

DENTAL HYGIENE (DHY)

Course Descriptions

DHY 150. Concepts in Clinical Dental Hygiene I: Pre-clinic. 3 Credit Hours.

Concepts in Clinical Dental Hygiene I: Pre-clinic introduces the development of basic foundations for competent delivery of preventive, therapeutic, and educational dental hygiene services to the public. A solid knowledge base for assessment, planning, implementation, and evaluation of patient care is established. Theory and practical aspects of prevention of disease transmission in the dental setting and patient assessment skills such as health history, vital signs, oral inspections, principles of instrumentation, and treatment planning are emphasized. (Credit is only allowed for either DHY 150 or DHY 120.)

Prerequisites: BIO 203, BIO 207, BIO 208, and CHM 101 with minimum grades of "C"; Current CPR-Basic Life Support with AED Certification, and Reading Proficiency

DHY 152. Clinical Dental Hygiene I: Pre-Clinic. 3 Credit Hours.

Clinical Dental Hygiene I: Pre-Clinic introduces students to the application of basic foundations for competent delivery of preventive, therapeutic, and educational dental hygiene services on dental manikins and peer partners. Skill development in areas of assessment, planning, implementation, and evaluation of patient care is achieved. The topics of health history, vital signs, oral inspections, application of instrumentation, and treatment planning are emphasized. (Credit is only allowed for either DHY 152 or DHY 121.)

Prerequisites: BIO 203, BIO 207, BIO 208 and CHM 101 with minimum grades of "C"; Current CPR-Basic Life Support with AED Certification, Reading Proficiency

DHY 154. Periodontics I. 2 Credit Hours.

Periodontics I is the study of the healthy periodontium and an introduction to gingival conditions and diseases. Acquired soft and hard deposits, the microbiology, and the etiologic factors of periodontal diseases are covered in depth. Methods of basic oral physiotherapy are introduced. (Credit is only allowed for either DHY 154 or DHY 125.)

Prerequisites: BIO 203, BIO 207, BIO 208, and CHM 101 with minimum grades of "C"; Current CPR-Basic Life Support with AED Certification, Reading Proficiency

DHY 155. Dental Radiology. 2 Credit Hours.

Dental Radiology is the study of the production, effects, and uses of radiation in dentistry. Significant emphasis is given to the effects of variations in exposure control factors, personnel and patient safety measures, techniques in the exposing of dental radiographs and digital images, dental film and sensors, film processing and digital imaging. Radiographic presentation of important anatomical landmarks and structures are introduced. In addition, abnormalities such as periodontal disease, dental caries, traumatic and periapical lesions and other anatomical irregularities are covered.

Prerequisites: BIO 203, BIO 207, BIO 208, and CHM 101 with minimum grades of "C"; Current CPR-Basic Life Support with AED Certification, and Reading Proficiency

DHY 156. Dental Radiology Lab. 1 Credit Hour.

Dental Radiology Lab introduces the techniques for placement, exposing, processing, mounting, imaging, and analysis of dental radiographs. Application of the principles of ethical and safety reasoning is applied to the exposure of patient to x-radiation following the ALARA concept. Supplemental dental radiographic techniques and procedures used in contemporary dental practices and facilities are applied. Emphasis is also given to the extra oral panoramic digital techniques. Supplemental techniques for pediatric, transitional, and edentulous radiographs are presented. (Credit is only allowed for either DHY 156 or DHY 126 and DHY 226.)

Prerequisites: BIO 203, BIO 207, BIO 208, and CHM 101 with minimum grades of "C"; Current CPR-Basic Life Support with AED Certification, Reading Proficiency

DHY 157. Oral Anatomy. 2 Credit Hours.

Oral Anatomy is the introductory study of the teeth, as well as intraoral and perioral structures. Macroscopic and microscopic anatomical features of the oral cavity are covered in addition to the anatomy and identification of the primary, mixed and permanent dentitions. Processes and techniques for identifying and documenting oral conditions and occlusal relationships are detailed. The dental caries process is introduced. Rationales and techniques for the use of pit and fissure sealants as a supportive primary preventive procedure are presented. (Credit is only allowed for either DHY 157 or DHY 127.)

Prerequisites: BIO 203, BIO 207, BIO 208, and CHM 101 with minimum grades of "C"; Current CPR-Basic Life Support with AED Certification, and Reading Proficiency

DHY 158. Biomedical Science for the Dental Hygienist. 2 Credit Hours.

