

DENTAL HYGIENE BS

Dental Hygiene

College of Allied Health & Nursing
 Department of Dental Education
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 Email: msudentalclinic@mnsu.edu
 Dept. Website: <http://ahn.mnsu.edu/dental>

Chair: Brigette Cooper MS

Faculty: Terri Brown MS; Brigette Cooper MS; Julie Dittrich MS; Lynnette Engeswick PhD.; Lisa Fleck MS; Trisha Krenik-Matejcek MS; Angela Monson PhD

Accreditation. The Dental Program is accredited by the Commission on Dental Accreditation (CODA).

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 work in a variety of settings and roles including clinical practice, corporate, public health, researcher, educator, administrator, and entrepreneur 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 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.

Academic Map/Degree Plan at www.mnsu.edu/programs/#All

POLICIES/INFORMATION

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 Education 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 2.9.
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 106 or CHEM 111

Transfer students are exempt from the application requirements to complete DHYG 219 or DHYG 225 prior to applying to the program. However, both DHYG 219 and DHYG 225 must be completed prior to starting the program in the fall. Transfer students accepted into the fall DHYG class and first attending Minnesota State University in the fall to start the DHYG program will have DHYG 100 waived.

The application form may be obtained from the Department of Dental Education website ahn.mnsu.edu/dental/program/. 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.

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. At the beginning of the program students will purchase scrubs and lab coats (@~\$300). Students are responsible for purchasing two kits of instruments and supplies during the program. The first kit fee of \$3,125+ is attached to DHYG 313 in the fall of the junior year. The second kit fee of \$1,700+ is attached to DHYG 331 in the spring of the junior year. Upon acceptance to the program a deposit of \$500 towards the first kit fee is required.

Risks: Dental hygienists are at risk for exposure to blood borne pathogens (BBP). Accepted students are highly encouraged to be vaccinated against Hepatitis B and will also 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 offsite clinical sites. Currently the vaccine series costs approximately \$150. Accepted students are required to have a Mantoux test prior to starting the fall semester.

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 | Introduction to Psychological Science (4)~ |

(choose 3 credits)

| | | |
|-----|-----|--------------------------------|
| SOC | 101 | Introduction to Sociology (3)~ |
| SOC | 150 | Social Problems (3)~ |

(choose 3 credits)

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|------|-----|------------------------------------|
| CMST | 100 | Fundamentals of Communication (3)~ |
| CMST | 102 | Public Speaking (3)~ |

(choose 3-4 credits)

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|------|-----|-------------------------------------|
| SOC | 202 | Introductory Social Statistics (3)~ |
| STAT | 154 | Elementary Statistics (4)~ |

(choose 3 credits)

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|------|------|-----------------------------|
| PHIL | 120W | Introduction to Ethics (3)* |
| PHIL | 222W | Medical Ethics (3)* |

Chemistry

(choose one course 3-5 credits)

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|------|-----|---|
| CHEM | 106 | Chemistry of Life Process Part I (General) (3)^ |
| CHEM | 111 | Chemistry of Life Processes Part II (5)^ |

Prerequisites to the Major (choose 16 credits)

| | | |
|------|-----|--|
| BIOL | 220 | Human Anatomy (4) |
| DHYG | 100 | Perspectives in Dental Hygiene (1) |
| DHYG | 219 | Head and Neck Anatomy and Histology (2) |
| DHYG | 223 | Pharmacology (3) |
| DHYG | 225 | Oral Anatomy (2) |
| FCS | 242 | Nutrition for Healthcare Professionals (3) |

(choose 4 credit(s).

| | | |
|------|-----|------------------------------------|
| BIOL | 310 | Basics of Human Physiology (4) |
| BIOL | 330 | Principles of Human Physiology (4) |

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) |

DENTAL HYGIENE CONTINUED

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|------|------|--|
| 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) |
| 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 | 424 | Nitrous Oxide Sedation (1) |
| DHYG | 425W | 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

General Electives

The student may choose 2 credits of general electives to complete the 120 credits for graduation.

Other Graduation Requirements

DH to BSDH Online Program
(choose 32 Credits).

This track is for licensed dental hygienists who want to earn a Bachelor of Science Degree.

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| DHYG | 441 | Advanced Dental Hygiene Practice (3) |
| DHYG | 442 | Current Issues in Dental Hygiene (3) |
| DHYG | 443 | Technology in Oral Health (3) |
| DHYG | 444W | 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) |

Study Abroad

Choose 0 - 6 Credit(s).

These courses are optional and may not be offered each year/semester.

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| DHYG | 336 | Cultural Awareness through the Lens of Health (3) |
| DHYG | 447 | Dental Health Study Abroad in Belize (3) |

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.

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 Dittich at julie.dittich@mnsu.edu for more information.

Required for Major

| | | |
|------|------|---|
| DHYG | 441 | Advanced Dental Hygiene Practice (3) |
| DHYG | 442 | Current Issues in Dental Hygiene (3) |
| DHYG | 443 | Technology in Oral Health (3) |
| DHYG | 444W | Principles of Oral Health Promotion (3) |

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|------|-----|--|
| 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.

Prerequisite: BIOL 220

Variable

DHYG 223 (3) Pharmacology

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

Prerequisite: BIOL 220, CHEM 106 or CHEM 111

Fall, Spring, Summer (On Demand)

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.

Prerequisite: 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.

Prerequisite: 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.

Prerequisite: 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.

Prerequisite: 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.

Prerequisite: 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

DENTAL HYGIENE CONTINUED

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 is designed to reinforce topics covered in DHYG 311 through the use of advanced case studies. Emphasis will be placed on evidence-based decision making. Also designed to collaborate with clinic needs as identified in DHYG 331.
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 336 (3) Cultural Awareness through the Lens of Health

Concepts of "Global Citizenship" and "Intercultural Competency" are desired attributes of future health care professionals. Students will self-assess their cultural knowledge in preparation for international travel. Interacting with individuals from different cultural backgrounds will provide the opportunity for students to become aware of their own cultural understanding and improve critical thinking and interpersonal skills. Through travel and experiential learning, the students will begin to develop the capacity to identify, discuss and reflect upon the ethical challenges presented in political, social, and personal lives to understand diverse world views of social justice and common good.
Spring
Diverse Cultures - Gold

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.
Spring

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 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.
Fall

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 425W (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. This course is an upper division writing intensive course for the traditional dental hygiene program.
WI

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.
Fall

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

DENTAL HYGIENE CONTINUED

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, Summer (On Demand)

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, Summer (On Demand)

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.

Fall (On Demand), Spring

DHYG 444W (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, Spring (On Demand)

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, Spring (On Demand)

DHYG 447 (3) 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, Spring (On Demand)

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, Spring (On Demand)

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.

Fall (On Demand), 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.

Prerequisite: DHYG 444

Fall (On Demand), 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.

Prerequisite: DHYG 445

Fall (On Demand), 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, Summer (On Demand)

DHYG 499 (1-6) Individual Study