

# EVS - Environmental Science

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## Environmental Science: EVS

### Lower-Division Courses

#### **EVS 301. Introduction to Environmental Science.**

Restricted to Environmental Science majors. Introduction to the field of environmental science, with a focus on the contributions from the three disciplinary areas of the biology, geography, and geological sciences. Examine historical and current perspectives as well as problems in environmental science including climate and climate change, the science of sustainability, ecosystem stability and change, pollution, water resources, and environmental ethics. Discuss what it means to be an environmental professional. Three lecture hours a week for one semester. May be taken two times for credit. May be repeated for credit. Offered on the letter-grade basis only.

#### **EVS 311. Field Seminar in Sustainability.**

Restricted to environmental science majors. Introduces field observation and analysis of environmental processes and sustainability issues. Subjects include ecology, hydrogeology, marine science, climate science, energy, and campus sustainability. Two lecture hours and four laboratory or field laboratory hours a week for one semester. Prerequisite: Consent of instructor.

### Upper-Division Courses

#### **EVS 121. Research Methods.**

Restricted to students pursuing a Bachelor of Science in Environmental Science. Overview of the methods involved in research projects designed to help prepare students in independent research projects or internships. One lecture hour and one workshop hour a week for one semester. Offered on the letter-grade basis only. Prerequisite: Environmental Science 311 with a grade of at least C-.

#### **EVS 331. Research Methods for the Environmental Sciences.**

Restricted to environmental science majors. Subjects include experimental design, statistical analysis and modeling, and ethics. Students develop and conduct an independent research project during the laboratory portion of the course. Two lecture hours and four laboratory or field laboratory hours a week for one semester. Prerequisite: Environmental Science 311 with a grade of at least C-.

#### **EVS 141. Environmental Science Professionalism I.**

Restricted to environmental science majors. Examines the fundamental, nontechnical aspects of environmental science and sustainability practices through the use of case studies and projects that use interdisciplinary approaches. Subjects may include the importance of interdisciplinary collaboration in addressing and assessing environmental science processes, the development of professional opportunities across disciplines, understanding professional responsibilities, applying ethical principles, the balance of multidisciplinary demands in professional practice, and the need for lifelong learning. One lecture hour a week for one semester. Prerequisite: Senior standing, Environmental Science 311, and 121 with a grade of at least C- in each.

#### **EVS 151. Environmental Science Professionalism II.**

Restricted to environmental science majors. Examines the fundamental, nontechnical aspects of environmental science and sustainability practices. Focuses on the use of interdisciplinary communication for addressing and assessing environmental science processes, the

challenges posed by communicating across disciplines, the development of professional communication and public speaking skills, effective presentation of research, the ethics and practices of peer research review, and effective communication of the effects of environmental science in a global society. One lecture hour a week for one semester. Prerequisite: Environmental Science 141.

#### **EVS 171, 271, 371, 471. Research Experience.**

Restricted to environmental science majors. Supervised study of selected topics in environmental science by individual arrangement with the instructor. Conference course. May be repeated for credit when the topics vary. Prerequisite: Consent of instructor.

#### **EVS 172C, 272C, 372C, 472C. Senior Research Proposal in Environmental Science.**

Restricted to seniors in the Bachelor of Science in Environmental Science degree program. Work towards an understanding of the broader literature on a topic, identify hypothesis of interest, design an experiment to test the hypothesis, develop a budget, and write a research proposal. For each semester hour of credit earned, one lecture hour a week for one semester, with additional hours to be arranged as needed. Offered on the letter-grade basis only. Prerequisite: Upper-division standing, Biology 373, 373L, and Environmental Science 121, with a grade of at least C- in each.

#### **EVS 172D, 272D, 372D, 472D. Senior Research in Environmental Science.**

Restricted to seniors pursuing the Bachelor of Science in Environmental Science degree. Continuation of Environmental Science 172C, 272C, 373C, or 472C. Perform proposed experiment, collect and analyze data, present results, and write a final report. For each semester hour of credit earned, one hour of field work and one and one-half laboratory hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Environmental Science 172C, 272C, 372C, or 472C with a grade of at least C- and consent of instructor.

### Graduate Courses

### Professional Courses