NOTE: This document can be used as a compact display of courses and other curricular requirements at the time of publication of the 2015-2017 catalog. The Degree Progress Report must be used to track students' progress in all degree requirements, throughout their Cal Poly career.

Note: No major, support or concentration courses may be selected as credit/no credit.

MAJOR COURSES (78)	Units
BIO 160 Diversity and History of Life	4
BIO 161 Cell & Molecular Bio (B2&B4) ¹	4
BIO 162 Organismal Form & Function	4
BIO 263 Intro Ecology & Evolution	4
BIO 351 Principles of Genetics	5
BIO 414 Evolution	4
BIO 461 or BIO 462	2
Ecology Topic ²	4
BIO 327, 401; BOT 326; MSCI 328	
Physiology Topic ³	4
BIO 361, 434, 435	
Conc. or General Curriculum in Biology 4,5	43
(see reverse)	

SUPPORT COURSES (41)

CHEM 127 General Chem for Ag & Life Sci I (B3&B4) 1	4
CHEM 128 General Chem for Ag & Life Sci II	4
CHEM 129 General Chem for Ag & Life Sci III	4
CHEM 216 Organic Chemistry I ⁶	5
or CHEM 312 Survey of Organic Chemistry	
MATH 161 Calculus for Life Sciences I (B1) ¹	4
MATH 162 Calculus for Life Sciences II (B1) 1	4
PHYS 121 College Physics I	4
PHYS 122 College Physics II	4
PHYS 123 College Physics III	4
STAT 218 Applied Statistics for the Life Sciences	4

¹ Required in Major/Support; also satisfies GE.

GENER	RAL EDUCATION (GE)	56
72 u	nits required, 16 of which are specified in Major and/or Sup	port.
Min	nimum of 12 units required at the 300 level.	
Area A	Communication	12
A1	Expository Writing4	
A2	Oral Communication4	
A3	Reasoning, Argumentation & Writing4	
Area B	Science and Mathematics	0
B1	Math/Statistics (8 units in Support) 1	
B2	Life Science (4 units in Major) ¹	
В3	Physical Science (4 units in Support) 1	
B4	One lab with B2 or B3 (in Major) ¹	
Area C	Arts and Humanities	20
C1	Literature4	
C2	Philosophy4	,
C3	Fine/Performing Arts4	,
C4	Upper-division elective4	
C1-	C5 Elective	
Area D/	E Society and the Individual	20
D1	The American Experience (40404)4	
D2	Political Economy4	
D3	Comparative Social Institutions4	
D4	Self Development (CSU Area E)4	
D5	Upper-division elective4	
Area F	Technology (upper div)	4

OTHER DEGREE REQUIREMENTS:

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

FREE ELECTIVES5

• For students admitted Fall 2016 and after, a grade of C- or higher is required in GE A1, A2, A3, and one GE B1 course

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

 $^{^2}$ Wildlife and Biodiversity students should take either BIO 327 or BOT 326 to fulfill this requirement.

³ Anat & Physiology students should take BIO 361 to fulfill this requirement.

⁴ Concentrations or general curriculum courses may not double-count in the major core.

 $^{^{5}}$ Max of 6 units may be applied toward the major from the following: BIO 400, 450, 462, 463.

⁶ Molecular & Cell Bio students should take CHEM 216 to fulfill this requirement.

GENERAL CURRICULUM (default if no concentration declared)

General Biodiversity (excess units will go to Approved Elect)	4
BOT 313, 433; MCRO 224, 402; MSCI 324; ZOO 321, 322,	
323, 329, 335, 336, 341, 425	

General Upper Division Electives (excess to Approved Elect) Select any 300-400 level BIO/BOT/MCRO/MSCI/ZOO course, except BIO 330, 400, 450, 462, 463, 470, 471, 472; SCM 302/ENGR 322

General Approved Electives¹

Any BIO/BOT/MCRO/MSCI/ZOO course; **6 unit max** from BIO 330, 400, 450, 462, 463, 470, 471, 472; SCM 302

Courses can also be selected from any other concentration in BIO, but **no more than 15 units** can be selected from: AduG/EDES/ENGR/ISLA/SCM/UNIV 350; ASCI 329, 351, 403, 405, 406, 438, 503; CHEM 217, 218, 220, 223, 313/371, 331, 341, 372, 377, 474, 478, 528; FSN 310, 429; GEOG/ERSC 250; KINE 406, 445, 446; NR/LA 218; NR 141, 142, 311, 404, 416, 418, 425; PHIL 339/PHIL 341/SCM 451; PSC 201; PSY 340; SCM 302/ENGR 322; SS 121, 321, 322, 422; STAT 313, 324, 330, 416, 419, 421.

Max of 10 units of lower-division coursework.