Biomedical Science for the Dental Hygienist is designed to acquaint the dental hygiene student with the basic concepts of pathophysiology. It will deal with selected conditions of the cardiovascular, respiratory, immune, nervous and endocrine systems. Emphasis is on the relationship between these conditions and potential actions and treatment modifications in the dental health care setting. Patient evaluation and risk vs. benefit of providing dental care is discussed. (Credit is only allowed for either DHY 158 or DHY 128.)

Prerequisites: BIO 203, BIO 207, BIO 208, and CHM 101 with minimum grades of "C"; Current CPR-Basic Life Support with AED Certification, and Reading Proficiency

DHY 159. Dental Medical Emergencies. 1 Credit Hour.

Dental Medical Emergencies introduces elements of dental care as it relates to risk management of medically compromised patients. The major portion of the course deals with the prevention, recognition, and management of medical emergencies which occur in the dental office. (Credit is only allowed for either DHY 159 or DHY 129.)

Prerequisites: BIO 203, BIO 207, BIO 208, and CHM 101 with minimum grades of "C"; Current CPR-Basic Life Support with AED Certification, and Reading Proficiency

DHY 160. Concepts in Clinical Dental Hygiene II. 3 Credit Hours.

Concepts in Clinical Dental Hygiene II is the continuation and further development of content from Concepts of Pre-clinical Dental Hygiene I DHY 150, with emphasis on didactic information regarding the clinician's assessment of the patient's medical status and dental conditions for the dental hygiene diagnosis. Learning theory as it relates to patient education is covered. Introduction to powered instrumentation theory and technique, dental stains and their removal, as well as fluoride therapies as a preventive measure for patients and the community are included. (Credit is only allowed for either DHY 160 or DHY 130.)

Prerequisites: DHY 150, DHY 152, DHY 154, DHY 155, DHY 156, DHY 157, DHY 158, and DHY 159 with minimum grades of "C"; Current CPR-Basic Life Support with AED Certification, and Reading Proficiency

DHY 162. Clinical Dental Hygiene II. 5 Credit Hours.

Clinical Dental Hygiene II establishes patient contact which coordinates with application of the theories, principles, and responsibilities related to dental hygiene practice at the student's current level of knowledge. Patients of varying age groups with healthy or early periodontal involvement will be treated affording students instruction that will allow them to develop the instrumentation techniques taught in Preclinical Dental Hygiene I. Competency requirements for the completion of this clinical course include topics to help students incorporate skills learned in the laboratory and apply them at the clinical level. External clinical observations in the areas of endodontics, periodontics, orthodontics, general dentistry, and dental hygiene allow students to gain knowledge of a working dental office. Continued emphasis is placed on professionalism. (Credit is only allowed for either DHY 162 or DHY 131 and DHY 132.)

Prerequisites: DHY 150, DHY 152, DHY 154, DHY 155, DHY 156, DHY 157, DHY 158, and DHY 159 with minimum grades of "C"; Current CPR-Basic Life Support with AED Certification, and Reading Proficiency

DHY 164. Periodontics II. 2 Credit Hours.

Periodontics II presents the advanced study of the periodontium in disease. Periodontitis and its various presentations are covered in depth, with emphasis on periodontal assessment methods, nonsurgical periodontal therapies, dental hygiene interventions and periodontal maintenance. Basic surgical and implant concepts are introduced. (Credit is only allowed for either DHY 164 or DHY 225.)

Prerequisites: DHY 150, DHY 152, DHY 154, DHY 155, DHY 156, DHY 157, DHY 158, and DHY 159 with minimum grades of "C"; Current CPR-Basic Life Support with AED Certification, and Reading Proficiency

DHY 167. Anatomy & Embryology of the Head & Neck. 3 Credit Hours.

Anatomy Embryology of the Head and Neck covers the gross morphology and embryology of the structures of the head and neck. Emphasis is on the specific anatomy of the temporomandibular joint and associated disorders; cranial nerves with emphasis on the trigeminal and facial nerves, nerve basis for dental anesthesia; the muscles of mastication and facial expression, and the blood and lymphatic vessels of the head and neck. The principles of ethics is emphasized in the prevention of tissue damage during dental anesthesia procedures. (Credit is only allowed for DHY 167 or DHY 137.)

