

## MS in General Biology Curriculum Map

Two aspects of the program require that the curriculum map be approached in a unique way. First, in an effort to maximize the flexibility of the program, it was not designed on a cohort model, so new students may join at any time. Second, the elective biology lab courses are offered on a rotating basis every 2-3 years. All students are required to taking at least 4 of these lab courses. Due to these two factors, students do not take courses in a particular sequence, with the exception of BIO 6043 (taken first) and BIO 6082 (taken second).

For this reason, students have multiple chances to gain experience with and to practice each of the PLO's, but individual courses can't be identified as introducing, developing or mastering particular PLO's because students in the course are at different points in the program and will exhibit varying levels of expertise.

Courses	Program Learning Outcomes			
	1: Discuss major concepts and theories in biology.	2: Carry out and communicate various experimental methods and types of data analysis.	3: Demonstrate knowledge and skills in critical thinking, such as analysis and synthesis, as applied to primary literature in the field of biology.	4: Distinguish between science and faith and discuss the potential compatibility of the two domains.
Required course: BIO 6011 Learning in Science OR BIO 6123 Leadership in Science			I, D	
Required course: BIO 6043 Research Design		I	I	
Required course: BIO 6082 Pilot Study		D	D	
Required course: BIO 6033 History/Philosophy of Science				I, D, M, A*
Elective biology lecture/discussion/lab courses (must take 4, additional courses may be taken): BIO 6060, 6061, 6062, 6063, 6064, 6065, 6067, 6068 (These courses have similar formats and expectations, but within the context of different subtopics in the field of biology.)	I, D	I, D	I, D	I, D

Required of MS: Non-thesis option students only: BIO 6084 Comprehensive Exam	M,A*	M,A*	M,A*	
Required of MS Thesis-option students only: BIO 6083A (Thesis Proposal)			D	
Required of MS Thesis-option students only: BIO 6083B (IRB Proposal)				
Required of MS Thesis-option students only: BIO 6083C (Collect data)		D		
Required of MS Thesis-option students only: BIO 6083D (Analyze data/write)		D		
Required of MS Thesis-option students only: BIO 6083E (Write conclusions)		D	D	
Required of MS Thesis-option students only: BIO 6083F (Submit written thesis, Defend thesis)	M,A*	M,A*	M,A*	

\*Course syllabus must include the PLO as well as description of how the PLO will be assessed.

2022