Natural Sciences - Chemistry Option, B.A.

DEPARTMENT

Science and Mathematics Interdisciplinary Courses and Programs

David M. Andrews, Director
Science II Building, Room 360
559.278.5173
www.fresnostate.edu/csm

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

David M. Andrews,
Program Coordinator
559.278.5174

Chemistry Option

The B.A. in Natural Sciences serves as a waiver program for the Single Subject Teaching Credential in Science. Please contact Mr. Jaime Arvizu, College of Science and Mathematics counselor, for advising and more information at 278-5173.

1. Major Requirements (71-72 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

Chemistry Option (35-36 units)
PHYS 2A, 2B (see note 1) (8 units)
MATH 75 (4 units)
MATH 76 (4 units)
CHEM 128A (3 units)
CHEM 102 or 105, 108, 128B, 129A, 150 or 155A* (16-17 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.

   * Offered fall semester only.

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.

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