

# DENTAL HYGIENE (DENT-HYG)

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## RESTRICTIONS

Courses under this subject code may have program (major, minor, certificate) specific enrollment restrictions. The Courses (<https://catalog.umkc.edu/course-offerings/undergraduate/>) section of the Catalog shows all courses offered by UMKC. Specific course restrictions are detailed in Pathway. If you have questions about your course options, please contact Roo Advising (or your academic advisor).

Please select the 'COURSES' tab above to view all courses within this subject code.

## Courses

DENT-HYG 3000 Dental Morphology And Occlusion Credits: 2

Designed to provide the dental hygiene student with a sound knowledge based in dental morphology and occlusion through discussion and classroom activities. Students will learn to identify anatomical structures of each tooth and be able to communicate these findings effectively with colleagues and patients in both verbal and written forms. The clinical application and relevance of dental morphology in the practice of dental hygiene will be emphasized. Special consideration will be given to root morphology as it relates to periodontal instrumentation. Classroom activities will include identification of dental model teeth, terminology exercises, dental charting experiences and identifying classifications of occlusion.

DENT-HYG 3020 Dental Radiology Credits: 2

Lecture and clinical practice of dental radiographic procedures. Topics included are radiation hygiene, taking and developing radiographs, processing and mounting films, and radiographic interpretation. Clinical experience is required throughout the remaining semesters.

DENT-HYG 3030 Introduction to Histopathology of Oral Tissues Credit: 1

A comparison of the microscopic anatomy of healthy and diseased oral tissues. The major goal of this course is to integrate basic sciences (embryology, descriptive histology, and cell biology of oral tissues) with clinical sciences. The gap between the basic and clinical sciences is not always easy to bridge; this course is designed to bridge the 'gap.' This course provides students with an introduction to orofacial histology and embryology and pathology that may arise from the tissues of the head, neck, and oral cavity.

**Prerequisites:** Dental hygiene student.

DENT-HYG 3080 Introduction to the Preventive Practice of Dental Hygiene Credits: 4

This course will introduce theories and rationales for basic clinical dental hygiene care (infection control, oral examination and fundamentals of instrumentation) in diverse populations. Practical application of specific clinical skills will be introduced in the classroom and applied in the clinical setting.

DENT-HYG 3080L Preclinical Dental Hygiene Credits: 2

This course emphasizes the practical application of the fundamental concepts and principles of patient care in a diverse society discussed in DENT-HYG 3080. Emphasis is placed on patient assessment and techniques of instrumentation for examination and dental hygiene treatment. After the student has mastered basic skills, he/she will begin to provide direct dental hygiene services.

DENT-HYG 3200 General and Oral Pathology Credits: 2

An introduction to the principles of general pathology and organ system pathology including inflammation, immunity and diseases of immune origin, genetic diseases, neoplasia with emphasis on oral cancer, and diseases of selected organ systems including pulmonary, cardiovascular, hematopoietic, endocrine, skeletal, gastrointestinal, hepatic, pancreatic and other systems as time permits.

DENT-HYG 3210 Applied Nutrition and Biochemistry Credits: 2

This course introduces biochemistry and nutrition, encouraging identification of sources and application of specific nutrients for health. Contents familiarize students with roles of nutrition and places emphasis on the hygienist's role as nutritional educator- utilizing skills of recognition, prevention and treatment of related disease(s) and support of good oral health. Topics build on previous knowledge of chemistry, biology and physiology in application to health, coupled with deficient/optimal nutrition. Students will utilize motivational interviewing pertaining to counseling to help patients assign values, prioritize, and meet agreed upon goals. The format will include face-to-face lectures, online supplements, short labs, and group assignments/presentations.

DENT-HYG 3220 Dental Biomaterials Credits: 2

This course is designed to provide the dental hygiene student with a sound knowledge base in the science and manipulation of dental biomaterials. Through lectures and laboratory session, the student's ability to make clinical judgments regarding the application of dental biomaterials and the ways in which materials react to the oral environment will be enhanced.

DENT-HYG 3260 Principles Of Periodontics Credits: 2

This course in Periodontics will cover the biological and clinical aspects of periodontal health and pathology. An introduction to the supporting structures of the teeth will provide the foundation of understanding pathogenesis, histopathology and subsequent therapeutic treatment of periodontal diseases. The dental hygienist's role in recognition, prevention and treatment of periodontal diseases and maintenance of periodontal health is examined.

