NOTE: This document is intended as a compact <u>display</u> of courses and other curricular requirements. The Degree Progress Report must be used to <u>track</u> students' progress in all degree requirements, throughout their Cal Poly career.

* = Required in Major/Support; also satisfies GE. Note: No Major or Support courses may be taken Credit/No Credit.

MAJOR COURSES (69)	Units
BIO 160 Diversity & History of Life	4
BIO 161 Cellular & Molecular Biology (B2&B4)*	4
BIO 263 Ecology & Evolution	4
BIO 351 Principles of Genetics	5
BIO 426 Immunology	4
BIO 452 Cellular Biology	4
MCRO 224 General Microbiology I	5
MCRO 225 General Microbiology II	5
MCRO 402 General Virology	4
MCRO 423 Medical Microbiology	5
MCRO 424 Microbial Physiology	5
BIO 461 or BIO 462 Senior Project	2
¹ Approved electives (see reverse)	18
At least 10 units must be upper-division (300-400 level).	

²SUPPORT COURSES (47)

CHEM 127 General Chemistry I (B3)*	4
CHEM 128 General Chemistry II	4
CHEM 129 General Chemistry III	4
CHEM 316 Introduction to Organic Chemistry I	5
CHEM 317 Introduction to Organic Chemistry II	5
³ CHEM 371 Biochemical Principles	5
MATH 161 Calculus for Life Sciences I (B1)*	4
PHYS 121 College Physics I	4
PHYS 122 College Physics II	4
PHYS 123 College Physics III	4
STAT 218 Application Statistics-Life Science (B1)*	4

OTHER DEGREE REQUIREMENTS:

• Cal Poly, Higher Ed, and Major GPA must all be at least 2.00

All students must complete:

- United States Cultural Pluralism Requirement
- Graduation Writing Requirement
- 60 units Upper Division (any 300-400 level classes)
- Upper Division units in the Major: 27
- Residency Requirements: See Degree Progress Report for details

GENERAL EDUCATION (GE)		56
72 units required, 16 of which are listed in Major/Support.		
→Minimum of 12 units required at the 300 level.		
Area A Communication		12
A1 ENGL 133/134	4	
A2 COMS 101/102	4	
A3 Reason, Argu, & Writ	4	
Area B Science & Mathematics (no add'l units req'd)		
*16 units are listed in Major/Support		
Area C Arts and Humanities		20
C1 Literature	4	
C2 Philosophy: PHIL 230/231	4	
C3 Fine/Performing Arts	4	
C4 Upper-division elective	4	
C1-C4 elective	4	
Area D/E Society and the Individual		20
D1 Amer. Experience (40404)	4	
D2 Political Economy	4	
D3 Comparative Social Institutions	4	
D4 Self Development (CSU Area E)	4	
D5 Upper-division elective	4	
Area F Technology (upper div)		4
Addu CE Unite (if moded)		_
Add'l GE Units (if needed)		-
		4

¹ Consultation with advisor is recommended prior to selecting approved electives; bear in mind your selections may impact pursuit of post-baccalaureate studies and/or goals.

FREE ELECTIVES

³ CHEM 313 may be substituted, with advisor approval, for students not planning to pursue graduate school or a health professions career.

Students planning to attend graduate or professional schools are strongly advised to meet with their advisors to ensure that they meet necessary prerequisites for entry into these programs. Additional courses in math and chemistry may be necessary.

APPROVED ELECTIVES

A maximum of 4 units from any combination of BIO 400, 450, 462 and 463. At least 10 units must be upper division (300-400 level).

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Biotechnology
  ASCI 403;
 BIO/CHEM 375, 441, 476;
 BOT/HCS 450;
 BRAE 448;
 CHEM 331, 372, 373, 474, 478;
 MCRO 433;
 SCM 201
Food Microbiology
 DSCI 402, 434, 444;
 FSN 230, 275, 335, 341, 364, 368, 374, 474;
 MCRO 421
Medical and Public Health Microbiology
  ASCI 203, 312, 321, 438, 440;
 BIO 162, 432, 433;
 CHEM 331, 349, 377, 477;
 KINE 301;
 MCRO 320, 342;
 ZOO 425, 428
Microbial Ecology and Evolution
 BIO 325, 414, 443;
 CHEM 341;
 ENVE 434;
 MCRO 436;
 SS 422
Other Electives for Microbiology Majors
  BIO 361, 400, 434, 450, 462, 463;
 BOT 323;
 CHEM 318, 319, 419;
 MATH 151, 162;
 PPSC 311, 441;
 SCM 451;
 STAT 313, 419, 421;
 ZOO 335, 336
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