texas. Must be taken on a satisfactory/unsatisfactory basis.

DDDS 9230 Advanced Endodontics Concepts**Credits 0.5. 6 Lecture Hours.**

Advanced course for senior dental students to broaden their understanding of clinical endodontic concepts including cleaning and shaping techniques, complex diagnoses, obturation systems, irrigation protocols, inter-relationship of endodontics with restorative and periodontal principles, resorption, and National Board review.

Prerequisites: ENDO 7020, ENDO 7024, ENDO 8060.

DDDS 9240 National Board Dental Exam Part II Review**Credit 1. 1 Lecture Hour.**

Formal establishment of a mandatory NDBE II review course in the fall semester of the D4 curriculum; intended outcome of this review is to increase the first-time pass rate on the NBDE II.

Prerequisite: DDDS 7410.

DDDS 9250 Managing Cultural Issues in Patient Care**Credits 0.5. 0.5 Lecture Hours.**

Allows student reflection on care provided to patients who identify with cultures that differ from their own to assess strengths and weaknesses in their ability to provide culturally sensitive care and recognize strategies that can be used to effectively manage similar encounters in the future. Must be taken on a satisfactory/unsatisfactory basis.

DDDS 961 Orthodontics IV Interdisciplinary and Clinical Topics in Orthodontics**Credit 1. 1 Lecture Hour.**

Orthodontics and interaction with other dental and medical specialists.

DDDS 971 Pediatric Dentistry**Credit 1. 1 Lecture Hour.**

Integrative topics essential to the management of and treatment planning for the pediatric patient; complete dental rehabilitation of the patient; current topics most pertinent to pediatric dentistry.