

## Dental Hygiene

College of Allied Health & Nursing  
Department of Dental Hygiene  
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Chair: Lisa Fleck

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### Accreditation. American Dental Association (ADA).

The dental hygiene curriculum is designed to provide opportunities for the student to develop a sound clinical and theoretical foundation for the practice of dental hygiene. The graduate is prepared to fulfill the dental hygiene roles as clinician, change agent, educator, researcher and consumer advocate as put forth by the American Dental Hygienists' Association.

The program is accredited by the American Dental Association's Commission on Dental Accreditation, and meets by the American Dental Association's Commission on Dental Accreditation Standards for Dental Hygiene. A Bachelor of Science degree is earned upon completion of the program.

**Admission to Program.** Application for admission to the Dental Hygiene program is a separate process in addition to being admitted to the University. It is highly recommended to meet with a Dental Hygiene advisor to formulate a plan of study as soon as possible. Requirements for application for admission to the dental hygiene program include:

1. Completion of at least 36 semester credits.
2. A minimum career grade-point average of 2.5.
3. Successful completion of prerequisites of CMST 100 or CMST 102, ENG 101, PSYC 101, SOC 150 or SOC 101, BIOL 220, STAT 154 or SOC 202, DHYG 100, DHYG 219 or DHYG 225 and two of these three courses: BIOL 270, BIOL 330, CHEM 111

A maximum of two science courses can be repeated (each once) in order for the application to be accepted.

Required science courses for Dental Hygiene with a "W" listed next to them on the transcript will be counted as a science attempt on the Dental Hygiene application.

The application form may be obtained from the Dental Hygiene Department website. The number of students admitted to the Dental Hygiene major is limited to 20 students each fall semester. Applicants are accepted primarily based on academic achievement in prerequisite courses with an emphasis placed on the science prerequisites.

### POLICIES/INFORMATION

**P/N Grading Policy.** All courses required for Dental Hygiene must be taken for a letter grade and a letter grade of "C" or higher must be achieved. A grade of "D" or "F" in a Dental Hygiene course will result in academic suspension from the program. Completion of didactic course numbers DHYG 326 forward requires successful completion of previous Dental Hygiene courses obtaining a "C" or better in order to continue in the Dental Hygiene program. Students must achieve a "C" or higher in DHYG 219 and DHYG 225. A grade of "D" or "F" in either of these courses will result in academic suspension from the program and the student's position in the fall class will go to another individual on the waiting list.

**Costs.** A student in the dental hygiene program should be prepared to spend about \$375 each semester for books and supplies. An additional \$2,400+ will be spent for instruments, gloves, etc. An additional \$850.00 will be spent at the beginning of the program to purchase scrubs, labcoats and dental loupes. Approximately 50

percent is paid before beginning the program. Upon acceptance to the program a deposit of \$500 is required. The remainder is due in July of the same year.

Dental hygienists are at risk for exposure to blood borne pathogens (BBP). Accepted students will be required to be vaccinated against Hepatitis B and will also be required to have their blood tested following any exposures to BBP through needle sticks, cuts or splashes that occur at the Minnesota State Mankato Dental Clinic or any off-site clinical sites. Currently the vaccine series costs approximately \$150. Students must successfully complete a CPR course prior to enrolling fall semester.

The American Heart Association *Healthcare Provider* or the American Red Cross *Professional Rescuer* are the only CPR courses accepted.

### KEY:

- ~ Must be completed prior to applying to Dental Hygiene Program
- \* Must be completed prior to starting Dental Hygiene Program
- ^ **Two of these three** courses must be successfully completed ("C" or above) prior to applying to the Dental Hygiene Program.
- # One of these two courses must be completed prior to **applying** to the program and the other must be completed prior to **starting** the program.

