Environmental Science

Environmental science is the application of scientific information in order to solve conflicts resulting from humans' use of our planet's resources. This requires an understanding of the sustainability of natural systems and resources, the interrelationships between these systems, as well as the human impact on the environment.

Environmental science is thus an inherently interdisciplinary field, using and combining information from such varied disciplines as:

- biology
- · chemistry
- · geology
- economics
- · political science

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- law
- · ethics

California Lutheran University's B.S. degree in environmental science is designed to provide the student with the tools to critically examine environmental issues from a variety of perspectives.

Beyond the required foundational science courses, the program provides a broad range of science and humanities courses to select from, allowing students to tailor the program to their interests. The curriculum emphasizes experiential learning, providing the student with opportunities to actively engage in research.

Many students who obtain the B.S. degree in environmental science are planning careers in environmental protection and management, risk assessment, environmental law or education. The program also prepares students to pursue graduate studies in various environmental fields.

Bachelor of Science in Environmental Science

45 credits minimum, 18 credits upper division.

| GEOL 152/152L | Introduction to Environmental Science and Introduction to Environmental Science Lab | 4 |
|--------------------------------|--|-----|
| or BIOL 325/325L | Environmental Ecology | |
| Select one of the following: | | 4-5 |
| BIOL 111/111L | Principles of Biology and Principles of Biology Lab | |
| BIOL 120/123L | Introduction to Ecology and Populations and Introduction to Biological Experimentation I | |
| Select one of the following: | | 4-5 |
| CHEM 111/111L | Chemistry and the Environment and Chemistry and the Environment Lab | |
| CHEM 151/151L | General Chemistry and General Chemistry Lab | |
| GEOL 111/111L | Physical Geology and Physical Geology Lab | 4 |
| MATH 231 | Biostatistics | 4 |
| ENVS 485 | Environmental Science Capstone | 2 |
| Select three of the following: | | 12 |
| BIOL 311/BIOL 311L | Evolution and | |
| BIOL 325/325L | Environmental Ecology and Environmental Ecology Lab (If not used earlier) | |
| BIOL 345/345L | Marine Biology and Marine Biology Lab | |
| BIOL 352/352L | Oceanography and Oceanography Lab | |
| BIOL 452/452L | California Plant Communities and California Plant Communities Lab | |

| CHEM 301/301L | Environmental Chemistry and Environmental Chemistry Lab | |
|------------------------------|---|-------|
| GEOL 331/331L | Invertebrate Paleontology and Invertebrate Paleontology Lab | |
| GEOL 332/332L | Stratigraphy and Sedimentation and Stratigraphy and Sedimentation Lab | |
| GEOL 395/395L | Water Resources and Laboratory and Field Studies in Water Resources | |
| GEOL 405/405L | Geophysics and Geophysics Lab | |
| Select two of the following: | | 8 |
| REL 352 | Environmental Ethics | |
| ECON 414 | Economics of the Environment | |
| ENGL 216 | Environmental Literature | |
| POLS 414 | Environmental Law and Policy | |
| Additional Science course 1 | | 4 |
| Total Hours | | 46-48 |

From Biology, Chemistry, Geology, Physics at the 200 level or above or two field experience courses (see adviser for list of approved choices).

Courses

ENVS 482. Selected Topics. (1-4).

ENVS 485. Environmental Science Capstone. (2).

This course introduces students to the professional skills and practices required in the environmental field. Includes introduction to GIS (Geographic Information Systems), literature searches, written and oral presentation of work. Prerequisite: senior standing.

ENVS 490. Independent Study. (1-4).

ENVS 492. Internship. (1-4).