DENT-HYG 3280C Dental Hygiene Clinic I Credits: 3

Students will further develop clinical skills and techniques learned in DENT-HYG 3080L and previous courses by providing services to patients.

DENT-HYG 3285 Seminar In Dental Hygiene I Credits: 2

This course expands on theory and background presented in DENT-HYG 3080. Topics include expanding dental hygiene skills required for the care of patients and continued development of problem solving abilities and critical thinking skills as they relate to the provision of dental hygiene care. Provide students with a more insightful view of the role of the dental hygienist in the delivery of comprehensive patient care.

DENT-HYG 3300 Radiographic Interpretation Credit: 1

The purpose of the course is to introduce interpretation of radiographic anomalies and pathology just prior to the clinical experience. This lecture and participation course supplement clinic instruction in diagnosis of the patient's oral needs and formulation of a treatment plan. Upon completion of this course, the student should be able to recognize simple pathology and radiographic anomalies.

DENT-HYG 3320 Oral Health Behavior Change Credits: 3

The purpose of this hybrid course is to prepare the junior dental hygiene student to effectively assess and individualize preventive oral health care through the use of brief motivational interviewing. The course will include evidenced based information in dental caries and caries risk assessment, caries preventive measures, introduction to periodontal disease, dental stains, and management of xerostomia, halitosis, and dentinal sensitivity, oral healthcare products and how to care for an oral appliance. The student will subsequently apply course concepts to facilitate patient behavior change in the clinical setting. Recommended preparation: a course in General Psychology.

DENT-HYG 3340 Principles Of Public Health Credits: 2

This course introduces the student to principles of public health, the field of epidemiology, health care delivery systems, public health terminology and teaching methodologies to use in culturally diverse community settings. Students will have the opportunity to assess a target population, plan, implement and evaluate appropriate programs. Students will also apply theories and skills of communication and education while preparing and presenting oral health education programs for various population groups.

DENT-HYG 3620 Civic Engagement Credits: 0

Service learning experiences expose students with different opportunities to engage the community. Students can choose from approved experiences and participate based on their interest and skill level. Students will research, participate, and reflect on their experiences.

DENT-HYG 4001 Clinical Oral Radiology Credit: 1

Clinical application of radiology principles taught in preceding terms. To provide clinical skills to safely make and interpret radiographic images for the provision of oral health care.

DENT-HYG 4020 Local Anesthesia And Pain Control Credits: 3

This course is designed to prepare dental hygiene students for the safe, effective administration of local anesthesia and nitrous oxide sedation. Included are content areas in anatomy, physiology, pharmacology, and emergency management as they relate to the administration of local anesthetics, nitrous oxide, and pain control. Laboratory sessions are structured to develop actual experiences in administration of local anesthetics and nitrous oxide. Various mechanisms for pain control are also covered. Methods of presentation include lecture, large group discussion, laboratory and clinical participation.

DENT-HYG 4040 Introduction to Instruction Credits: 2

This course is designed to introduce the student to instructional design work with the models and principles that best fit the needs and goals of their audience. As students engage in instructional design, they will acquire knowledge of learning science that will aid them in understanding how design elements make a difference in the process of learning, retaining, and applying information. This course is designed to provide engaging and effective learning experiences for all audiences.

DENT-HYG 4050 Periodontics II Credit: 1

This course in Periodontics will provide an introduction to Phase II and III therapy. Periodontal decision making will be emphasized. The dental hygienists' role in recognition, prevention and treatment of periodontal diseases and maintenance of periodontal health is further examined.

**Prerequisites:** DENT-HYG 3260.

DENT-HYG 4060C Dental Hygiene Clinic II Credits: 2

The student will continue to develop competency in basic dental hygiene skills. Principles of periodontal techniques, such as non-surgical periodontal therapy, supportive treatment procedures and comprehensive patient care in a diverse society will be emphasized. The student will be asked to demonstrate professional management skills and productivity.

DENT-HYG 4065 Seminar in Dental Hygiene II Credit: 1

This seminar course is offered in conjunction with DENT-HYG 4060C, and expands upon theory and background presented in other dental hygiene courses within the curriculum which will involve further development of their critical thinking/problem solving skills regarding patient care. Students will be provided with further instruction regarding advanced instrumentation, cultural diversity, motivational interviewing and other technological advancements utilized in dental hygiene care.

