**BIOLOGY, MS**

Department of Biology, College of Arts and Sciences

**Vision Statement**
The goal of the Department of Biology is to provide students with individualized, broad training in biology leading to a Master of Science (MS) degree. Original research is an integral part of both the thesis and non-thesis degree options. Faculty areas of expertise include ecology, physiology, genetics, molecular biology, taxonomy, behavior, and developmental biology of a wide variety of organisms. The MS degree prepares students for employment in industry, private or government agencies, and academics, as well as further education in professional programs, such as the PhD or MD.

**Program Contact Information**
James Wilson, PhD, Graduate Program Chair (GPC)
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402.554.2585
jameswilson@unomaha.edu

**Program Website** ([https://www.unomaha.edu/college-of-arts-and-sciences/biology/](https://www.unomaha.edu/college-of-arts-and-sciences/biology/))

**Other Program Related Information**
The Department of Biology annually awards 17 graduate assistantships. New applicants should indicate their interest in applying for an assistantship as part of the admission application and should include your employment history along with names and contact information of three references in your resume or CV. The assistantships require 20 hours per week of teaching and/or other assignments.

**Admissions**
General Application Requirements and Admission Criteria ([http://catalog.unomaha.edu/graduate/admission/](http://catalog.unomaha.edu/graduate/admission/))

**Program-Specific Requirements**

**Application Deadlines (Spring 2022, Summer 2022, and Fall 2022)**
- Fall: February 15
- Spring: October 15
- Summer: February 15

**Other Requirements**
- The applicant's GPA in undergraduate biology courses will be determined and must be 3.0 or above (on a 4.0 scale)
- An applicant must normally present 24 semester hours of credit in the biological sciences, including genetics (sophomore level or above), ecology (junior level or above) and molecular/cell biology (junior level or above). Preparation in the supporting sciences must include a course in inorganic or introductory chemistry, a course in organic chemistry or biochemistry, a course in introductory physics and a course in mathematics (college algebra, trigonometry or calculus) or statistics. Applicants with inadequate backgrounds in biology or the supporting sciences may be admitted provisionally and will be required to complete courses in the named areas.
- **Entrance Exam**: Graduate Record Exam (GRE) General Test with a combined score (verbal + quantitative) of 297 and a minimum writing score of 3.5.
- **English Language Proficiency**: Applicants are required to have a command of oral and written English. Those who do not hold a baccalaureate or other advanced degree from the United States, OR a baccalaureate or other advanced degree from a predetermined country on the waiver list, must meet the minimum language proficiency score requirement in order to be considered for admission.
- **Statement of Purpose**: The Department of Biology strongly encourages applicants to contact a professor whose research interests overlap with their own goals for graduate research. Due to the individualized nature of the biology graduate program, otherwise qualified applicants may not be admitted if appropriate faculty are not available to serve as advisors. Please indicate in your statement of purpose which faculty member has been contacted or plan to contact.
- **Resume or curriculum vitae (CV)**- including an outline of educational background, employment history, research experience, and a list of references.
- **Letters of Recommendation**: Three letters are required
- Applicants not meeting the criteria in terms of GPA or standardized test scores may provide written evidence of experience or potential to perform outstanding graduate work and petition the department for provisional admission as long as their biology GPA is above the 2.7 minimum set by the Graduate College. Students seeking provisional admission should contact two or more biology faculty to discuss admission. Provisional admission will not be removed until the student has earned at least the grade of "B" (3.0 on a 4.0 scale) in each course involved in the first 12 hours of graduate study. Questions about requirements for admission should be directed to the Department of Biology.

**Degree Requirements**

**Thesis Option**
At least 50% of the 30 credit hours will be taken in 8000-level (graduate only) courses. The 30 credit hours of graduate course work must include:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>BIOL 8010</td>
<td>SEMINAR IN BIOLOGY</td>
<td>1</td>
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<tr>
<td>Electives</td>
<td></td>
<td>23</td>
</tr>
<tr>
<td>BIOL 8990</td>
<td>THESIS</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td></td>
<td><strong>30</strong></td>
</tr>
</tbody>
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**Non-Thesis Option**
At least 50% of the 36 credit hours will be taken in 8000-level (graduate only) courses. The 36 credit hours of graduate course work must include:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 8010</td>
<td>SEMINAR IN BIOLOGY</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 8020</td>
<td>INDEPENDENT RESEARCH IN BIOLOGY</td>
<td>2</td>
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<tr>
<td>Electives</td>
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<td>33</td>
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<tr>
<td><strong>Total Credits</strong></td>
<td></td>
<td><strong>36</strong></td>
</tr>
</tbody>
</table>

**Exit Requirements**
All degree students must form a supervisory committee of faculty, chaired by a major advisor from the Department of Biology. In consultation with the supervisory committee, students will develop a plan of study list courses
required for graduation. This will include any deficiencies required as a condition of admission and a minimum of 30 graduate credits for the thesis option and a minimum of 36 credits for the non-thesis option. Graduate students are expected to attend the Graduate Seminar (BIOL 8010) even when not registered for it.

**Thesis Option (6 hours):**
Thesis candidates must complete 6 credit hours of BIOL 8990, Thesis. All candidates should carefully review the Graduate College requirements for forming a Supervisory Committee, Thesis/Thesis Equivalent Proposal Approval forms and final approval and submission of a thesis.

**Non-Thesis Option:**
Comprehensive Examination administered by the supervisory committee.