ANATOMY AND PHYSIOLOGY CONCENTRATION

BIO 452 Cell Biology	4
CHEM 371 or CHEM 313	5
A&P Biodiversity Elective (any excess unit goes to Add'l Elect)	4
AEPS/BOT 323, BIO 415; BOT 313, 433; MCRO 224;	
MSCI 324, 437; ZOO 321, 322, 323, 329, 335, 336, 341	
A&P Core Electives¹ (excess will go to Add'l Elect)	16
BIO 407 or ASCI 405; BIO 406, 408, 409, 410, 426	
A&P Approved Elective (excess will go to Add'l Elect)	3
BIO 407 or ASCI 405; BIO 405, 406, 408, 409, 410, 426,	
434, 435; BIO/CHEM 475; MCRO 225, 320, 342, 402, 423,	
424; ZOO 425, 428	
A&P Additional Electives ¹	11
ASCI 351, 406, 438; BIO 407 or ASCI 405; BIO 400, 405,	
406, 408, 409, 410, 426, 434, 435, 462 ² , 463; BIO/CHEM	
475; CHEM 217, 218, 220, 223, 372; FSN 310, 429; KINE	
406, 445, 446; MCRO 225, 320, 342, 402, 423, 424; PHIL	
339 or PHIL 341 or SCM 451; PSY 340; SCM 302/ENGR	
322; ZOO 425, 428.	
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ECOLOGY CONCENTRATION Ecology Levels

BIO 442, 444, 445, 446	
Systems and Applications	12
BIO 327, 401, 415; BOT 326; MSCI 328	
Ecology Biodiversity (any excess unit goes to Approved Elect)	4
BOT 313, 433; MCRO 224; MSCI 437; ZOO 321, 322, 323,	
329, 335, 336, 341, 425	
Ecology Approved Electives ¹ (max of 8 units can be taken	15
outside BIO/BOT/MCRO/MSCI/ZOO)	
AG/EDES/ENGR/ISLA/SCM/UNIV 350; BIO 327, 330,	
361, 400, 401, 415, 419; NR/SS 421, 427, 434, 435, 442,	
444, 445, 446, 462, 463, 472; BIO/CHEM 441, 475; BOT	
311, 313, 326, 433; GEOG/ERSC 250; MCRO 224, 424,	
436; MSCI 328, 437, 439, 440; NR/LA 218; NR 311, 418;	
SCM 302/ENGR 322; SS 121, 321, 322, 422; STAT 313,	
419; ZOO 321, 322, 323, 329, 335, 336, 341, 425	

WILDLIFE AND BIODIVERSITY CONSERVATION CONCENTRATION

BOT 313 Taxonomy of Vascular Plants	4
BOT 433 Field Botany	4
BIO 401 Conservation Biology	4
NR/LA 218 Applications in GIS	3
Wildlife Zoology Electives	12
ZOO 321, 322, 323, 335, 336, 341	
Wildlife Ecology Electives	8
BIO 427, 444, 445	
W & B Approved Electives ¹	8
ASCI 329; BIO 327, 330, 400, 415, 419, 427, 434, 442, 446,	
462, 463; BOT 326; MSCI 328, 437, 439; NR 141, 142, 404,	
416, 418, 425; SCM 302/ENGR 322; STAT 313, 324, 330,	
416, 419, 421; ZOO 329, 335, 425	
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MARINE BIOLOGY AND CONSERVATION CONCENTRATION

PSC 201 Physical Oceanography	4
TAT 313 Applied Exp. Design & Regression Models	4
Marine Biodiversity	8
MSCI 324, 437; ZOO 322, 336	
Marine Resources and Conservation	8
BIO 401; MSCI 428, 438, 439	
Marine Approved Electives ¹ (excess units go to Addtional Elec	t) 11
BIO 327, 400, 401, 405, 419, 434, 435, 442, 444, 445, 446,	
452, 462, 463; BIO/ CHEM 475; MCRO 436; MSCI 324,	
438, 439, 440; ZOO 321, 323, 425	
Marine Additional Electives	8
BIO 327, 400, 401, 405, 419, 434, 435, 442, 444, 445, 446,	,
452, 462, 463; BIO/ CHEM 475; CHEM 217, 313/371, 341	,
474; MCRO 436; MSCI 324, 438, 439, 440; SCM	
302/ENGR 322; ZOO 321, 323, 425	
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MOLECULAR AND CELLULAR BIOLOGY CONCENTRATION

BIO 452 Cell Biology	4
BIO/CHEM 475 Molecular Biology Laboratory	3
CHEM 217 Organic Chemistry II	3
CHEM 220 Organic Chem Lab II	1
CHEM 371 Biochemical Principles	5
CHEM 372 Metabolism	4
MCRO 224 General Microbiology I	5
Molecular/Cell Approved Electives (excess goes to Add'l Elect) ASCI 403; BIO 405, 426, BIO/CHEM 441, 476; CHEM 474; MCRO 402, 433; ZOO 428	9
Molecular/Cell Additional Electives ¹ Any upper-division BIO/BOT/MCRO/MSCI/ZOO course or any of the following: ASCI 403, 406, 503; BIO/CHEM 202; CHEM 218 & 223, 331, 377, 474, 478, 528; PHIL 339 or PHIL 341 or SCM 451; SCM 302/ENGR 322; STAT 313.	9
No more than 6 units from BIO 400, 462, 463, 485, and 495.	
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¹ Consultation with advisor is recommended prior to selecting approved electives; bear in mind your selections may impact pursuit of post-bacc studies and/or goals.

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 $^{^2}$ BIO 462 counts as an approved elective only if the student also completes BIO 461.