**Co-requisites:** DENT-HYG 4060C.

DENT-HYG 4080 Introduction to Research and Evidence Based Decision Making Credits: 2

This is a lecture/discussion course with assigned exercises in the research process and evaluating scientific studies. Students will apply basic principles of research design and methodology to the critical analysis of contemporary oral health related literature focusing on the review and evaluation of literature as it relates to the practice and profession of dentistry and dental hygiene with the intent of utilizing an evidence-based approach to care.

**DENT-HYG 4100 Pharmacology Credits: 3**

An overview and introduction to the major drug groups and common drugs taken by dental outpatients. Course includes the basic principles and general theories of drug action, basic pharmacokinetics, their mechanisms of action and therapeutic uses and the relative dental significance of each.

**DENT-HYG 4110 Introduction to Research Methodologies Credits: 2**

This is a lecture/discussion course with assigned exercises in the research process and evaluating scientific studies. Students will learn the basic principles involved in research design and methodology and will apply those principles to the critical analysis of contemporary health related literature. Focus on the review and evaluation of literature as it relates to the practice and profession of dentistry with the intent of utilizing an evidence-based approach to care will be stressed.

**DENT-HYG 4115 Practicing in the Dental Hygiene Public Health Safety Net Credits: 3**

The course is designed to increase the knowledge base of the practicing dental hygienist in the area of public health dentistry, including health promotion, disease prevention, current legislation, evidence based treatment, school based portable dentistry, coalitions, treating the geriatric and disabled populations, as well as how to write and secure.

**DENT-HYG 4120C Dental Hygiene Clinic III Credits: 4**

The student will continue to develop competency in intermediate dental hygiene skills. Principles of periodontal techniques, such as root planning, pain control and supportive techniques will be stressed. Comprehensive treatment planning and implementation of comprehensive care to a diverse patient population will be the focus of this course. Continued development of professionalism, management and critical thinking skills will be emphasized.

**DENT-HYG 4125 ECP III Training Course Credits: 2**

The ECP III Training Course is designed to prepare a registered dental hygienist to apply for the Kansas Extended Care Permit III. Hygienists with the ECP III certificate can practice under the sponsorship of a dentist in a variety of public health settings including schools and long term care facilities in Kansas.

**DENT-HYG 4130 Introduction to Instructional Technologies and Online Learning Credit: 1**

The web-based multimedia course will examine the mediated communication process using Internet tools and is designed to help the incoming student become prepared to succeed in their degree program using online technologies. Students will exam the changes and challenges associated with mediated synchronous and asynchronous technologies. The course will be delivered in four different modules.

**DENT-HYG 4150 Portfolio Capstone Credit: 1**

The capstone course serves as the culminating experience for students in the BSDH Degree Completion Program. During the Capstone course, students will create a coherent and cohesive body of work reflective of attainment of the competencies for the BSDHDC program—in the form of an e-Portfolio.

**DENT-HYG 4210 Practice Management Credits: 3**

Current relevant issues impacting dental hygiene practice are discussed. Dental practice economics, communicating and management in a diverse society are included. Also included in this course is the study of jurisprudence as it relates to the practice of dental hygiene.

**DENT-HYG 4220 Interdisciplinary Community Oral Health Field Experiences Credits: 3**

Students will practice skills/principles learned in Anchor I-II by participating in interdisciplinary community projects and clinical activities targeting Kansas City's urban and surrounding rural environments. Students will use strategies of assessment, program planning, implementation and evaluation to improve existing, develop new, and reflect on service projects' purposes, methods, and consequences. This course is taught with DENT-HYG 4120. Major emphases include team collaboration/leadership of civic action, community programming to enact measurable and meaningful change, respectful communication considering health literacy and associated disparities among patients and health care providers, to express ideas supporting wellness through improved oral health.

**DENT-HYG 4240 Ethics In Professional Practice Credit: 1**

Study of ethics and ethical issue related to the practice of dental hygiene within a diverse society. Includes application of ethical principles to real-life situations.

**DENT-HYG 4260 Senior Seminar Credits: 2**

This course serves as a means of synthesizing information from all courses in the dental hygiene curriculum and applying content to patient cases and practice management issues. Case-based learning (CBL) will be utilized to review significant content areas as well as to introduce subjects not previously encountered during previous clinical experiences. Case based/problems based learning (PBL) with faculty facilitation will assist students in managing patient cases. This course is also designed to assist in preparing senior dental hygiene students for the written and clinical examinations required for licensure.

**DENT-HYG 4260C Dental Hygiene Clinic IV Credits: 4**

The student will have the opportunity to reach competency in all clinical skills. Emphasis will be placed on decision-making, problem-solving, critical thinking, appointment and time management. The course will focus on comprehensive dental hygiene care to a diverse population.

