

# Natural Sciences - Biology Option, B.A.

## DEPARTMENT

### Science and Mathematics Interdisciplinary Courses and Programs

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BA in Natural Sciences - Biology Option, B.A.  
BA in Natural Sciences - Earth Science Option, B.A.  
BA in Natural Sciences - Physics Option, B.A.  
BA in Natural Sciences - Chemistry Option, B.A.  
Courses Offered

The Bachelor of Arts in Natural Sciences serves as a waiver program for the Single Subject Teaching Credential in Science. With the Science Credential, students are able to teach any introductory science class, i.e. earth, general, life, or physical science along with the courses in their chosen emphasis. Please contact Mr. Jaime Arvizu, College of Science and Mathematics counselor, for advising and more information, at 278-5173.

## REQUIREMENTS

### Bachelor of Arts Degree Requirements

#### Natural Sciences Major

#### Teaching Credential - Biology Option

The B.A. in Natural Sciences serves as a waiver program for the Single Subject Teaching Credential in Science. This degree program is designed for students who wish to become high school science teachers. Students may also complete the credential requirements while obtaining a B.S. in biology. Please contact Mr. Jaime Arvizu, College of Science and Mathematics counselor, for advising and more information at 559.278.5173. The B.A. in Natural Sciences with the Biology Option is as follows:

#### 1. Major Requirements (75-77 units)

##### Core requirements (36 units)

Biology (12 units)  
BIOL 1A, 1B, 1BL, 101

Chemistry (10 units)  
CHEM 1A, 1AL, 1B, 1BL

Geology (7 units)  
EES 1 and 168

Natural Science (3 units)  
NSCI 106

Physical Science (4 units)  
PSCI 21

##### Biology Option (39-41 units)

CHEM 8 or 128A (3 units)  
PHYS 2A, 2B (see note 1) (8 units)  
MATH 75 (4 units)  
MATH 101 or PSYCH 42 (4 units)  
BIOL 102, 103, 104, 105 (10 units)  
BIOL 120 (4 units)

Select one course: BIOL 122, 124, 125, 130, 131, 132, 133, 134, 135, 136, 171, 172 (3-4 units)

Select one course: BIOL 160, 161, 162 and 162L, 163 (3-4 units)

**2. General Education requirements (49 units)** (See note 2)

**3. Other requirements (6 units)**

Upper-division writing and Multicultural and International (MI)

**4. Sufficient elective units to meet required total units** (varies)

**5. Total (120 units)\***

\* G.E. and MI courses can be double-counted with major requirements. The writing requirement may be met by taking the upper-division writing exam. See advisor for details.

### **Advising Notes for all Options within the Natural Sciences Major**

1. Substitutions may be made with the permission of the appropriate department chair. PHYS 4A-B-C with labs 4AL, 4BL is recommended instead of PHYS 2A-B for those students well-prepared for physics.
2. This total assumes that students in this option will maximize 13 units required for the major that also may be applied to fulfill General Education requirements as follows: CHEM 1A/1AL (4 units), BIOL 1A (3 units), EES 168 (3 units) and, depending on emphasis and choice, MATH 75 (3 units). Consult your major advisor for details.

## **FACULTY**