

# ENVIRONMENTAL SCIENCE

Environmental Science integrates topics from biological sciences, physical sciences, geosciences, and public policy to understand the working of the earth's ecosystems and the impact of humans within those systems. Environmental Scientists apply scientific knowledge to understand complex environmental problems that impact the quality of life and develop solutions to protect, preserve, and sustain the natural environment.

Environmental Science courses may not be listed as required in the program of study in the pathway, however, they are recommended so students gain experience and understanding the discipline, enable completion of prerequisites for future ESRM courses, and the units are transferable to UC and CSU.

The Associate in Science in Environmental Science for Transfer degree (AS-T in Environmental Science) prepares students to transfer into the CSU system to complete a bachelor's degree in Environmental Science, Environmental Science and Resource Management, Environmental Studies, or a major deemed similar by a CSU campus. Some UC Environmental Science or Environmental Studies majors require additional courses in Calculus or Chemistry. Therefore, students transferring to the UC system should review Environmental Studies/Environmental Science major agreements for their intended transfer institution on [assist.org](http://assist.org) to ensure they are taking the required courses prior to transfer. See a counselor and consult [assist.org](http://assist.org) (<https://assist.org/>).

## ESRM R100 Introduction to Environmental Science 3 Units

*In-Class Hours:* 52.5 lecture

This course is an interdisciplinary introduction to environmental issues from a scientific perspective focusing on physical, chemical, and biological processes within the Earth system, the interactions between humans and these processes, and the role of science in finding sustainable solutions. Topics include ecological principles, biodiversity, climate change, sustainability, renewable and non-renewable energy, water resources, air and water pollution, and solid waste management.

**Grade Modes:** Letter Graded

**Field Trips:** May be required

**Degree Applicability:** Applies to Associate Degree

**AA/AS GE:** A1

**Transfer Credit:** CSU, UC

**UC Credit Limitations:** None

**CSU GE-Breadth:** B2

**IGETC:** 5B

## ESRM R100L Introduction to Environmental Science Laboratory 1 Unit

*In-Class Hours:* 52.5 laboratory

*Prerequisites:* ESRM R100 or concurrent enrollment

Explores environmental processes associated with society including energy production, waste management, and soil and water quality. The laboratory class is focused on using environmental sampling, monitoring and assessment devices, and equipment and analytical tools to detect and quantify environmental contaminants in air, water and soil, as well as to assess the overall quality of those basic environmental resources. This course emphasizes the scientific method, data collection, and the completion of a research-based oral presentation.

**Grade Modes:** Letter Graded

**Field Trips:** Will be required

**Degree Applicability:** Applies to Associate Degree

**AA/AS GE:** None

**Transfer Credit:** CSU, UC

**UC Credit Limitations:** None

**CSU GE-Breadth:** B3

**IGETC:** 5C

- Environmental Science, Associate in Science for Transfer (<http://catalog.vcccd.edu/oxnard/programs-courses/environmental-science/environmental-science-ast/>)

*For more information, contact:*

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