Prerequisites: DHY 150, DHY 152, DHY 154, DHY 155, DHY 156, DHY 157, DHY 158, and DHY 159 with minimum grades of "C"; Current CPR-Basic Life Support with AED Certification, and Reading Proficiency

DHY 168. General & Oral Pathology. 2 Credit Hours.

General Oral Pathology introduces the student to general pathology with emphasis on oral pathosis. Oral diseases and oral manifestations of systemic diseases are studied in depth. (Credit is only allowed for either DHY 168 or DHY 138.)

Prerequisites: DHY 150, DHY 152, DHY 154, DHY 155, DHY 156, DHY 157, DHY 158, and DHY 159 with minimum grades of "C"; Current CPR-Basic Life Support with AED Certification, and Reading Proficiency

DHY 169. Ethics in Dental Hygiene. 1 Credit Hour.

Ethics in Dental Hygiene sets the foundation and explores the relationship between ethics and professionalism, ethical theory, philosophy, principles and values. In addition, social responsibility and the code of ethics are discussed. Students will practice ethical decision-making through the use of case studies.

Prerequisites: DHY 150, DHY 152, DHY 154, DHY 155, DHY 156, DHY 157, DHY 158, and DHY 159 with minimum grades of "C"; Current CPR-Basic Life Support with AED Certification, and Reading Proficiency

DHY 172. Clinical Dental Hygiene: Summer Clinic. 2 Credit Hours.

In Clinical Dental Hygiene: Summer Clinic, students continue to apply the learned theories, principles, procedures, instrumentation and responsibilities related to the field of dental hygiene practice in the dental hygiene clinic. (Credit is only allowed for either DHY 172 or DHY 142.)

Prerequisites: Current CPR-Basic Life Support with AED Certification and Reading Proficiency

Corequisites: DHY 273

DHY 250. Concepts in Clinical Dental Hygiene III. 2 Credit Hours.

Concepts in Clinical Dental Hygiene III introduces additional clinical dental hygiene procedures including advanced periodontal instrumentation and skills to further develop the assessment and implementation of the dental hygiene diagnosis and treatment plan. Theories and principles for the use of power scalers, air polishers, and pulp vitality testers are introduced. Ergonomics for the dental hygienist, further strategies and methods for treating dentin hypersensitivity in the periodontal patient, and care and maintenance of dental implants will be presented. (Credit is only allowed for either DHY 250 or DHY 220.)

Prerequisites: DHY 172 and DHY 273 with minimum grades of "C"; Current CPR-Basic Life Support with AED Certification, and Reading Proficiency

DHY 251. Concepts in Clinical Dental Hygiene III: Lab. 1 Credit Hour.

Concepts in Clinical Dental Hygiene III: Lab involves the application of clinical dental hygiene concepts and various dental materials learned in Concepts of Clinical Dental Hygiene III and Dental Materials. (Credit is only allowed for either DHY 251 or DHY 221.)

Prerequisites: DHY 172 and DHY 273 with minimum grades of "C"; Current CPR-Basic Life Support with AED Certification and Reading Proficiency

DHY 252. Clinical Dental Hygiene III. 5 Credit Hours.

Clinical Dental Hygiene III continues with students applying the learned theories, principles and responsibilities related to the field of dental hygiene practice in the dental hygiene clinic and at community dental health facilities. Additional dental hygiene modalities will be implemented into patient treatment care. (Credit is only allowed for either DHY 252 or DHY 222.)

Prerequisites: DHY 172 and DHY 273 with minimum grades of "C"; Current CPR-Basic Life Support with AED Certification and Reading Proficiency

DHY 257. Dental Materials. 1 Credit Hour.

Dental Materials introduces the student to the physical properties and procedures for using various dental materials. Students are instructed in the use of impression material, steps in constructing study casts, formulating restorative materials and replacing or protecting structures within the oral cavity. The clinical application and use of these materials will take place in DHY 251 Concepts of Clinical Dental Hygiene Lab.

Prerequisites: DHY 172 and DHY 273 with minimum grades of "C"; Current CPR-Basic Life Support with AED Certification and Reading Proficiency

DHY 258. Dental Pharmacology. 2 Credit Hours.

