MASTER OF SCIENCE IN DENTAL HYGIENE

Program Description:

The Master of Science in Dental Hygiene professional program provides dental hygienists who wish to pursue a graduate program with a choice of two tracks: management and dental hygiene education.

Program Overview:

The Master of Science in Dental Hygiene program prepares leaders in the profession for careers in academia, the healthcare industry and research.

Courses in the management track provide students with the knowledge and skills necessary for positions in the healthcare industry such as sales representatives and managers of marketing and professional relations divisions, managers of large dental clinics, practice management consulting, and entrepreneurship.

Courses in the dental hygiene education track provide students with the knowledge and skills to teach didactic, clinic, and laboratory courses in dental hygiene programs; conduct research; and assume administrative positions.

Core Curriculum (9 cr.): Students in both the Management and Dental Hygiene Education Tracks take the following core courses:

- DH 5401 Research Methods in Health Sciences (3 cr.)
- DH 5407 Instructional Strategies for Effective Teaching (2 cr.)
- DH 5411 Administrative Leadership and Professional Development (1 cr.)
- DH 5421 Grantwriting (1cr.)
- Epsy 5261 Introductory Statistical Methods (2 cr.)

MANAGEMENT TRACK CURRICULUM:

Required Curriculum: (9 cr.):

- MBA 6030 Financial Accounting (3 cr.)
- MBA 6210 Marketing Management (3 cr.)
- MBA 6220 Operations Management (3 cr.)

Plan A:

- DH 8777 Masters Thesis (10 cr.)
- MBA Elective(s) (6 cr.)
Plan C:

- DH 5201 Management Internship (5 cr.)
- DH 5203 Capstone Project (3 cr.)
- MBA Elective(s) (8 cr.)

Electives Curriculum: Chosen from the following courses (not an inclusive list): See Carlson School of Management for more course offerings.

- ENTR 6020 Business Formation (4 cr.)
- MBA 6300 Strategic Management (3 cr.)
- MILI 6235 Pharmaceutical Industry: Business and Policy (2 cr.)
- MKTG 6051 Marketing Research (4 cr.)

Required: Thesis or Internship and Capstone: Students complete either: 1) a research study and thesis with additional MBA elective courses equaling eight credits; or 2) an internship and capstone project with additional MBA elective courses equaling thirteen credits.

DENTAL HYGIENE EDUCATION TRACK

Required Curriculum: (15 cr.)

- DH 5403 The Discipline of Dental Hygiene (2 cr.)
- DH 5405 Curriculum and Course Development (2 cr.)
- DH 5409 Dental Hygiene Clinic Administration (2 cr.)
- DH 5413 Dental Hygiene Supervised Clinical Student Teaching (3 cr.)
- DH 5415 Dental Hygiene Supervised Didactic Student Teaching (1 cr.)

Required Thesis:

- DH 8773 Thesis I: Literature Review I (2 cr.)
- DH 8774 Thesis I: Literature Review II (2 cr.)
- DH 8775 Thesis II: Proposal Development (2 cr.)
- DH 8776 Thesis III: Implementation & Data Analysis (2 cr.)
- DH 8779 Thesis IV: Dissemination (2 cr.)

Proposal Approval and Final Oral Examination:
ADMISSIONS:

Materials must be submitted by July 1 for the class beginning Fall (September) semester 2016.

ADMISSION REQUIREMENTS:

- Completion of a baccalaureate or associate degree in dental hygiene from an accredited U.S. institution or foreign equivalent. If the applicant has graduated from an associate degree dental hygiene program, s/he must also have a baccalaureate degree from an accredited U.S. institution.
- Applicants who have not completed an undergraduate statistics course must do so prior to matriculation or prior to taking the required statistics course.
- Minimum of a 3.0 grade point average.
- Graduate Management Assessment Test (GMAT) is only required for applicants to the Management Track. (A minimum score of 500 is required).

Application:

- Rolling Admissions: Applications considered as they are received until July 1, 2016. Applicants apply online via the University of Minnesota Graduate School. Link to application can be found at: http://dentistry.umn.edu/programs-admissions/advanced-programs/dental-hygiene/application/index.htm
- Upon acceptance a $95.00 non-refundable placement fee is required.

