Biological Sciences (M.S.)

Requirements

Designed as a two-year program for full-time students, the curriculum requires 34 credits for students who choose to concentrate in ecology and 35 credits for those who choose cell and molecular biology. Both tracks include two core courses in ecology and two core courses in cell and molecular biology in the first year, so students will get exposure to both subject areas. Requirements include core courses, breadth courses, concentration courses, and a language requirement. A comprehensive examination is also required.

Course Title Credits
First Year
Fall
BISC 7501 POPULATION & COMMUNITY BIOLOGY 4
BISC 7502 EUKARYOTIC MOLECULAR BIOLOGY 4
BISC 7801 METHODS IN CELL AND MOLECULAR BIOLOGY 1
BISC 8801 BIOLOGICAL COLLOQUIUM I 0
Credits 9
Spring
BISC 6734 CELL BIOL OF EUKARYOTES 4
BISC 7503 COMMUNITY & ECOSYSTEM ECO 4
BISC 6525 BIOSTATISTICS 1
BISC 8801 BIOLOGICAL COLLOQUIUM I 0
BISC 0936 MASTER'S COMPREHENSIVE EXAMINATION-BIOLOGY 0
Credits 11
Summer
BISC 6999 RESEARCH FOR MS 0
Credits 0
Second Year
Fall
Concentration Required Class 3 to 4
Research or Elective Course 4
Credits 7-8
Spring
Elective Course 4
Research or Elective Course 4
Credits 8
Total Credits 35-36

1 Biostatistics counts toward the literature requirement with a minimum grade of 3.0 (B).

Concentrations

Ecology concentration

Students concentrating in Ecology for their Master's or Ph.D. in Biological Sciences must complete the following course:

• BISC 6535 ECOLOGICAL METHODS

Students are encouraged to select their electives from the following list of courses offered in Ecology:

Course Title Credits
Tropical Biodiversity
BISC 6505 ORNITHOLOGY 3
BISC 6513 (Limnology)
Aquatic Ecology & Water Management
Biogeography
BISC 6561 (Mammalogy)
Evolutionary Ecology
BISC 6595 (Environmental Management)
BISC 5510 CONSERVATION BIOLOGY 3
Primate Behavior and Ecology
Paleobiology
BISC 7501 POPULATION & COMMUNITY BIOLOGY 4
BISC 7503 COMMUNITY & ECOSYSTEM ECO 4
Physiological Ecology
BISC 7552 (Insect Ecology)
Ecology of Urban and Suburban Landscapes
BISC 7565 (Plant Ecology)
Behavioral Ecology
Aquatic Botany
BISC 8530 SEM:ECOLG/EVO I 1
BISC 8531 (SEM:ECOLG/EVO II)

Molecular & Cell concentration

Students concentrating in Cell and Molecular for their Master's or Ph.D. in Biological Sciences must complete the following course:

• BISC 7804 TECH. IN MOLECULAR BIOL.

Students are encouraged to select their electives from the following list of courses offered in Cell and Molecular:

Course Title Credits
Eukaryotic Genetics
BISC 6734 CELL BIOL OF EUKARYOTES 4
BISC 6744 (Virology)
BISC 6759 (Physiology)
BISC 6793 (Neurobiology)
BISC 6795 (Developmental Biology)
Immunology
Biological Membranes
BISC 7502 EUKARYOTIC MOLECULAR BIOLOGY 4
BISC 7760 (Genomics and Human Molecular Genetics)
BISC 7801 METHODS IN CELL AND MOLECULAR BIOLOGY 1
BISC 7804 TECH. IN MOLECULAR BIOL. 4