

## Course Overview: BIO 200

<b>Course title:</b> Ecology and the Environment
<b>Pre-requisites:</b> None
<b>Number of credits:</b> 3
<b>Catalog course description:</b> This course introduces students to the study of organismal interactions: both among organisms, as well as those between organisms and their physical environment. Course topics include the movement of energy through ecosystems, species interactions, population dynamics, and human impacts on other organisms and the environment. Topics will be presented within an evolutionary framework, drawing on connections to human experience as well as other sub-disciplines of biology. Special emphasis will be placed on critical evaluation of scientific information, the scientific method and ecology as a scientific enterprise.
<b>Required instructor qualifications:</b> Minimum degree required: Master's in Biology or related field. Master's in Education with Ecology coursework will be considered. No lab experience required.
<b>Course's audience and role in Eastern's curriculum:</b> This course fulfills two requirements with Eastern's liberal arts core curriculum (ELAC), serving as a disciplinary perspectives course in Science & Math and counting toward the learning outcome of <a href="#">quantitative literacy</a> . As such, it enrolls students across the university, primarily students who do not intend to major in Biology. The course is also taken by students completing the Environmental Science minor.
<b>Learning outcomes:</b> Instructors may decide on their own phrasing for learning outcomes, so long as they reflect the course content, including the focus on quantitative literacy. You might wish to use the outcomes below.  Upon completion of this course, students will be able to: <ul style="list-style-type: none"><li>• Measure and analyze environmental factors that impact local habitats and global cycles and draw conclusions using quantitative methods</li><li>• Demonstrate how humans/society make choices that impact ecosystems and other humans in the present and the future</li><li>• Present and communicate complex environmental problems and how humans/society need to work together and find solutions</li></ul>
<b>Primary modes of instruction:</b> Lecture; class and small-group discussions; debates
<b>Primary modes of assessment:</b> Instructors' grading policies on campus vary slightly, but generally have the following requirements:  3-4 exams (45-50% of course grade) Class participation (about 10% of course grade)

Writing assignments (about 45% of course grade)

As described on the sample syllabi, writing assignments might include short papers about the conservation issue of the students' choice, a garbage log, in-class writing, group debates and reflections, essays analyzing peer reviewed and news articles, or other options of the instructor's choice.

**Other notes for instructors:** Instructors on campus tend to recommend but not require a textbook for this course. Recommended titles include G. Tyler Miller and Scott Spoolman's *Essentials of Ecology* and Anna Sher and Manuel Molles's *Ecology: Concepts and Applications*.

Approved by the Department of Biology on \_\_04/15/2025\_\_

Signature of department chair or faculty liaison: \_\_\_\_\_ 