**BIOLOGY, MS**

Graduate School Policies and Procedures (http://catalog.ucdenver.edu/cu-denver/graduate/graduate-school-policies-procedures/) apply to this program.

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Website: https://clas.ucdenver.edu/integrative-biology/academics/graduate-programs/ (https://clas.ucdenver.edu/integrative-biology/academics/graduate-programs/)

**Introduction**

The MS in Biology program offers students the opportunity to receive advanced training and research experience in an area of specialization of one of our nationally and internationally recognized faculty members. The master's program is designed to prepare graduate students for careers in research and teaching; for employment in business, industry and government; for existing career advancement; and for continuing post-baccalaureate work in PhD and professional programs. Students in the program specialize in fields ranging from cell and molecular biology to ecology and evolution.

The master's program is a research-based program. Applicants to the program must have a declared area of specialization that aligns with the research focus of a biology graduate faculty member. Faculty expertise can be found undergraduate faculty profiles on the Department of Integrative Biology website (clas.ucdenver.edu/biology/). Students must contact prospective faculty advisors to determine if openings are available within the faculty member's research group.

**Program Requirements**

Students matriculate into the research-based MS degree program. Under unusual circumstances, students and/or advisors may petition for a student to switch into the coursework-based MS degree program. The research-based MS program requires a minimum of 30 credits, and the coursework-based MS program requires a minimum of 32 credits. No double-counted courses will be applied to the degree. A maximum of 12 hours of graduate level courses may be transferred and counted toward the degree in either program. Both programs additionally require the student to meet minimum academic residency requirements, to form an advisory committee and to deliver and orally defend written work before the advisory committee, which constitutes the final exam for both programs as required by the Graduate School. Students must earn a minimum grade of B- (2.7) in all courses taken at CU Denver and must achieve a minimum cumulative GPA of 3.0. All graded attempts in required and elective courses are calculated in the GPA. Students cannot complete course requirements as pass/fail.

Research-based MS degree program requires

1. Completing 30 credits including 3-6 thesis (BIOL 6950 Master's Thesis)  
2. Meeting minimum academic residency requirements  
3. Forming and meeting regularly with an advisory committee  
4. Writing and defending research proposal  
5. Writing and defending research thesis (including a publishable paper)

**Required Courses**

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<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>BIOL 6002</td>
<td>Biology Skills Sets - Pedagogy (required only for students supported by a Graduate Teaching Assistantship)</td>
<td>2</td>
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<tr>
<td>BIOL 6655</td>
<td>Seminar (take in 2 different years)</td>
<td>2</td>
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<tr>
<td>BIOL 6705</td>
<td>Biological Research Workshop (take in 2 different years)</td>
<td>4</td>
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<tr>
<td>BIOL 6764</td>
<td>Biological Data Analysis (take in Year 1)</td>
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**Electives**

Students should complete a minimum of 12 credits from graduate level Biology coursework.

**Additional Minimum Requirements Research-Based**

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<tr>
<th>Code</th>
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<th>Hours</th>
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<tbody>
<tr>
<td>BIOL 6950</td>
<td>Master's Thesis</td>
<td>3-6</td>
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To learn more about the Student Learning Outcomes for this program, please visit our website. (https://clas.ucdenver.edu/integrative-biology/sites/default/files/attached-files/biology_ms_learning_goals_2020_0.pdf)