

BIOLOGICAL SCIENCES, M.S.

Learning Outcomes

1. To gain expertise in a specific area in Biological Sciences. To include acquiring in depth knowledge of the literature in the field and how to use appropriate methodology to carry out research.
2. Ability to design and critique an independent research project. Also the capacity to assess research methods in an area of expertise.

An applicant must have a baccalaureate degree or its equivalent from an accredited college or university. The applicant's academic record must indicate adequate preparation for graduate study in biology and must demonstrate ability to excel in the biological sciences. Generally, to be considered for admission, a student must have a minimum grade point average of 3.00 in the sciences on a 4.00 scale. However, these guidelines are flexible, and slight deficiencies can be compensated by strengths in another. It is strongly advised to contact faculty members in the Biological Sciences Department that are carrying out research that you would like to become involved in for the MS degree. The majority of those who ultimately are accepted into the MS program, have secured a space in a specific professor's research group. In addition, applicants whose native language is not English must obtain a minimum score of 600 (250 computer-based score) on the TOEFL exam or 7 on the IELTS exam.

Degree Requirements (30 Hours)

Students choose a Major Professor and form an Advisory Committee during the first year. This Advisory Committee serves as the students Thesis Committee. A curriculum, tailored to each student, is developed with and approved by the Advisory Committee and submitted to the Graduate School as the Program of Study. Students take a Qualifying Examination at the end of their first year, comprised of a short written and orally defended Research Plan focusing on planned research in the laboratory of their Major Professor; this Research Plan is developed in consultation with the Major Professor and presented to a committee selected by the Department Chair. Students present a thesis plan in the form of a Research Proposal to their Thesis Committee; the format of this Research Proposal is determined by the Thesis Committee. Finally, students write and orally defend a research based Thesis; the Thesis and its defense serve as the M.S Comprehensive Examination. M.S. students must complete at least 30 hours of course credits including multiple credits of BIOL 798 and 3 credits of BIOL 799. M.S. students are required to have teaching experience equivalent to one semester as a Teaching or Instructional Assistant, unless waived on appeal by the Department Graduate Studies Committee.