

DUAL DEGREE (BSDH/MDT) COURSE DESCRIPTIONS

BIOC 2011— Biochemistry for the Agricultural and Health Sciences

Survey of organic chemistry/biochemistry outlining structure/metabolism of biomolecules, metabolic regulation, and principles of molecular biology.

DH 2111 - Dental Anatomy

All deciduous/permanent teeth, including tooth form, function, and relationship to oral health. Calcification, eruption, exfoliation patterns. Ideal static occlusion, dental terminology, tooth annotation systems. Lab includes identification/annotation of teeth.

DH 2212 - Communication for Oral Health Providers

The study of effective communication strategies within health care settings with emphasis on the oral health provider-patient relationships. Application of health literacy concepts and behavior change theory as components of evidence-based decision making in a variety of practice settings.

DH 2121 - The Dental Hygiene Care Process: Clinical Application I

Dental hygiene care process, assessment principles related to medical and oral health status, dental hygiene clinical procedures, and development of instrumentation skills.

DH 2132 - Head and Neck Anatomy

Anatomical structures of head/neck as they relate to practice of dental hygiene.

DH 2215 - Oral Histology and Embryology

Development of orofacial region. Structural microscopic anatomy of oral hard/soft tissues applicable for rendering clinical treatment.

DH 2221 - Periodontology

Periodontal diseases. Etiology, assessment, and treatment options. Clinical experience in debridement and root planing with ultrasonic/hand instruments.

DH 2222 - The Dental Hygiene Care Process: Clinical Application II

School of Dentistry clinical systems. Various medical/emergency conditions affecting patient care and preventive strategies for dental diseases. Skill development in fluoride, sealant, and air polishing techniques. Evaluation of products used in treatment of dental caries and periodontal diseases.

DH 2231 - Cariology and Applied Nutrition in Dental Hygiene Care

Dental caries. Etiology, pathology, and prevention. Principles of diet/nutrition applied to dental hygiene patient care. Dental dietary counseling.

DH 3100 - Dental Professional Development I

Introductory course to develop skills essential to management of a dental practice, including basic accounting principles, strategies and business planning, quality improvement, patient management, scopes of practice, and lifelong learning through continuing education.

DH 3120 - General and Oral Pathology

Topics in pathology related to dentistry and oral cavity. Oral benign/malignant tumors. Infectious, inflammatory, and immunologically mediated lesions/diseases.

DH 3121 - Local Anesthesia and Pain Management

Concepts in administration of local anesthesia, nitrous oxide-oxygen sedation, and other methods of pain management. Anatomy, physiology, pharmacology, patient assessment, indications and contraindications, selection of agents, injection techniques, complications, emergency management, and legal/ethical considerations. Lecture, lab, clinic.

DH 3123 - The Dental Hygiene Care Process: Clinical Application III

Dental hygiene treatment planning, alternative instruments, and advanced skills related to implementation of dental hygiene care. Clinical experience.

DH 3126 - Oral and Maxillofacial Radiology: Clinic I

Radiographic Technique. Exposing radiographs on skulls, interpretation, panoramic/extraoral technique, quality assurance procedures.

DH 3133 - Pharmacology

Principles of pharmacology, physical/chemical properties of drugs, modes of administration, therapeutic/adverse effects, drug actions/interactions.

DH 3134 - Pediatric Dentistry

Knowledge, skills, and attitudes required for providing dental hygiene care for pediatric patients.

DH 3151 - Oral and Maxillofacial Radiology

General principles of radiology, radiation physics, dosimetry, biology, radiation protection, regulations, recent concepts of imaging.

DH 3211 - Biomaterials and Principles of Restorative Techniques I

Principles of biomaterials and restorative techniques; lecture and pre-clinic experiences.

DH 3224W - The Dental Hygiene Care Process: Clinical Application IV

Knowledge, skills, and attitudes required for providing dental hygiene care for the medically compromised patient, gerodontic patient, and patient with a disability. **Fulfills writing intensive requirement.**

DH 3227 - Oral and Maxillofacial Radiology: Clinic II

Exposing patient radiographs, interpretation, panoramic/extraoral technique, and quality assurance procedures.

DH 3228 - Ethics and Jurisprudence for the Dental Hygienist

Ethical decision making, jurisprudence.

DH 3234 - Oral and Maxillofacial Radiology: Theory, Principles and Radiographic Analysis

Atomic radiations. Characteristics, production, and control of radiographs. Radiographic exposures. Radiation biology, dosimetry, protection, regulations. Discrepancies, technical errors in intraoral radiographs. Radiographic anatomy. Radiographic evidence of deviations.

DH 3238 - Dental Public Health and Academic Service Learning

Epidemiological methods of investigation, patterns of oral diseases. Scope/content of specialty of dental public health. Emphasizes impact on oral promotion and public health policy.

DH 4100 - Dental Professional Development II

Building on the content in DH 3100, students will continue to develop skills essential to effective practice management including team dynamic, conflict resolution, regulatory compliance, collaborative practice, and strategies for a successful career. This course promotes mutual trust and respect in all interpersonal interactions, with an emphasis on the roles of a collaborative dental team.

DH 4125W - Dental Hygiene Care Process V: Social Justice and Oral Health Care Delivery (DSJ, WI)

Social justice with regard to health/oral health care in the United States. How race, class, and gender have impacted how health resources specific to dental health care are distributed and how social conditions impact health/oral health. Dental hygiene treatment to diverse patient populations in a variety of community-based clinics. Health and oral health disparities in the United States. **Fulfills Diversity and Social Justice Liberal Education Theme Requirement.**

DH 4128 - Oral and Maxillofacial Radiology: Clinic III

Exposing patient radiographs, interpretation, panoramic/extraoral technique, quality assurance procedures.