### DENTAL HYGIENE BS

Degree completion = 120 credits

#### Required General Education

BIOL	270	Microbiology (4)^
ENG	101	Composition (4)~
HLTH	101	Health and the Environment (3)*
PSYC	101	Psychology (4)~
(choose 3 credits)		
SOC	101	Introduction to Sociology (3)~
SOC	150	Social Problems (3)~
(choose 3 credits)		
CMST	100	Fundamentals of Communication (3)~
CMST	102	Public Speaking (3)~
(choose 3 credits)		
SOC	202	Introductory Social Statistics (3)~
STAT	154	Elementary Statistics (3)~
(choose 3 credits)		
PHIL	120W	Introduction to Ethics (3)*
PHIL	222W	Medical Ethics (3)*
<u>Chemistry</u>		
(choose one course 3-5 credits)		
CHEM	106	Chemistry of Life Process Part I (General) (3)^
CHEM	111	Chemistry of Life Processes (5)^

#### Prerequisites to the Major

(choose 16 credits)		
BIOL	220	Human Anatomy (4)~
BIOL	330	Principles of Human Physiology (4)^
DHYG	100	Perspectives in Dental Hygiene (1)~
DHYG	219	Head and Neck Anatomy and Histology (2)#
DHYG	225	Oral Anatomy (2)#
FCS	242	Nutrition for Healthcare Professionals (3)*

#### Major Common Core

DHYG	311	Preclinical Orientation (3)
DHYG	313	Clinical Skills Development (3)
DHYG	321	Radiography I (3)
DHYG	322	Biomaterials I (2)
DHYG	326	Biomaterials II (2)
DHYG	327	Periodontology I (2)
DHYG	328	Radiography Interpretation (2)
DHYG	329	Oral Embryology and Pathology (3)
DHYG	331	Clinical Dental Hygiene I (2)
DHYG	332	Clinical Seminar I (2)
DHYG	333	Clinical Dental Hygiene IS (2)

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DHYG	334	Dental Computer Software Management (1)
DHYG	420	Local Anesthesia (1)
DHYG	421	Clinical Dental Hygiene II (3)
DHYG	422	Clinical Seminar II (1)
DHYG	423	Pharmacology (3)
DHYG	424	Nitrous Oxide Sedation (1)
DHYG	425	Community Dental Health (3)
DHYG	426	Dental Hygiene Jurisprudence and Ethics (1)
DHYG	427	Periodontology II (2)
DHYG	428	Technology in Dentistry (1)
DHYG	431	Clinical Dental Hygiene III (3)
DHYG	432	Clinical Seminar III (2)
DHYG	435	Community Practicum (2)
DHYG	437	Dental Management of the Medically Compromised Patient (2)
DHYG	438	Advanced Community Practice I (1)
DHYG	439	Advanced Community Practice II (1)
DHYG	440	Restorative Functions (4)

**Required Minor: None**

### **DENTAL HYGIENE BS DEGREE COMPLETION OPTION**

Students who have graduated with an A.S. or A.A.S. degree in Dental Hygiene from an accredited program are eligible to apply to the B.S. Degree Completion option. Courses within this program are 100% online, offered on a 2-year rotating schedule.

Requirements for admission to the Dental Hygiene BS Degree Completion option are:

1. Successful completion of a Program in Dental Hygiene accredited by the ADA Commission on Dental Accreditation.
2. License to practice dental hygiene (or eligible for licensure).
3. CPR level C certification
4. Completion of HBV series.
5. A minimum grade point average of 2.0

The Dental Hygiene BS degree completion option is considered a broad major and does not require a minor. Each student will develop an individual plan of study with the Degree Completion Coordinator to meet the general education and upper division requirements. Contact Julie Dittrich at julie.dittrich@mnsu.edu for more information.