**DENT-HYG 4340 Community Dentistry Practicum Credits: 2-4**

The community dentistry practicum provides the student with an opportunity for personal exploration of the many settings of community dentistry. These experiences may lead the students into clinical activities or design and implementation of dental health educational programs. The student will have the opportunity to work with various community health professionals in the Kansas City area. The student will need reliable transportation and should expect some experiences to require travel.

DENT-HYG 4350 Advanced Clinical Practice Credits: 2

This course is designed for the dental hygiene student who desires increased experiences in traditional or non-traditional clinical settings. The course will involve practical experience functioning as a dental hygienist working in alternative clinical settings.

DENT-HYG 4360 Practice Management Practicum Credits: 3

Current relevant issues impacting dental hygiene practice are discussed. Dental practices, economics, communication and management are included. Practical application of course would include the development of a dental office operating manual.

DENT-HYG 4500 Issues in Dental Hygiene Credits: 3

This course is designed to introduce the student to contemporary issues encountered in dental hygiene. Weekly readings, assignments, and synchronous sessions will familiarize the student in topics such as: writing resumes and curriculum vitas, accreditation, motivational interviewing, advanced professional roles, and social media in the profession.

DENT-HYG 4600 Scientific Inquiry in the Health Sciences Credits: 2

This course is designed to expand on the student's basic knowledge of the dental hygiene process of care. Utilization of evidence based decision-making skills will be explored in an effort to incorporate current scientific literature, personal clinical experience and patient preferences as it relates to the delivery of comprehensive patient care. Skills taught in this course will enhance background knowledge related to the dental hygiene process of care and help to foster an attitude of critical analysis and life-long learning.

DENT-HYG 4620 Introduction to Learning Theory Credits: 3

This course is designed to introduce the student to basic learning theories and to provide participants with a better understanding of the learning process. The course includes units on metacognition, learning theory, teaching and learning strategies, and the science of learning.

DENT-HYG 4625 Dental Hygiene Administration Credits: 2

This course is designed for the post-certificate dental hygiene student. Major topic areas include accreditation of dental hygiene programs, the impact of National and State Board examinations on curriculum planning, selective admissions policies and procedures, faculty evaluation, promotion and tenure and students' rights.

DENT-HYG 4635 Practicum In Clinical Supervision Credits: 2-4

Under the supervision and permission of the Dental Hygiene Clinical Supervisor, the student will gain actual experience in the duties involved in coordinating the clinical education of a dental hygiene student. The student may contract for responsibilities such as, coordinating mock board examinations, maintaining student clinical records, developing faculty and student clinic schedules and report writing.

DENT-HYG 4640 Student Teaching and Conference I Credits: 2-4

Under the direction of a supervising professor, the student may select teaching experience in the classroom areas of their choice. The student develops behavioral course objectives, comprehensive lesson plans, test and examination items, classroom presentations, and prepares student evaluations in the selected classroom teaching areas. The student may select teaching assignments in one of the developed externship student teaching programs. Conferences will be held in conjunction with the course.

**Prerequisites:** DENT-HYG 4040, DENT-HYG 4620.

DENT-HYG 4650 Student Teaching and Conference II Credits: 2-4

The student will continue to develop teaching skills in laboratory and/or classroom areas as selected by the student under the direction of a supervising professor.

**Prerequisites:** DENT-HYG 4640.

DENT-HYG 4660 Independent Study in Dental Hygiene Credits: 1-4

This course is designed for the dental hygiene student who desires independent study of a particular problem or area of interest in dental hygiene education.

DENT-HYG 4662 Practicum in Clinical Instruction Credits: 2

This course is designed for the dental hygiene student who desires exploration of dental hygiene clinical instruction – under the supervision of dental hygiene faculty - in a dental hygiene clinic.

**Prerequisites:** Dental Hygiene Professional Program Student.

DENT-HYG 4680 Dental Hygiene Clinical Instruction I Credits: 2-4

Continued development of competency as a clinical instructor under the supervision of the dental hygiene faculty. Requires a half-day in clinic student instructor.

**Prerequisites:** DENT-HYG 4640.

DENT-HYG 4685 Dental Hygiene Clinical Instruction II Credits: 1-4

A continuation of DENT-HYG 4680. Under the supervision of the dental hygiene faculty, students may continue to develop skills as a dental hygiene clinical instructor.

**Prerequisites:** DENT-HYG 4680.