

# MS BIOLOGICAL SCIENCES

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## Program Learning Objectives

1. Demonstrate a thorough understanding and competency in a subdiscipline of specialization within the biological sciences.
2. Communicate scientific ideas effectively in both oral and written formats.
3. Demonstrate an ability to think critically and evaluate, design, conduct, and quantitatively analyze or assess research in a biological discipline.
4. Demonstrate the skills and knowledge needed for employment or advanced graduate or professional study in discipline related areas.

### Required Courses

Select from the following:	8	
BIO 501	Molecular & Cellular Biology	
BIO 502	Biology of Organisms	
BIO 503	Population Biology	
BIO 560	Graduate Professional Seminar	2
BIO 561	Proposal Writing for Biological Research	3
BIO 590	Seminar in Biology	3
BIO 591	Biology Colloquium	2
BIO 599	Thesis	9
Select from the following:	4	
STAT 419	Applied Multivariate Statistics	
STAT 513	Applied Experimental Design and Regression Models	
STAT 523	Design and Analysis of Experiments I	
STAT 524	Applied Regression Analysis	
<b>Electives</b>		
Additional units at the 400 or 500 level. <sup>1</sup>	14	
<b>Total units</b>	<b>45</b>	

<sup>1</sup> Electives must include 5 units taken within the Biological Sciences Department at Cal Poly in order to meet the program requirement of 32 units.

All 45 units must be acceptable for graduate credit and in accordance with Graduate Guidelines of the Biological Sciences Department. Coursework must include 32 units taken within the Biological Sciences Department at Cal Poly. For further information, students should communicate with the Chair of the Biological Sciences Department or with the Director of the Graduate and Research Committee.