

2011-13 Cal Poly Catalog

Biological Sciences Department**BIOLOGY MINOR**

The purpose of the minor is to help students from other disciplines acquire increased factual and conceptual knowledge in biology, an increased understanding of scientific methods and techniques used to study biology, and an increased ability to analyze biological topics in the news or in various jobs. Biological issues are important throughout modern life and particularly relevant in many careers, including those in health-related businesses, agriculture, several engineering disciplines, city planning, teaching K-12 students, journalism, political science, psychology, and statistics. Students in more closely related majors such as biochemistry or kinesiology may also be interested in strengthening their biology background. In addition, an enhanced biology background helps students become better educated citizens regarding a variety of controversial issues (e.g., genetically-modified organisms in agriculture, human cloning, genetic discrimination, the pressures of population growth).

Required Courses. Units

Choose one of the following three tracks 12-14

*Track 1 (~~13-14~~) (12-14)*BIO 160 Diversity and the History of Life (4) *or*
MCRO 221 Microbio. (4) (B2&B4) *or*

MCRO 224 Gen. Microbio. I (5) (B2&B4)

BIO 161 Introduction to Cell and Molecular
Biology (4) (B2&B4)

BIO 162 Intro to Organismal Form/Function (4/5)

*Track 2 (12-13)*BIO 161 Introduction to Cell and Molecular
Biology (4) (B2&B4)

BIO 162 Intro to Organismal Form/Function (4/5)

BIO 263 Intro Ecology and Evolution (4)

Track 3 (12-13)

BIO 111 General Biology (4) (B2&B4)

And two of the following three options

¹ a) BIO 114 Plant Diversity and Ecology (4)
(B2&B4) *or*

BOT 121 General Botany (4) (B2&B4)

¹ b) BIO 113 Animal Diversity and Ecology (4)
(B2&B4) *or*BIO 115 Animal/Human Structure and
Function (4) (B2&B4)c) MCRO 221 Microbiology (4) (B2&B4) *or*
MCRO 224 General Microbio I (5) (B2&B4)*(9/24/12)*

The three tracks are intended to meet prerequisites in different areas of the curriculum. The choice of which introductory courses to take should be made in consultation with one of the Biology Minor Coordinators to ensure that students have appropriate prerequisites for upper division electives.

Approved Electives 15-16

Select at least four courses at the 300-400 level in BIO, BOT, MCRO, **MSCI** or ZOO, with the exception of BIO 400, BIO 450, BIO 485, **and** BIO 495 **and** **MSCI 401**. Suggested combinations of courses in particular areas of biology are available in the department. Specific combinations of courses may not be allowed if the courses overlap too much in content. *(4/22/16)*

*Students must obtain **prior approval** from one of the Biology Minor Coordinators.*

28-30

¹ For Liberal Studies majors, BIO 211 may be substituted for BIO 114, BOT 121, BIO 113 or BIO 115.