DH 4135W - Research Methods in Dental Hygiene (WI)

Develop skills in the scientific method and critiquing scientific literature. Emphasis is placed on evidence based decision making, types of research and research design, problem identification and hypothesis development, analyzing individual components of journal articles in relation to research principles, and writing the literature review. **Fulfills writing intensive requirement.**

DH 4136 - Periodontology III Lecture

Clinical procedures associated with surgical phase of periodontal therapy. Evaluation of periodontal treatment. Maintenance phase. Relationship between periodontics and other dentistry disciplines. Roles of clinical research in periodontics.

DH 4139 - Dental Public Health and Academic Service Learning II

Academic service-learning in various community health care settings. Assessment, planning, implementation, and evaluation of a community oral health program.

DH 4211- Principles of Restorative Techniques II

Restorative Techniques. Clinical experiences.

DH 4226 - Dental Hygiene Care Process: Clinical Application VI

Advanced dental hygiene care process in Comprehensive Care Clinics and Service Learning Outreach sites. Development and presentation of the Senior Capstone experience. The Capstone is a comprehensive oral case presentation and written case report based on a unique patient experience and treatment.

DH 4229 - Oral and Maxillofacial Radiology: Clinic IV

Exposing patient radiographs, interpretation, panoramic/extraoral technique, quality assurance procedures.

DH 4234 - Leadership and Professional Development

Dental hygienist as leader/manager in client care. Oral health care delivery, manpower, finance mechanisms, health insurance programs, professional associations, state practice acts, legislation. Ethical, political, and legal issues.

DH 4310 - Foundations of Interprofessional, Professionalism, Communication, and Collaboration

Professionalism, communication/collaboration across health professions. Online independent/group work followed by facilitated interprofessional small group discussion of case narratives.

DT 4460 - Essentials of Clinical Care I For the Dental Therapist

Students provide comprehensive care under direction of clinical faculty. May include periodontics, operative, pediatric care, and health promotion. Limited care may be given on rotations to oral surgery clinics.

DT 4960 - Essentials of Clinical Care II for Dental Therapists

Comprehensive clinical care of assigned patients that may include treatment encompassing periodontics, operative, prosthodontics and endodontics, health promotion disciplines.

DT 5000 - Dental Therapy Capstone Project

In-depth, independent, project-based research topic from interests in oral health. Intensive, active-learning initiative requiring significant effort in planning/implementation. Final written product/oral presentation mandatory, demands extensive systematic investigation/research.

DT 5130 - Preclinical Pediatric Dentistry

Childhood development and care of children. Restorative dentistry for children/adolescents. Behavior management techniques. Issues that arise in dental health care setting. Lab.

DT 5140 - Preventive Pediatric Dental Clinic

Oral health promotion of pediatric patients. Brushing techniques, fluoride application, dietary analysis/counseling. Students interact with parents of pediatric patients.

DT 5141 - Clinical Pediatric Dentistry III

Early childhood development, dental care for children.

DT 5162 - Principles of Exodontia and Minor Oral Surgery

Develop knowledge/skill for exodontia/minor oral surgery.

DT 5321 - Treatment Planning for the Dental Therapist

Formal lecture presentations regarding fundamentals of assessment/treatment planning of dental cases. Prepare student to understand University of Minnesota School of Dentistry protocol in development of optimal, alternative, emergency treatment plans.

DT 5360 - Outreach Experiences I

Experiences that reinforce principles of delivering dental health care/services to patients, including underserved patient populations, in contemporary off-site clinical settings.

DT 5361 - Outreach Experiences II

Experiences that reinforce principles of delivering dental health care/services to patients, including underserved patient populations, in contemporary off-site clinical settings.

DT 5410 - Biomaterials Science I

Application of scientific principles to selection/utilization of dental materials.

DT 5429 - Introduction to Psychomotor Skill Development

Virtual reality based training for psychomotor skills required in prosthodontic/operative courses. Eye-hand/mirror skills, ergonomics used while preparing teeth for restoration.

DT 5430 - Oral Anatomy

Morphological characteristics of human dentition, associated contiguous structures. Foundational knowledge applied to situations encountered in general dental clinical practice.

DT 5431 - Oral Anatomy Laboratory

Manual dexterity skills, anatomy of human dentition.

DT 5432 - Operative Dentistry I

How to treat dental caries. Therapeutic treatment of underlying pathology. Surgical treatment of early caries lesion.

DT 5433 - Operative Dentistry I Pre-Clinic Laboratory

How to treat dental caries. Therapeutic treatment of underlying pathology. Surgical treatment of early caries lesion. Hands-on projects working with models simulating teeth and surrounding structures.

DT 5434 - Operative Dentistry II Lecture

How to surgically manage more advanced caries lesions. Transition from pre-clinic lab to clinic setting.

DT 5435 - Operative Dentistry II for the Dental Therapist, Lab

More advanced caries lesions: diagnosis, structural preparation, decay removal and restoration.

DT 5443 - Operative Clinic III

How to place restorations. Students place single-tooth restorations on patients.

DT 5460 - Essentials of Clinical Care I For the Dental Therapist

Students provide comprehensive care under direction of clinical faculty. May include periodontics, operative, pediatric care, and health promotion. Limited care may be given on rotations to oral surgery clinics.

DT 5471 - Prosthodontic Topics for Dental Therapy

Lectures, lab projects of selected prosthodontic techniques to enable the dental therapist to provide/cement quality pre-fabricated metal or resin provisional crowns and other prosthodontic procedures in the scope of DT practice.