### **Required for Major (32 credits)**

DHYG	441	Advanced Dental Hygiene Practice (3)
DHYG	442	Current Issues in Dental Hygiene (3)
DHYG	443	Technology in Oral Health (3)
DHYG	444	Principles of Oral Health Promotion (3)
DHYG	445	Educational Methods in Dental Hygiene (3)
DHYG	451	Dental Hygiene Care Planning (3)
DHYG	452	Decision Making in Periodontology (3)
DHYG	453	Research Methods in Dental Hygiene (3)
DHYG	454	Oral Health Promotion Practice (3)
DHYG	455	Educational Practice in Dental Hygiene (3)
DHYG	456	Oral Medicine and Treatment Planning (2)

### **COURSE DESCRIPTIONS**

#### **DHYG 100 (1) Perspectives in Dental Hygiene**

This course will give the student an introduction to Dental Hygiene as a profession and career. Exploration of dental hygiene practice and an overview of the dental hygiene curriculum and conceptual framework will be covered.  
Fall, Spring

#### **DHYG 219 (2) Head and Neck Anatomy and Histology**

Head and Neck Anatomy is the study of the hard and soft tissues of the head and neck including bones, muscles, nerves, blood supply, glands and how they function. Oral Histology is the study of cells and cell layers which compose basic tissues, oral mucosa, gingival and dentogingival tissues, orofacial structures, enamel, dentin and pulp.

Pre: BIOL 220

Variable

#### **DHYG 225 (2) Oral Anatomy**

This course includes the study of the permanent, mixed and primary dentitions including each individual tooth's morphology, function and occlusion.

Pre: BIOL 220

Variable

#### **DHYG 311 (3) Preclinical Orientation**

This course includes an introduction to dental terminology and clinical aspects of dental hygiene treatment including care and use of equipment/instruments, infection control and preparation of patient records.

Pre: Admission into Dental Hygiene Program and Dental Terminology packet  
Fall

#### **DHYG 313 (3) Clinical Skills Development**

This course will teach the operative techniques needed to perform oral prophylactic procedures and health education through laboratory/clinical practice.

Pre: Admission into Dental Hygiene Program

Fall,

Variable

#### **DHYG 321 (3) Radiography I**

This course includes production of dental radiographs, physics of x-radiation, biologic effects, interpretation, processing, mounting, and laboratory practice on mannequins and patients. Special attention is given to infection control, safety precautions, and patient selection.

Pre: Admission into Dental Hygiene Program

Fall

#### **DHYG 322 (2) Biomaterials I**

This course is the first of two courses that studies the fundamental elements, purposes and uses of dental materials in the modern dental office. In addition it will give the dental hygiene student a fundamental understanding and skill level of basic dental assisting techniques utilized in the dental office.

Pre: Admission into Dental Hygiene Program

Fall

#### **DHYG 326 (2) Biomaterials II**

This course is the second of two courses that studies the fundamental elements, purposes and uses of the materials used in the modern dental office. The student will develop laboratory or clinical competency in functions using dental materials that are legal duties for Minnesota dental hygienists.

Spring

#### **DHYG 327 (2) Periodontology I**

This course will include a study of supporting tooth structures, identification, classification, etiology, progression and treatment of periodontal diseases.

Fall

#### **DHYG 328 (2) Radiography Interpretation**

This course will study the normal anatomical features from intraoral and extraoral radiographs. Students will then use this knowledge to interpret what is seen on radiographs to discern normal from abnormal. Interpretation of dental caries, periodontal disease and pathology are among the topics this course will cover.

Spring

**DHYG 329 (3) Oral Embryology and Pathology**

Oral Embryology encompasses development of human body from conception through birth, with a focus on development of the face and hard and soft tissues of the oral cavity. Oral Pathology addresses the causes and mechanisms of disease with special emphasis on common oral lesions and neoplasms, stressing their etiology and clinical manifestations.  
Spring

**DHYG 331 (2) Clinical Dental Hygiene I**

This course provides an opportunity for dental hygiene students to develop their roles as educators, clinicians, consumer advocates, change agents, researchers, and administrators in a clinical setting.  
Spring,  
Variable

**DHYG 332 (2) Clinical Seminar I**

This course includes the study of treatment planning, oral health education, ultrasonic scalers, cardiology, sealants, and new products. Library use and writing a research paper are also included.  
Spring

