ENVIRONMENTAL STUDIES

With a Concentration in: Conservation Ecology

Eberly College of Science & Technology

120 credits

Degree Benefits

The Environmental Studies Program prepares students for a career in environmental science, ecology related areas and graduate work. The emphasis of the program is to provide graduates with a broad core of courses in biology, supplemented with courses in chemistry, physics and mathematics. Each student has the opportunity to select from a wide range of science electives in order to fulfill needs for future work or to prepare for graduate school. Almost all courses include a laboratory portion where students study the practical application of scientific theories and learn about many scientific instruments and various organisms. The degree concentration in conservation ecology offers students the flexibility to focus on a specific content area in ecology leading to a variety of opportunities.

Careers & Job Opportunities

It is anticipated that job growth will be 25% through the year 2016 for environmental professionals and will be much faster than the average for all careers. According to the Ecological Society of America there is a growing need to understand and manage the natural world and our impact on it. This need has resulted in a growth in job opportunities for individuals with ecological backgrounds to conduct research, determine environmental impacts, develop management plans to minimize ecological impacts and restore ecosystems, educate the public, and to further sustainable community efforts. Positions are available as wildlife specialists, plant ecologists, field/research technicians, park naturalists, ecologists and environmental consultants, planners, and education coordinators.

Program Objectives

The objectives of the Conservation Ecology program are to:

- Provide knowledge of biological processes and structures occurring in the ecological sciences.
- Provide laboratory and field experiences which promote scientific inquiry and experimental methods in the environmental sciences and ecology.
- Create opportunities for student research projects to enhance their understanding of ecological processes.
- Assist students with course selection that will enhance their chosen career path.
- Provide the necessary foundation for continued professional growth in graduate school.
- Provide skills required for entry-level positions with industry, non-profit, and government organizations.

Curriculum

The conservation ecology curriculum at CalU provides a broad background in the life and natural sciences and promotes hands-on experiences to further develop one’s skills. The curriculum provides for an understanding of the physical sciences, chemistry, and physics, and a working knowledge of mathematics, and statistics to provide students with the knowledge to design, analyze and interpret ecological data. The curriculum is designed to allow students essential field opportunities through internships and undergraduate research opportunities in conservation ecology. This core content is enhanced by the breadth of the universities general education requirements.

Note

The policies and procedures described here may be reviewed and revised at any time. This fact sheet should be used as an information guide. For details on current programs, policies and procedures, contact the chair of the department, or the environmental studies program director.

BACHELOR OF SCIENCE IN ENVIRONMENTAL STUDIES-120 CREDITS ENVIRONMENTAL CONSERVATION CONCENTRATION

The following eight-semester schedule of courses provides a recommended framework for completing this program of study in four years. To ensure that they are making satisfactory academic progress, students should consult with their faculty advisor, ensure that they complete necessary prerequisites and required courses in sequence, and complete between 14 and 17 credits each semester.
## Freshman Year

**First Semester** ................................................. 15 credits
- ENG101 English Composition I. .................................. 3 crs.
- CHE 101 General Chemistry I. ................................. 4 crs.
- UNI 100 First Year Seminar .................................. 1 cr.
- BIO 120 General Zoology or
  BIO 125 General Botany .................................. 4 crs.
- General Education Courses ............................... 3 crs.

**Second Semester** ............................................. 14 credits
- BIO 125 General Botany or
  BIO 120 General Zoology .................................. 4 crs.
- CHE 102 General Chemistry II ................................ 4 crs.
- ENG 102 English Composition II or
  Equivalent .................................................. 3 crs.
- General Education Courses ............................... 3 crs.

## Sophomore Year

**Third Semester** .................................................. 16 credits
- BIO 215 Cell. & Molecular Biology or
  BIO 248 General Ecology .................................. 4 crs.
- MAT 273 Basic Calculus I or
  MAT 281 Calculus I ........................................ 3 crs.
- PHY 121 General Physics I .................................. 3 crs.
- General Education Courses ............................... 6 crs.

