DENTAL HYGIENE MASTER OF SCIENCE ON CAMPUS CURRICULUM

The Master of Science in Dental Hygiene On-Campus Program offers students the opportunity to earn a master’s degree while taking classes both on the University of Michigan campus and online. Courses are scheduled in a sequence to allow for completion of this 36-credit-hour program in a 20-month period. Full-time students will enroll in at least 9 credit hours during the fall and winter semesters over two academic years. A part-time option is also available. Transfer of credit from other graduate programs cannot be accommodated.

NOTE: Curriculum is subject to change without notice.

COURSE DESCRIPTIONS

YEAR 1, FALL

- **DHYGRACK 687**: Foundations of Dental Hygiene, Education, and Health Care (3 credits, online)
  - This course provides an overview of the current and future trends impacting oral health, dental hygiene, higher education, and health care services. The role of individuals and organizations in addressing health disparities, preparation of future workforces, and promoting change will be addressed. Students will begin to examine leadership roles and professional development.

- **DHYGRACK 693**: Research Principles and Application (3 credits, online)
  - In this course students will attain an understanding of evidence-based practice, scientific methods and analysis of research findings. Emphasis will be placed on types of research, formulation of research question and hypothesis, research planning and design, data collection, statistical concepts, and synthesis of the scientific literature. This course will guide students through the stages of developing a proposal and will culminate with each student presenting a draft.

- **BIOSTATS 501** (4 credits, on-campus)
  - Fundamental concepts related to the practice of public health: descriptive statistics; probability; sampling; statistical distributions; estimation; hypothesis testing; chi-square tests; simple and multiple linear regression; one-way ANOVA. Use of computer in statistical analysis.

YEAR 1, WINTER

- **DHYGRACK 689**: Educational Concepts and Strategies (3 credits, online)
- This course will focus on the study of theory, principles, and research related to teaching and learning, development of ethical reasoning, critical thinking and reflective judgment, development of curricular frameworks, outcomes and competencies, and course delivery methods.
- DHYGRACK 692 Evidence-Based Practice (3 credits, online)
  - This course builds upon foundational skills learned in Research Principles and Application. Through judicious critical appraisal of current clinical and scientific literature, students will learn how to combine a thorough evaluation of the literature with their own clinical expertise in order to formulate best evidence-based patient care decisions. The research thesis process will be elucidated such that each student will be prepared to commence their individual master's level research project. This course will end with each student developing an individual research proposal.
- Elective (3 credits, on-campus)

YEAR 2, FALL
- DENTED 630 Practicum in Pre-Clinical/Clinical Teaching (3 credits, online with student teaching placement on-campus)
  - This course provides the student with guided experiences in teaching foundation and advanced clinical skills. The seminar will focus on the theory and practices of clinical instruction and clinical supervision, as they relate to psychomotor skill development, competency-based evaluation systems. In addition, CODA standards, dealing with students in difficulty, promotion of critical thinking/self-directed learning, faculty calibration, evidence-based teaching, and professionalism and ethics will be applied to the role of the pre-clinical and clinical instructor.
- DHYGRACK 685 Foundations of Oral Health Services (3 credits, online)
  - This course examines issues and policies affecting health care and oral health services. Factors influencing access to care and provision of care to underserved populations are included. Elements of program planning and implementation in community health will be covered.
  - Note: An on-campus course with a health policy focus may be substituted.
- Elective (3 credits, on-campus)

YEAR 2, WINTER
- DENTED 631 Practicum in Didactic Teaching (3 credits, online with student teaching placement on-campus)
  - This course provides the student with guided experiences in teaching foundation and advanced didactic teaching skills. The seminar will focus on the theory and practices of didactic instruction as they relate to cognitive, affective, and psychomotor development, using the principles of integrated course design as the platform for teaching.
- DHYGRACK 694 Applied Biostatistics (3 credits, online)
  - This second course in statistics is intended to provide students with the skills necessary to carry out statistical analysis commonly employed in health sciences. Students will
identify the scientific objectives of their research projects and develop a statistical analysis and presentation strategy appropriate for those objectives. Various statistical software packages will be used to manipulate the data into an analyzable form.

- DHYGRACK 688 Thesis (3 credits, on-campus)
- Independent research leading to the advancing of a new point of view. Students must complete the thesis and thesis defense prior to confirmation of the Master of Science in Dental Hygiene. This course is the final course in the thesis curricular thread of the MSDH program. It is designed to guide students through the development of the remaining chapters of their written thesis document as well as the other required sections of this work. This course also helps prepare the student for his/her public thesis defense presentation. Also included are modules focusing on publishing a master’s thesis research project and important authorship responsibilities. The course introduces the student to national and international research organizations and possible future advanced educational opportunities.

PROGRAM PREREQUISITES

Certification in local anesthesia and nitrous oxide analgesia is a requirement and must be completed before year 2. This requirement can be completed before enrolling in the Online Program or during the course sequencing, either through U-M's Continuing Dental Education program or through any other accredited dental hygiene program or continuing education program.

RACKHAM COGNATE COURSE REQUIREMENT

Cognates are those courses that are in a discipline or area different from a student’s field of study, but are related to some aspect of that field. Cognate coursework must be approved by the graduate program, and may be satisfied by completing 4 credit hours of cognate coursework in approved graduate-level courses with a grade of B- or better. Courses outside of DHYGRACK meet the definition of a ‘cognate course’. Visit the Rackham Graduate School website for more information.