

## DENTAL HYGIENE

### Dental Hygiene

College of Allied Health & Nursing  
Department of Dental Hygiene  
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Dept. Web site: <http://ahn.mnsu.edu/dental>

Chair: Lynnette Engeswick

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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, MATH 112 and two of these three courses: BIOL 270, BIOL 230, or CHEM 111

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

The application form may be obtained from the Dental Hygiene Department website or secretary. The number of students admitted to the Dental Hygiene major is limited to 24 students admitted 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.

**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 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.

### DENTAL HYGIENE BS Program

#### Required General Education (33 credits)

BIOL	270	Microbiology (4)^
CHEM	111	Chemistry of Life Processes (5)^
CMST	100	Fundamentals of Communication (3)# <b>OR</b>
CMST	102	Public Speaking (3)#
ENG	101	Composition (4)#
HLTH	101	Health and the Environment (3) ~
MATH	112	College Algebra (4)#
PHIL	222W	Medical Ethics (3) ~ <b>OR</b>
PHIL	120W	Introduction to Ethics (3) ~
PSYC	101	Psychology (4)#
SOC	150	Social Problems (3)# <b>OR</b>
SOC	101	Introduction to Sociology (3)#

#### Recommended for Major

IT	100	Introduction to Computing and Applications (4)
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#### Required for Major (18-19 credits)

BIOL	220	Human Anatomy (4)#
BIOL	230	Human Physiology (4)^
DHYG	100	Perspectives in Dental Hygiene (1)~
FCS	240	Nutrition I (3) ~
HLTH	321	Medical Terminology (3) ~
Choose one course from the following		
ECON	207	Business Statistics (4)
HLTH	475	Biostatistics (3)
PSYC	201	Statistics for Psychology (4)
SOC	202	Introductory Social Statistics (3)

#Prerequisites must be successfully completed before applying.

^Two of these three courses must be successfully completed prior to submitting an application to the Dental Hygiene Program. The third course must be successfully completed prior to enrolling in dental hygiene courses.

~ Must be successfully completed prior to starting dental hygiene program.

#### Dental Hygiene Core (58-62 credits)

DHYG 311	DHYG 313	DHYG 319	DHYG 321	DHYG 322
DHYG 325	DHYG 326	DHYG 327	DHYG 328	DHYG 329
DHYG 331	DHYG 332	DHYG 333	DHYG 334	DHYG 420
DHYG 421	DHYG 422	DHYG 423	DHYG 424	DHYG 425
DHYG 426	DHYG 427	DHYG 428	DHYG 431	DHYG 432
DHYG 435	DHYG 437	DHYG 438	DHYG 439	DHYG 440

**Required Electives.** Electives to yield a total of 128 semester credits are required.

**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 Angela Monson at [angela.monson@mnsu.edu](mailto:angela.monson@mnsu.edu) for more information.

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### 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 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 319 (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: Admission into the Dental Hygiene Program  
Fall

#### 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 325 (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: 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.  
Spring

#### 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

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### **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.

Fall

### **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

### **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 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

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### **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**