



**California State Polytechnic University, Pomona
Degree Curriculum Sheet**

Plan (Major) **Biology**

Catalog Year **2014 - 2015**

Name _____

Subplan/Option **Zoology**

Minimum Units Required **180**

Student ID _____

Required Core Courses		
Course		Units
Foundations of Biology: Reproduction and Development & Lab	BIO 122/122L	3/2
Foundations of Biology: Biodiversity & Lab	BIO 123/123L	3/2
Biometrics	BIO 211/211L	3/1
Genetics	BIO 303	4
Scientific Communication	BIO 490	1
Total Units		19

Required Subplan/Option Core Courses		
Course		Units
Cell and Molecular Biology	BIO 310	4
Principles of Ecology & Lab	BIO 325/325L	3/1
Principles of Evolution	BIO 413	4
Intro to Invertebrate Zoology & Lab	ZOO 237/237L	3/2
Intro to Vertebrate Zoology & Lab	ZOO 238/238L	3/2
Animal Physiology & Lab	ZOO 428/428L	4/1
Total Units		27

Elective Subplan/Option Core Courses		
Course		Units
22 units of upper division courses must be completed from approved courses included in one of two clusters (Physiology and Neuroscience/Biodiversity and Systematics). Students do not need to declare a cluster. Courses may be chosen from either of the two clusters indicated below; however, a minimum of 3 units must be completed from each cluster. See below for approved courses.		
Physiology and Neuroscience		
Developmental Biology & Lab	BIO 320/320L	(4/1)
Biophysics	BIO 410	(4)
Neuroscience	BIO 424	(4)
Neuroanatomy & Lab	BIO 426/426L	(4/1)
Cellular Physiology & Lab	BIO 428/428L	(4/1)
Radiation Biology & Lab	BIO 431/431L	(3/1)
Concepts of Molecular Biology	BIO 450	(4)
Molecular Biology Techniques	BIO 451	(3)
Molecular Biology of Recombinant DNA & Lab	BIO 451L	(2/2)
Stem Cell Biology & Lab	BIO 465/465L	(3/1)
Special Topics for Upper Division Students	BIO 499	(1-4)
Histology & Lab	ZOO 422/422L	(2/3)
Evolutionary Ecomorphology & Lab	ZOO 439/439L	(2/2)
Continue to next column		

Elective Subplan/Option Core Courses		
Course		Units
Biodiversity and Systematics		
Marine Biology	BIO 330	(3)
Population Ecology	BIO 418	(3)
Marine Ecology & Lab	BIO 442/442L	(3/2)
Biology of Species Invasions	BIO 464	(3)
California Flora & Lab	BOT 343/343L	(1/2)
Entomology & Lab	ZOO 426/426L	(3/1)
Herpetology & Lab	ZOO 429/429L	(3/2)
Ornithology & Lab	ZOO 435/435L	(3/1)
Total Units		22

Required Support Courses		
Course		Units
The following required support courses should be taken to satisfy the indicated GE Requirements to achieve the minimum units to degree listed at the top of this sheet.		
Foundations of Biology & Lab (B2, B3)	BIO 121/121L	3/2
Environment and Society (B5)	BIO 304	4
or Biodiversity Conservation (B5)	BIO 340	(4)
General Chemistry & Lab (B1, B3)	CHM 121/121L	3/1
General Chemistry & Lab	CHM 122/122L	3/1
General Chemistry & Lab	CHM 123/123L	3/1
Organic Chemistry & Lab	CHM 201/250L	3/1
Elements of Biochemistry & Lab	CHM 321/321L	3/1
Freshman English II (A3)	ENG 105	4
or Critical Thinking (A3)	PHL 202	(4)
Stretch Composition III (A2)	ENG 107	4
or Advanced Stretch Composition II (A2)	ENG 109	(4)
or First-Year Composition (A2)	ENG 110	(4)
Calculus for the Life Sciences (B4)	MAT 120	4
College Physics & Lab	PHY 121/121L	3/1
College Physics & Lab	PHY 122/122L	3/1
College Physics & Lab	PHY 123/123L	3/1
Statistics with Applications (B4)	STA 120	4
Health, Nutrition and the Integrated Being (E)	FN 203	4
or General Psychology (E)	PSY 201	(4)
or Mind, Brain & Behavior: Integrated View (E)	PSY 210	(4)
or Sci and Math: Freshmen Experience I (E)	SCI 101/101A	(1/1)
and Sci and Math: Freshmen Experience II (E)	SCI 102/102A	(1/1)
Total Units		61

Elective Support Courses		
Course		Units
Approved electives include any 200, 300, or 400-level courses in the Biological Sciences Department not specifically designed for non-majors. Only 2 units of BIO 200 or BIO 400 allowed. Only 4 units of BIO 441 or BIO 461 allowed. Only 2 units of BIO 462 allowed. Approved electives include any advanced chemistry or math course. See advisor for approval of courses offered by other departments.		
Total Units		11

General Education Requirements	
Area	Units
Area A Communication & Critical Thinking	12
1. Oral Communication	
2. Written Communication	
3. Critical Thinking	
Area B Mathematics & Natural Sciences	16
<i>Select at least one lab course from subarea 1 or 2.</i>	
1. Physical Science	
2. Biological Science	
3. Laboratory Activity	
4. Math/Quantitative Reasoning	
5. Science & Technology Synthesis	
Area C Humanities	16
1. Visual and Performing Arts	
2. Philosophy and Civilization	
3. Literature and Foreign Language	
4. Humanities Synthesis	
Area D Social Sciences	20
1. U.S. History, Constitution, American Ideals	
a. United States History	
b. Introduction to American Government	
2. History, Economics and Political Science	
3. Sociology, Anthropology, Ethnic & Gender Studies	
4. Social Science Synthesis	
Area E Lifelong Understanding & Self Development	4
Total Units	68

American Institutions	
Courses that satisfy this requirement may also satisfy GE Area D1	8

American Cultural Perspectives Requirement	
Refer to catalog for list of courses that satisfy this requirement. Course may also satisfy major, minor, GE, or unrestricted elective requirements.	4

All persons who receive undergraduate degrees from Cal Poly Pomona must pass the Graduation Writing Test (GWT). The test must be taken by the quarter following completion of 120 units for undergraduates.