**DHYG 333 (2) Clinical Dental Hygiene IS**

This course offers the student continued practice of dental hygiene treatment procedures in the Minnesota State Mankato Dental Clinic.  
Summer  
Variable

**DHYG 334 (1) Dental Computer Software Management**

This course is designed to equip the dental hygiene students with the skills necessary to manage a dental computer software program. A focus on networking, dental resource codes and insurance protocol will also be covered.  
Spring

**DHYG 420 (1) Local Anesthesia**

This course is designed to be a study of the fundamental elements, purposes, and uses of local anesthesia for the dental hygienist.  
Fall

**DHYG 421 (3) Clinical Dental Hygiene II**

This course offers the student continued practice of dental hygiene treatment procedures in the Minnesota State Mankato Dental Clinic. It includes several mandatory off-campus experiences.  
Fall

**DHYG 422 (1) Clinical Seminar II**

This course focuses on clinical procedures, educational techniques and legal and ethical issues as they apply to the patient- dental hygiene provider relationship.  
Fall

**DHYG 423 (3) Pharmacology**

Pharmacology is the study of drugs used in dentistry or medicine for the treatment, prevention and diagnosis of disease.  
Fall

**DHYG 424 (1) Nitrous Oxide Sedation**

The course is designed to be a study of the fundamental elements, purposes and uses of nitrous oxide sedation in the practice of dental hygiene. This course meets the educational criteria established by the Minnesota Board of Dentistry.  
Spring

**DHYG 425 (3) Community Dental Health**

This course introduces second year dental hygiene students to the disciplines and basic principles of community dental health, epidemiologic methods and biostatistical measurement analysis. Preventive oral health measures and program development is included to provide a background for the practical application of dental public health methods to the community.  
Fall

**DHYG 426 (1) Dental Hygiene Jurisprudence and Ethics**

This course focuses on legal and ethical issues as applied to the patient dental hygiene provider relationship.  
Fall

**DHYG 427 (2) Periodontology II**

Didactic and clinical study of etiology, diagnosis, preventive and therapeutic procedures involved with periodontal disease.  
Spring

**DHYG 428 (1) Technology in Dentistry**

This course is designed to prepare the dental hygiene student in the use of new technologies in the modern dental office. Students will learn to integrate these new technologies into the teledentistry model.  
Fall

**DHYG 431 (3) Clinical Dental Hygiene III**

This course offers the student continued practice of dental hygiene treatment procedures in the Minnesota State Mankato Dental Clinic. It includes several mandatory off-campus experiences.  
Fall  
Variable

**DHYG 432 (2) Clinical Seminar III**

This course focuses on the development of a personal sense of responsibility for the well-being and development of one's workplace from an employee perspective.  
Spring

**DHYG 435 (2) Community Practicum**

This course focuses on the role of dental hygiene practitioners in promoting optimal oral health at the individual level and in the community.  
Spring

**DHYG 437 (2) Dental Mgmt. of the Medically Compromised Patient**

The course is designed to provide the dental hygiene practitioner with a survey of common medical disorders that may be encountered in a dental practice. The medical problems are organized to provide a brief overview of the basic disease process, etiology, incidence, prevalence, behavior characteristics, medications and oral manifestations commonly presented by the dental patients. As a result of the accumulation of evidence based research, the dental hygiene practitioner will be provided with an understanding of the disease, recognize the severity of the common medical disorders and make a dental management decision providing the patient with the highest possible level of oral health.

**DHYG 438 (1) Advanced Community Practice I**

The first of two clinical courses designed to utilize the assessment, planning, implementation and evaluation process in a community based setting. This course will address efforts to reduce incidence and severity of oral diseases resulting in improved access to community oral health in complex cases.  
Fall

**DHYG 439 (1) Advanced Community Practice II**

This is the second of two clinical courses designed to utilize the assessment, planning, implementation and evaluation process in a community based setting. This course will address efforts to reduce incidence and severity of oral diseases resulting in improved access to community oral health in complex cases.  
Spring