Application materials:

- Computer generated essay to include short and long term goals and an explanation of why an advanced degree is of interest and why he/she merits serious consideration
- Current resume including dental hygiene clinical practice and/or management experience.
- Three letters of reference from persons qualified to evaluate the applicant’s recent work and potential for success in professional graduate program.
- Official transcripts of all previous/current academic work from all institutions
- Copies of dental hygiene license CPR level C certification and immunization status will also be required upon matriculation
- A phone interview with members of the MSDH Admissions and Progression Committee may be requested.

Financial Aid:

- Federal financial aid loans are available.

Tuition/Fees:
**Tuition:** Tuition and Fees for 2016-17 are as follows:

- $850.00 per credit
- Total cost of program (33 credits) = $28,050.00
- *Please note that all MSDH students pay resident tuition rates.

**Fees:**

- Application Fee: $95.00
- University Fee: $90.00 per credit (students taking 1-9 credits)
- Student Services Fee: Approximately $368.00 for 6 credits or more
- Dental Hygiene/School of Dentistry Fee: Approximately $205.00

*Please go to www.onestop.umn.edu for a complete listing of University fees.

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**CORE COURSE DESCRIPTIONS**

**Core Curriculum:** (9 credits) Students in both the management and dental hygiene education tracks will participate in the following four core courses.

- **DH 5401 Research Methods in Health Sciences** (2 cr.) Develop skills in the scientific method and analysis of research findings; emphasis placed on types of research, problem selection, hypothesis writing, research planning and design, data collection and measuring techniques, analysis and interpretation of data, ethics in research and writing the research proposal.
- **DH 5407 Instructional Strategies for Effective Teaching** (2 cr.) Application of principles of learning, learning styles, teaching styles, and instructional strategies; microteaching of selecting a variety of instructional strategies.
- **DH 5411 Administrative Leadership and Professional Development** (1 cr.) Application of leadership theory and models of administrative roles in education, healthcare, research and corporate settings. Study of education and organization culture, strategic planning, human resource management and grantsmanship. Emphasis on professional development and advancement.
- **DH 5421 Grantwriting** (1 cr.) Application of the grantwriting process including successful elements of a grant application; writing an application; grant review process and critiquing a grant.
- **Epsy 5261 Introductory Statistical Methods** (3 cr.) Application of statistical concepts/procedures. Graphs, numerical summaries. Normal distribution, correlation/regression analyses, probability, statistical inferences for one or two samples. Hypothesis tests, Chi-square tests. Conceptual understanding/application of statistics.

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**CURRICULUM**
Management Track: (16 cr.) In addition to the above core courses, management track students will complete the following required courses.

- **MBA 6030 Financial Accounting** (3 cr.) Basic principles of financial accounting involving the consecution/interpretation of corporate financial statements.
- **MBA 6210 Marketing Management** (3 cr.) Management of marketing function; understanding the basic foundational marketing concepts and skills in strategy development and planning of operational and strategic levels pertaining to product offering decisions, distribution channels, pricing and communication.
- **MBA 6220 Operations Management** (3 cr.) Introduction to fundamental operations, management principles and concepts. The course takes a strategic view of operations in both a manufacturing and service context and stresses linkages to other functional areas. Many of the cases in the course take an international perspective.

**Electives** (8-13 cr.): more elective courses can be found at www.csom.umn.edu/mba:

- ENTR 6020 Business Formation (4 cr.)
- MBA 6300 Strategic Management (3 cr.)
- MILI 6235 Pharmaceutical Industry: Business and Policy (4 cr.)
- MKTG 6051 Marketing Research (4 cr.)

**Management Track Elective Course Descriptions** (not an inclusive list)

- **ENTR 6020 Business Formation** (4 credits) This course focuses on issues that are important at the launch and development of a business from concept development through business entry, either as a startup or through an acquisition. It covers opportunity identification and evaluation entry strategy, competitive analysis and business planning, forecasting and budgeting from a “blank slate,” resource markets and resource assembly, and problems/opportunities from concept stage through establishment of a viable business.