Dental Pharmacology introduces pharmacology which can be defined as the science of drugs. Within pharmacology is an interrelationship of biomedical sciences, including biochemistry, physiology, and pathology. This course will provide a study of pharmaceutical classifications, properties, and effects. Emphasis is given to the systemic effects of drugs and their dental implications in the management of various medical conditions. (Credit is only allowed for either DHY 258 or DHY 228.)

Prerequisites: DHY 172 and DHY 273 with minimum grades of "C"; Current CPR-Basic Life Support with AED Certification, and Reading Proficiency

DHY 259. Dental Nutrition & Biochemistry. 2 Credit Hours.

Dental Nutrition Biochemistry introduces the concepts of biochemistry required for a clear understanding of nutrition. Major topics of the course include energy balance and the chemistry, digestion and metabolism of proteins, carbohydrates and fats. Emphasis is on the importance and function of nutrients for health and disease prevention and the relationship of nutrition to oral health. (Credit is only allowed for either DHY 259 or DHY 136.)

Prerequisites: DHY 172 and DHY 273 with minimum grades of "C"; Current CPR-Basic Life Support with AED Certification and Reading Proficiency

DHY 260. Concepts IV: Transitioning into Professional Dental Hygiene Practice. 2 Credit Hours.

Concepts IV: Transitioning into Professional Dental Hygiene Practice introduces various supportive topics such as dental hygiene care for the cancer patient and the recognition and legal reporting of suspected cases of child abuse. The health care provider-patient legal relationship, state rules and regulations for the practice of dentistry and dental hygiene, and the theory of quality assurance are emphasized. Employment seeking skills are presented including the electronic portfolio. (Credit is only allowed for either DHY 260 or DHY 230.)

Prerequisites: DHY 250, DHY 251, DHY 252, DHY 257, DHY 258, and DHY 259 with minimum grades of "C"; Current CPR-Basic Life Support with AED Certification, and Reading Proficiency

DHY 262. Clinical Dental Hygiene IV. 5 Credit Hours.

Clinical Dental Hygiene IV continues with students applying the learned theories, principles, procedures, instrumentation and responsibilities related to the field of dental hygiene practice in the dental hygiene clinic and at community dental health facilities. Students will also participate in service learning opportunities. (Credit is only allowed for either DHY 262 or DHY 232.)

Prerequisites: DHY 250, DHY 251, DHY 252, DHY 257, DHY 258, and DHY 259 with minimum grades of "C"; Current CPR-Basic Life Support with AED Certification, and Reading Proficiency

DHY 263. Dental Public Health. 2 Credit Hours.

Dental Public Health provides a study of the history, economics, and management of the dental public health organization, its delivery and supportive services. Included are the assessment and control of dental disease through dental personnel roles in schools, industry, civic, and public organizations. Emphasis is placed on examination of the principles of dental public health, epidemiological methods of investigation, the US health care system, basic concepts in research and biostatistics, and community based program planning. Introduction to techniques for evaluating dental/dental hygiene literature is established. Students will also complete a community service project experience as a component of this course. (Credit is only allowed for either DHY 263 or DHY 223.)

Prerequisites: DHY 250, DHY 251, DHY 252, DHY 257, DHY 258, and DHY 259 with minimum grades of "C"; Current CPR-Basic Life Support with AED Certification, and Reading Proficiency

DHY 273. Pain Control. 2 Credit Hours.

Pain Control is a course that covers the theory and clinical applications of pain control interventions appropriate for use within the context of dental hygiene care delivery. The psychology, physiology and pharmacology of pain control are covered, with emphasis on the prevention, recognition and management of adverse reactions. Interventions within the legal scope of dental hygiene practice in Missouri are the focus of the course. Students are required to pass competency testing in this course for successful course completion. (Credit is only allowed for either DHY 273 or DHY 215.)

Prerequisites: DHY 160, DHY 162, DHY 164, DHY 167, DHY 168, and DHY 169 with minimum grades of "C"; Current CPR-Basic Life Support with AED Certification, and Reading Proficiency
Corequisites: DHY 172

DHY 290. Dental Hygiene Skills Review. 1 Credit Hour.

Dental Hygiene Skills Review is an independent study course that is offered to make available review/remediation of dental hygiene skills for currently enrolled Dental Hygiene students and/or students re-entering the Dental Hygiene Program. It is contracted on an as needed basis only. (Credit is only allowed for either DHY 290 or DHY 504.)

Prerequisites: Current enrollment in the Dental Hygiene program and Reading Proficiency