**DHYG 440 (4) Restorative Functions**

This course meets the requirements of the Minnesota Board of Dentistry for dental hygienists and assistants to legally perform new expanded duties including the placement, contouring and adjustment of amalgam, glass ionomer and composite restorations and the placement and adjustment of stainless steel crowns.  
Spring

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### **DHYG 441 (3) Advanced Dental Hygiene Practice**

Identify clinical skills and knowledge needed to improve effectiveness as a dental hygienist. Areas addressed: ultrasonic implementation using multiple types of devices, risk factor analysis, comprehensive treatment planning, Periscope (endoscope), carbide/diamond files, advanced instrumentation techniques, patient management, case presentation.

Spring

### **DHYG 442 (3) Current Issues in Dental Hygiene**

Topics included but not be limited to: advanced practice models to expand oral health services, including restorative procedures; counseling regarding smoking cessation; recent medical advances in the field of dentistry and legal and policy issues currently impacting dental hygiene.

Fall

### **DHYG 443 (3) Technology in Oral Health**

Assessment, planning, implementation and evaluation of the impact of emerging dental technology. Topics include dental practice software management, digital radiography, intra-oral cameras, patient education software, lasers in dentistry, and internet information sources for both practitioners and patients.

Spring

### **DHYG 444 (3) Principles of Oral Health Promotion**

Leadership preparation in the delivery of oral health care in the public health model. Emphasis will be placed on defining oral health problems and solutions, community planning, implementation and evaluation based on the oral health objectives of Healthy People 2010.

Fall

### **DHYG 445 (3) Educational Methods in Dental Hygiene**

Examines educational methods needed for effective dental hygiene instruction. Topics addressed within this course will include learner and context analysis, performance objectives, assessment instruments, instructional strategies, formative and summative evaluations. Emphasis will be placed on competency based instruction.

Fall

### **DHYG 447 (2) Dental Health Study Abroad in Belize**

The purpose of this course is to introduce students to first hand experience in providing dental hygiene services through a study abroad opportunity. This course centers on an international week long service learning project to San Pedro, Belize. Most of our time and effort will be spent providing dental hygiene treatment for children attending Holy Cross Anglican School. This course will also address ethics, cultural issues, standard of care issues, as well as challenges in providing dental hygiene care in a third world country.

Spring

Diverse Cultures - Gold

### **DHYG 451 (3) Dental Hygiene Care Planning**

Evidence based dental management of patients with medical disorders encountered in dental practice. Provides an overview of basic disease processes, epidemiology, pathophysiology, and accepted medical therapies utilizing human needs model to formulate a dental hygiene care plan.

Fall

### **DHYG 452 (3) Decision Making in Periodontology**

Combines the sciences and knowledge in the discipline of dental hygiene that permits synthesis and application of periodontal treatment techniques. Surgical and aggressive management of medically compromised periodontal patients will be addressed in this course.

Fall

### **DHYG 453 (3) Research Methods in Dental Hygiene**

Provides student awareness of the American Dental Hygienists' Research Agenda and prepares students on the methodology of research. Includes strengths and limitations of quantitative and qualitative research methods while developing methodological skills and proficiencies related to research.

Spring

### **DHYG 454 (3) Oral Health Promotion Practice**

Demonstration of oral health delivery in community based clinics embracing oral health promotion efforts as a methodology. Increasing demand for care, dental services and prevention resulting in reduction of oral diseases and improved community oral health.

Pre: DHYG 444

Spring

### **DHYG 455 (3) Educational Practice in Dental Hygiene**

Applies content from Principles of Educational Methods to support the role of dental hygiene educator in didactic and clinical instruction. Active participation in course design, delivery and evaluation in classroom, online or clinical format with emphasis on competency based instruction.

Pre: DHYG 445

Spring

### **DHYG 456 (2) Oral Medicine and Treatment Planning**

This course is designed to facilitate critical thinking skills related to drugs used in dentistry and medicine with emphasis placed on the impact of the dental hygiene diagnosis.

Spring

### **DHYG 499 (1-6) Individual Study**