California State Polytechnic University, Pomona
Degree Curriculum Sheet

Plan (Major) **Biology** Catalog Year **2010-2011** Name _____ Evaluator _____
Subplan/Option **Zoology** Minimum Units Required **180** Student ID _____ GWT Satisfied ____Yes ____No

Required Core Courses

Course		Units
Foundations of Biology	BIO 122/122L	3/2
Foundations of Biology	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 Courses

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

Elective Subplan/Option Courses

Course	Units
Upper division courses are selected from approved courses in two clusters (see back).	22
Total Units	**22**

Required Support Courses

Course		Units
Foundations of Biology (B2, B3)	BIO 121/121L	3/2
Environment and Society (B5)	BIO 304	4
or Biodiversity Conservation (B5)	BIO 340	(4)
General Chemistry(B1, B3)	CHM 121/121L	3/1
General Chemistry	CHM 122/122L	3/1
General Chemistry	CHM 123/123L	3/1
Organic Chemistry	CHM 201/250L	3/1
Elements of Biochemistry	CHM 321/321L	3/1
College Physics	PHY 121/121L	3/1
College Physics	PHY 122/122L	3/1
College Physics	PHY 123/123L	3/1
Freshman English I (A2)	ENG 104	4
Freshman English II (A3)	ENG 105	4
Calculus for Life Sciences (B4)	MAT 120	4
Statistics with Applications (B4)	STA 120	4
Health, Nutrition & 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 Mathematics: Freshmen Exp. I (E)	SCI 101/101A	(1/1)
-and-		
Sci. and Mathematics: Freshmen Exp. 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. Approved electives include any advanced chemistry or math course. See advisor for approval of courses offered by other departmetns.	11
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**
Select at least one lab course from sub-area 1 or 2.	
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	
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 G.E. Area D1	8

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

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.

Course		GE Area
Freshman English I	ENG 104	A2
Freshman English II	ENG 105	A3
General Chemistry/Lab	CHM 121/121L	B1, B3
Foundations of Biology/Lab	BIO 121/121L	B2, B3
Calculus for Life Sciences	MAT 120	B4
or Statistics with Applications	STA 120	(B4)
Environment and Society	BIO 304	B5
or Biodiversity Conservation	BIO 340	(B5)
Health, Nutrition & Integrated Being	FN 203	E
or General Psychology	PSY 201	(E)
or Mind, Brain & Behavior: Integrated View	PSY 210	(E)
or Sci. and Mathematics: Freshmen Exp. 1 and Exp. 2	SCI 101/101A & SCI 102/102A	(E)

The remaining GE requirements may be satisfied by any course approved for that area.

No more than 105 community college quarter units or 36 extension credit quarter units may be applied toward a Bachelor's degree.
A minimum 2.0 cumulative GPA is required in core (including option) courses, Cal Poly Pomona courses, and overall work completed in order to receive a degree in this major.

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		
Course		**Units**
Developmental Biology	BIO 320/320L	(3/2)
Biophysics	BIO 410	(4)
Neuroscience	BIO 424	(4)
Neuroanatomy	BIO 426/426L	(4/1)
Cellular Physiology	BIO 428/428L	(3/2)
Radiation Biology	BIO 431/431L	(3/1)
Concepts of Molecular Biology	BIO 450	(4)
Molecular Biology Techniques	BIO 451/451L	(3/2)
Molecular Biology of Recombinant DNA	BIO 455/455L	(2/2)
Neuromuscular Physiology	BIO 499	(4)
Histology	ZOO 422/422L	(2/3)
Evolutionary Ecomorphology	ZOO 439/439L	(2/2)

Biodiversity and Systematics		
Course		**Units**
Marine Biology	BIO 330	(3)
Population Ecology	BIO 418/418L	(2/1)
Marine Ecology	BIO 442/442L	(3/2)
California Flora	BOT 343/343L	(1/2)
Introduction to Entomology	ZOO 426/426L	(3/1)
Herpetology	ZOO 429/429L	(3/2)
Ornithology	ZOO 435/435L	(2/1)