

Environmental Science 2014-2015

Course Syllabus

TEACHER CONTACT INFORMATION

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OVERVIEW

Environmental science is the study of how humans interact with their environment. The focus of this senior/junior science elective lies in learning the basic ecological concepts that function in the natural world, understanding environmental problems created by human interactions with the natural world, and identifying means of mitigating or solving these problems. Laboratory and fieldwork are an important part of the curriculum. This course is designed as a three-trimester sequence that can be taken for one, two, or all three terms.

PREREQUISITES

To enroll in this course students must have already completed Biology, or receive permission from the teacher, to take the class.

TEXTS and RESOURCES

This course draws from a variety of digital and print media. There is no specific text or media that must be purchased. Information will be gathered through research of the available print and online resources available, as needed.

COURSE OUTLINE

Fall: The focus of the fall trimester is to gain an understanding of how the natural world functions, through an introduction to ecological principles. The major topics of the fall trimester are: Natural Selection, Energy in Ecosystems, Stability and Change in Nature, Species Interactions, the Natural History of Western Maine.

Winter: The focus of the winter trimester is gaining an understanding of the causes and resolution of global environmental issues. The major topics of the winter trimester are: The Tragedy of the Commons, Climate Change, Human Population, Global Current Issue Role Play.

Spring: The focus of the spring trimester is on applying your understanding of environmental science and environmental issues to your own lives, with a focus on local and national environmental issues. Major topics of the spring trimester are: Gould's Environmental Impact, Presenting an Earth Day Workshop, Local or National Current Issue Role Play, Independent Term Project

COURSE EXPECTATIONS

Excellence is the basic expectation for both effort and completion of assigned work in this course. Work will be assigned regularly, and students are expected to complete all work in a timely fashion. Science is a collaborative process so you will be expected to work with others on gaining understanding. This will include participation in class discussion, offering assistance to others, giving and accepting constructive criticism, and collaborating on group work. In all course activities, thoughtful and respectful interactions are expected. Since your first work is not always your best work, revision and resubmission of work is encouraged on most major assessments. Deadlines for specific work will be set by class agreement, and it is expected that all students will respect those deadlines.

ASSESSMENTS and GRADING

This course is based largely on independent and collaborative project-based learning. Grading will be based on work completed on the major projects of each term. Assessment of the quality of a student's process (research, collaboration, critical thinking, and documentation of work) as well as the end-product, is important in this course. Students will receive regular and timely formative feedback on their work. On group projects, an individual and group grade may be given, if appropriate.

ACADEMIC INTEGRITY

All work submitted for this course must honestly and accurately reflect a student's effort and understanding. With information so readily available, it is expected that students understand and apply best practices for documenting their research and for properly citing the sources of their information. To that end, *APA Advanced* is the accepted style for documenting sources in this course. It is the students responsibility to understand the standards for academic honesty and to consistently practice academic integrity in all your work. Academic dishonesty is a serious issue. Knowingly misrepresenting your understanding or effort, or failing to properly document the sources of your information, will result in both academic and disciplinary responses.