Introduction to Environmental Sciences for Majors

Last Updated: Tue, 11/18/2025

Course prefix: EAS

Course number: 1600

Section: Majors

CRN
33230

Instructor first name: Jennifer

Instructor last name: Glass

Semester: Spring

Academic year: 2026

Course description:

We will begin by considering external influences on Earth’s environment and reviewing the systems approach for studying interrelated phenomena, as well as the basic physics needed for such studies. We will explore how each component interacts with the others and how these processes control Earth’s climate. We will use parameters from potentially habitable exoplanets for examples of how to perform fundamental planetary calculations. We will finish with a discussion of modern anthropogenic climate change. This class is in a “flipped course” format with recorded lectures, quizzes, and two course projects including presentations. Weekly small group discussions of articles and current topics in environmental science apply the course material to “real-world” problems like the Flint water crisis, hurricane storm surges, drinking water quality, Mars geology mapping, environmental policy, and environmental justice. Through the laboratory sessions, students develop an understanding of the scientific method and scientific research. In the exoplanets project, students apply planetary energy balance equations to assess the habitability of an exoplanet. In the Wikipedia editing project, students gain experience in scientific writing on notable topics in environmental sciences of high interest to the public and will gain experience in identifying an audience, citing literature, peer review, and revisions.

Academic honesty/integrity statement:

Students are expected to maintain the highest standards of academic integrity. All work submitted must be original and properly cited. Plagiarism, cheating, or any form of academic dishonesty will result in immediate consequences as outlined in the university's academic integrity policy.