Oral Science, MS

Learning Outcomes

Acquisition of Broad-Based Foundational Knowledge in Oral Science

• Demonstrate a broad-based understanding in the scientific disciplines relevant to oral science.
• Demonstrate mastery of the literature and background knowledge pertaining to one’s chosen area of research.
• Understand the principles of biostatistical analyses and appropriate engagement with biostatisticians.

Development of Critical Thinking Skills

• Critically analyze primary scientific literature.
• Rationally debate and defend scientific viewpoints using scientific principles and critical analysis skills.
• Demonstrate problem-solving skills.

Understanding of the Scientific Method and its Application

• Formulate hypotheses or experimental objectives that address knowledge gaps in the literature.
• Formulate a logical and feasible approach to test a hypothesis or accomplish research objectives.
• Critically evaluate results and draw appropriate conclusions from the data.

Proficiency in Research

• Conduct research in a responsible and ethical manner.
• Carry out an in-depth research project and contribute intellectually and technically to all parts of its development, execution, and analysis.

Proficiency in Scientific Communication

• Demonstrate proficiency in scientific writing as evidenced by first-author manuscripts and by composing grant applications.
• Organize, defend, and communicate ideas effectively in scientific oral presentations and settings.

Interpersonal and Leadership Skills

• Demonstrate an ability to work, when appropriate, in teams or collaborative settings with a diverse workforce.
• Develop leadership skills, commensurate with experience, facilitate group discussions, teach, and/or conduct meetings.
• Effectively mentor and motivate subordinates and/or peers.
• Respond appropriately to positive or negative feedback.

Requirements

The Master of Science program in oral science requires a minimum of 30 s.h. of graduate credit, including 21 s.h. of coursework, 9 s.h. of independent research leading to a thesis, and a final examination.

Students pursuing the MS must be enrolled in a clinical specialty training program offered by a College of Dentistry department. Specific course requirements vary depending on the clinical specialty. Students should complete the MS and the clinical specialty training program in three years of study.

The master’s program is offered in conjunction with a certificate in one of five clinical specialties: endodontics, periodontics, prosthodontics, operative dentistry, and oral pathology, radiology, and medicine.

Admission

Applicants to the MS program must meet the admission requirements of the Graduate College and those specified by the clinical department, including the Test of English as a Foreign Language (TOEFL), the International English Language Testing System (IELTS), or the Duolingo English Test (DET) scores for applicants whose first language is not English.

A personal interview may be requested. Programs normally begin July 1 each year.