- **MBA 6300 Strategic Management** (3 credits) Introduction to the concepts and techniques used to create and implement a sense of corporate direction; choices about products and markets that involve the integration of different functional areas; positioning a business to increase returns for shareholders and stakeholders; the skills involved in identifying issues, evaluating options, and implementing business plans.

- **MILI 6235 Pharmaceutical Industry, Business & Policy** (2 credits) Business/policy issues specific to pharmaceutical industry. Interdisciplinary perspectives, active involvement by industry leaders.

- **MKTG 6051 Marketing Research** (4 credits) Methods for collecting/analyzing data to solve marketing problems. Survey research techniques. Research design, secondary/primary data collection, sample design, data analysis. Application of techniques to marketing problems, marketing research projects.
Education Track: (16 cr.) In addition to the core curriculum courses described on page 5, dental hygiene education track students will participate in the following courses:

- **DH 5403 The Discipline of Dental Hygiene** (2 cr.) will ensure that students’ dental hygiene practice is grounded in science and guided by research evidence; etiology, prevention, and treatment related to dental caries, periodontal diseases, oral cancer and other conditions; and, advances in technology.

- **DH 5405 Curriculum and Course Development** (2 cr.) will prepare students for curriculum and course development and management, competency-based education and outcomes assessment, and the role of accreditation in dental hygiene education. Students will develop a competency-based dental hygiene curriculum and a dental hygiene course.

- **DH 5409 Dental Hygiene Clinic Administration** (2 cr.) will prepare students for the administration of a dental hygiene clinic and the development of dental hygiene clinic courses, policies and procedures, evaluation mechanisms including OSCEs and standardized patients, and case-based instruction.

- **DH 5413 Dental Hygiene Supervised Clinical Student Teaching** (3 cr.) will prepare students to teach psychomotor skills in a clinic setting; observation and participation in selected supervised teaching experiences.

- **DH 5415 Dental Hygiene Supervised Didactic Student Teaching** (1cr.) Observation and participation in supervised teaching experience in dental hygiene education under faculty mentorship.

- **DH 5421 Grantwriting** (1 cr.) will provide students an introduction to grant writing for health care professionals. Topics will include grant sourcing, matching goals and objectives to funding sources, creating evidenced-based programs, developing an evaluation plan, writing a compelling proposal, and planning for funding sustainability. The effects of the economic environment and social responsibility of non-profit corporations will be discussed.

- **DH 8773, 8775, 8776, 8779 Thesis Credits** (10 cr.) Directed research toward completion of thesis. Students will complete 10 thesis credits and a research project under the supervision of an advisor and examining committee, write, and defend a thesis in a final oral examination. Students will be required to submit a manuscript based on their theses, approved by the students’ advisors, as one or more manuscripts into refereed journal, and submit a poster presentation abstract to be presented at a professional meeting. A final oral examination covering the thesis will be administered at the end of the students’ academic program, registration for thesis and satisfactory completion of all course work. The final oral examination will be administered by the student’s thesis committee.

**REQUIRED THESIS**

**DH 8773 Thesis I: Literature Review I**
This course is the first in a series of courses focused on the development of an original research project for the thesis. The purpose of this course is to provide students with the knowledge and skills to successfully review the literature on a chosen research topic, develop a research question, and write a focused review of the literature review.
DH 8775 Thesis II: Proposal Development
This course is the second in a series of five courses designed to assist the student in conducting a thesis research project. The focus of this course is the completion of a research proposal that will serve as a roadmap for carrying out the proposed research. Students will complete CITI training.

DH 8776 Thesis III: Implementation and Data Analysis
This course is third in a series of five courses culminating in a written thesis. The focus of this course is implementing the research, data management and analysis.

DH 8779 Thesis IV: Dissemination
The final course in the thesis course series focuses on completion of the written thesis, oral defense and preparation of a publishable manuscript.

