GENERAL BIOLOGY, M.S.

Program Description

The master's degree in general biology is an academic degree designed for working professionals. This program requires completion of either an original thesis **or** six (6) additional elective units **and** a comprehensive exam.

The thesis option is appropriate for those who wish to design and carry out an original research project in teaching and learning in biology. The comprehensive exam option is appropriate for those who wish to take more biology coursework to supplement their background knowledge.

Program Learning Outcomes

Candidates who complete the Master of Science in General Biology program will be able to:

- Discuss major concepts and theories in biology;
- Carry out and communicate various experimental methods and types of data analysis;
- Demonstrate knowledge and skills in critical thinking, such as analysis and synthesis, as applied to primary literature in the field of biology, as well as in science education or science leadership; and
- Distinguish between science and faith, and recognize the potential compatibility of the two domains.

Program Eligibility for the Master of Science in General Biology Program

- A completed application for admission to the biology program;
- Official transcripts from accredited institutions, one of which must indicate the completion of a baccalaureate degree;
- Successful completion of an undergraduate upper-division grade-point average of at least 2.7500;
  - Two recommendation letters from any of the following:
    - a principal
    - department head
    - former college/university professor
    - other professional colleague
- A writing sample on assigned topics which indicates graduate-level ability;
- Test score on either the GRE subject test in biology or the biology Major Field Test; and
- An interview with the appropriate graduate director or coordinator.

Code	Title	Units
Core Courses		
BIO 6011	Learning in Science	3
or BIO 6123	Leadership in Science	
BIO 6033	History/Philosophy of Science	3
BIO 6043	Research Design in Science Education	3
BIO 6082	Research Proposal and Pilot Study	1
Electives: Group A		
Choose twelve (12) units from the following:		12
BIO 6060	Microbiology and Immunology	
BIO 6061	Ecology of Plants and Animals	
BIO 6062	Genetics and Molecular Biology	
BIO 6063	Cell Biology	
BIO 6064	Developmental Biology	
BIO 6065	Physiology of Plants and Animals	
BIO 6067	Marine Biology	
BIO 6068	Evolutionary Biology	
Electives: Group B		**12**
Choose one (1) of the following:		
Thesis		
BIO 6083 (A,B,C,D,E,S)	Thesis	
or BIO 6084	Comprehensive Examination in General Biology	
Choose six (6) additional units		
Comprehensive Exam		
BIO 6084	Comprehensive Examination in General Biology	
Choose 12 additional units		
Additional Units		
BIO 6001	Graduate Internship in Biology	
BIO 6011	Learning in Science	
BIO 6021	Readings in Biology	
BIO 6060	Microbiology and Immunology	
BIO 6061	Ecology of Plants and Animals	
BIO 6062	Genetics and Molecular Biology	
BIO 6063	Cell Biology	
BIO 6064	Developmental Biology	
BIO 6065	Physiology of Plants and Animals	
BIO 6067	Marine Biology	
BIO 6068	Evolutionary Biology	
BIO 6090	Special Studies in Biology	
BIO 6092	Perspectives on Science	
BIO 6123	Leadership in Science	
BIO 6163	Methods of Teaching Secondary Science	
Other approved Biology courses		
Up to six (6) units of approved education or business coursework		
Total Units		**34**

Note(s): Students will develop an academic plan within the first semester of enrollment to determine the appropriate electives based on bachelor's degree coursework, teaching experience, and professional goals.

Graduation Requirements

In order to earn and receive a Master of Science in General Biology degree, a student must satisfy all of the following:

1. A completed Application for Degree Candidacy (online or in the Office of Records, Point Loma campus);
2. Completion of the approved graduate program of 34 units, including the thesis or comprehensive exam;
3. A cumulative grade-point average of 3.000 or higher. A student may earn a maximum of two "C" grades in the program;
4. Payment in full of all tuition, fees, and other financial obligations owed to the university, including a degree processing fee; and
5. All requirements for graduate degrees must be completed within an eight-year period from the time of initial enrollment in the program.