

# BIOLOGICAL SCIENCES (M.S.)

## Requirements

### Course Requirements

Course	Title	Credits
<b>Core Requirements</b> <sup>1</sup>		
BISC 7501	Population & Community Biology	4
BISC 7502	Eukaryotic Molecular Biology	4
BISC 7503	Community and Ecosystem Ecology	4
BISC 6734	Cell Biology of Eukaryotes	4
<b>Non-Core Requirements</b>		
BISC 6525	Biostatistics <sup>2</sup>	3
BISC 7801	Methods in Cell and Molecular Biology	1
BISC 8999	Independent Study (graded on a letter scale)	2
BISC 8801	Biological Colloquium I (taken twice)	0
<b>Concentration-Specific Requirements</b>		<b>3 to 4</b>
<i>Cell &amp; Molecular Biology Concentration</i>		
BISC 7804	Techniques in Molecular Biology	
<i>Ecology &amp; Systematics Concentration</i>		
BISC 6535	Ecological Methods	
One Additional Elective Credit <sup>3</sup>		
<b>Electives/Research Tutorials</b>		<b>9</b>
BISC 6999	Research for M.S. in Biological Sciences (independent research, graded pass/fail) <sup>4</sup>	
BISC 8999	Independent Study (graded on a letter scale)	
Graduate-Level Biological Sciences Electives <sup>5</sup>		
<b>Comprehensive Exam</b>		
BISC 0936	Master's Comprehensive Examination-Biology <sup>6</sup>	0
<b>Total Credits</b>		<b>34-35</b>

<sup>1</sup> Please note:

- For M.S. students, only one grade of "C" may count towards the Core requirements.
- BISC 7501 Population & Community Biology is the prerequisite for BISC 7503 Community and Ecosystem Ecology.
- BISC 7502 Eukaryotic Molecular Biology is the prerequisite for BISC 6734 Cell Biology of Eukaryotes.

<sup>2</sup> A grade of "B" or higher is required in Biostatistics for the course to fulfill the GSAS Language Requirement.

<sup>3</sup> See "Electives/Research Tutorials" for courses that can count towards this additional required credit.

<sup>4</sup> If students who complete 6 credits of BISC 6999 Research for M.S. in Biological Sciences opt to write and defend a thesis, they must register for BISC 0900 M.S. Thesis Defense in the semester of their thesis defense. The writing and defense of an M.S. thesis is optional.

<sup>5</sup> Any course with the subject code BISC, numbered 5000-8998 (not otherwise applied to other requirements) may fulfill this requirement.

<sup>6</sup> Please note:

- For students in the Ecology & Systematics concentration, BISC 7501 Population & Community Biology and BISC 7503 Community and Ecosystem Ecology are

considered concentration-specific core course subject to testing in the comprehensive exam. For students in the Cell & Molecular concentration, these courses are considered breadth core courses, and are not subject to testing in the comprehensive exam.

- For students in the Cell & Molecular concentration, BISC 7502 Eukaryotic Molecular Biology and BISC 6734 Cell Biology of Eukaryotes are considered concentration-specific core course subject to testing in the comprehensive exam. For students in the Ecology & Systematics concentration, these courses are considered breadth core courses, and are not subject to testing in the comprehensive exam.

## Degree Requirements

1. A minimum of 34 (Ecology & Systematics concentration) and 35 (Cell & Molecular concentration) course credits including at least 2 credits of research tutorial. For the M.S. degree with thesis, credits must include a minimum of 6 M.S. research credits, submission of a thesis document approved by the thesis committee, and an oral defense of the thesis is also required. All research tutorial credits and M.S. tutorial credits earned during years 1 and 2 count as course credits. It is not unusual for students to take more than 35 credits to complete their degree.
2. Reading knowledge of a foreign language (a computer language or statistics may be substituted for a foreign language).
3. Acceptable performance on the M.S. comprehensive examination (BISC 0936), which is achieved by a score of 70% or higher (grade of Pass).
4. Maintenance of a 3.0 GPA.

## CIP Code

26.0101 - Biology/Biological Sciences, General.

You can use the CIP code to learn more about career paths associated with this field of study and, for international students, possible post-graduation visa extensions. Learn more about CIP codes and other information resources.