FOR MORE INFORMATION

School of Dentistry Website
http://www.dentistry.umn.edu

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Minneapolis, MN 55455
612-625-5954
612-625-1605
## MSDH CURRICULUM EDUCATION TRACK

(Online)

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<td>The Discipline of Dental Hygiene (2 cr.) <strong>Flynn</strong></td>
<td>Research Methods in Health Science (3 cr.) <strong>Osborn</strong></td>
<td>Supervised Clinical Student Teaching (4 cr.) <strong>Ahmann</strong></td>
<td>Instructional Strategies for Effective Teaching (2 cr.) <strong>Ahmann/O’Brien</strong></td>
<td>Grantwriting (1 cr.) <strong>Flynn</strong></td>
<td>Administrative Leadership and Professional Development (2 cr.) <strong>Blue</strong></td>
<td>Didactic Student Teaching (2 cr.) <strong>Osborn</strong></td>
<td>Independent Study: Thesis Work (Optional)</td>
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<td>DH 8773</td>
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<td>Introduction to Statistical Methods (3 cr.)</td>
<td>Curriculum and Course Development (2 cr.) <strong>Blue</strong></td>
<td>Dental Hygiene Clinic Administration (2 cr.) <strong>Ahmann</strong></td>
<td>Thesis I: Literature Review (2 cr.) <strong>Blue</strong></td>
<td>Thesis II: Proposal Development (3 cr.) <strong>Osborn</strong></td>
<td>Thesis III: Implementation and Data Analysis (2 cr.) <strong>Blue</strong></td>
<td>Thesis IV: Dissemination (3 cr.) <strong>Blue</strong></td>
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**Notes:**
- **Flynn, Osborn, Ahmann, O’Brien** refer to the instructors for the respective courses.
- **Blue, Osborn** refer to the instructors for the respective courses.
- 5 Credits, 5 Credits, 6 Credits, 4 Credits, 4 Credits, 4 Credits, 5 Credits, 0 Credits refer to the credit hours for each course.
**MSDH CURRICULUM**
**MANAGEMENT: PART-TIME OPTION**

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<tr>
<td>MBA 6035 Managerial Accounting (3 cr.)</td>
<td>DH 5401 Research Methods in Health Science (3 cr.) <em>(Core)</em></td>
<td>DH 5421 Grantwriting (1 cr.) <em>(Core)</em></td>
<td>MBA 6220 Operations Management (3 cr.)</td>
<td>DH 5411 Administrative Leadership and Professional Development (2cr.) <em>(Core)</em></td>
<td>EPSY 5261 Introduction to Statistics and Measurement (3cr.)</td>
<td>DH 5403 Capstone Project (3 cr.)</td>
<td>DH 5201 Management Internship (5cr.) OR DH 8779 Thesis (10 cr.)</td>
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<td>DH 5407 Instructional Strategies (2cr.) <em>(Core)</em></td>
<td>MBA 6210 Marketing Management (3cr.)</td>
<td>MBA Elective (2-4 cr.)</td>
<td>DH 5411 Administrative Leadership and Professional Development (2cr.) <em>(Core)</em></td>
<td>EPSY 5261 Introduction to Statistics and Measurement (3cr.)</td>
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<td>DH 5403 Capstone Project (3 cr.)</td>
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*An MBA elective course may be taken any semester

** Thesis coursework will span several semesters.
## MSDH CURRICULUM
### DENTAL HYGIENE MANAGEMENT: FULL-TIME OPTION

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<tr>
<td>EPSY 5261 Introduction to Statistics and Measurement (3 cr.)</td>
<td>MBA 6220 Operations Management (3 cr.)</td>
<td>DH5413 Administrative Leadership and Professional Development (2 cr.) (Core)</td>
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<td>MBA 6035 Managerial Accounting (3 cr.)</td>
<td>DH 5401 Research Methods in Health Science (3 cr.) (Core)</td>
<td>MBA Elective(s) (2-4 cr.)</td>
<td>DH 5407 Instructional Strategies (2 cr.) (Core)</td>
<td>DH 5421 Grantwriting (1 cr.) (Core)</td>
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