**Fourth Semester** .................................................. 14 credits
- BIO 215 Cell. & Molecular Biology or
  BIO 248 General Ecology .................................. 4 crs.
- MAT 215 Statistics ........................................... 3 crs.
- Conservation Ecology Specialization .................. 4 crs.
- General Education Courses ............................... 3 crs.

## Junior Year

**Fifth Semester** .................................................. 15 credits
- Conservation Ecology Specialization .................. 6 crs.
- General Education Courses ............................... 6 crs.

**Sixth Semester** .................................................. 15 credits
- Conservation Ecology Specialization .................. 6 crs.
- Related Requirement ....................................... 3 crs.
- General Education Courses ............................... 3 crs.

## Senior Year

**Seventh Semester** .............................................. 17 credits
- Conservation Ecology Specialization .................. 5 crs.
- ENS 495 Design & Analysis ................................... 3 crs.
- Unrestricted Free Electives ............................... 6 crs.
- General Education Courses ............................... 3 crs.

**Eighth Semester** .................................................. 14 credits
- Conservation Ecology Specialization .................. 8 crs.
- ENS 495 Design & Analysis ................................... 3 crs.
- Unrestricted Free Electives ............................... 3 crs.
- General Education Courses ............................... 3 crs.

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### About Us

Established in 1852 as an academy, California University of Pennsylvania is one of 14 universities that comprise the Pennsylvania State System of Higher Education. The main campus, located in California, PA, has 38 buildings on 92 acres on a bend in the Monongahela River. In addition to the main campus, there are a variety of sites and options for undergraduate and graduate education, including:

- **Cal U Southpointe Center**, a technologically advanced facility located in Canonsburg, Pa., offering graduate and undergraduate and continuing education programs of study. [www.calu.edu](http://www.calu.edu)
- **Cal U Global Online**, the virtual campus of the Pennsylvania State System of Higher Education, offering completely online degree programs of study for students worldwide. [ww.calu.edu](http://ww.calu.edu)

### Program Contact Information

**Contact the Department of Biological and Environmental Sciences**

By Phone: 724-938-4200.

**Department Website**

[http://www.calu.edu/academics/colleges/eberly/biology/index.htm](http://www.calu.edu/academics/colleges/eberly/biology/index.htm)

**Financial Aid**

For information on student loans and undergraduate scholarships, visit [www.calu.edu](http://www.calu.edu) or call 1-888-412-0479.

**Apply Online**

[www.calu.edu](http://www.calu.edu)

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California University of Pennsylvania is an academic community dedicated to the ideals of justice, fairness and equal opportunity for all. In compliance with federal and state laws, the University is committed to providing equal educational and employment opportunities for all persons without regard to race, color, sex, religion, national origin, age, disability, ancestry, sexual orientation or status as a disabled or Vietnam-era veteran. The University will not tolerate racial, ethnic or sexual discrimination. Sexual harassment is considered by law to be a form of sexual discrimination and is, therefore, unacceptable. Direct equal opportunity and affirmative action inquiries or complaints to the Special Assistant to the President for EEO/University Ombudsperson, Office of Social Equity, South Hall 112, 724-938-4014. Direct inquiries regarding services or accessibility to the ADA/504, Dr. Timothy Susick, Compliance Officer, Office of Student Development and Services, G 52 Carter Hall, 724-938-4056. Direct Title IX inquiries to the Senior Women's Administrator/Title IX Coordinator, Department of Athletics, Hamer Hall 249, 724-938-4351.

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**Application Questions**

- **Admissions Office**
  - California University of Pennsylvania
  - 250 University Avenue
  - California, PA 15419-1394
  - 724-938-4404
  - Toll free: 1-888-412-0479
  - Fax: 724-938-4564
  - inquiry@calu.edu

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**Policies and Procedures**: Note that the policies and procedures described above may be reviewed and revised at any time. This fact sheet should be used as an informational guide. For details on current policies and procedures, contact the Provost/Vice President of Academic Affairs at 724-938-4407.

**Rev 10/10**