

Spring 2016

The basic science is not physics or mathematics but biology, the study of life. We must learn to think both logically and biologically—Edward Abbey (1929-1989)

: Dr. Johan Feddema

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: Wednesdays 1:00 – 4:00 or by appointment (contact feddema@uvic.ca to make one)

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Nature is our oldest home and our newest challenge. Understanding how our global environment functions and how humanity has interacted with the natural world—both past and present—have emerged as subjects of major public concern in recent years. The realization that humans are causing radical changes to the environment—to the point that we are causing the climate of the entire earth to become warmer—is one major source of societal concern. The goal of Geography 101A is to introduce students to the way in which the ecosphere functions and providing insight to ways in which humans interact with the natural environment. In order to put our discussion into current context, climate change will be a recurring theme throughout the course as a foundation for understanding anthropogenic change on a global scale.

To understand the dimensions of various environmental problems, such as acid rain, climate change, eutrophication, species extinction, deforestation, and a host of others, students must have some idea of how the biosphere functions. The first part of the course will focus on the history of the earth and the evolution of life.

: Evaluation of students is based on the combined scores from the course examinations and the laboratory sections of the course and student attendance in both the course and the laboratory portion of the course. Examination material will be heavily weighted to lecture and laboratory content and from related text book content. Because poor attendance is highly correlated with poor/failing grades and failure to eventually complete your degree, attendance is required for all parts of the course. Homework will be assigned through the laboratory section of the course.

Break down of overall course assessment:

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| Midterm | 17.5% |
| Final | 27.5% |
| Lecture attendance and participation | 10% |
| Laboratory section grade | 45% |

- Note: there will be a separate syllabus laying out the breakdown of the laboratory grades

: Assignments are due at the beginning of the lab. Late assignments will be deducted 10% per day. Exceptions to the late policy will only be granted by your lab instructor for verified illnesses (i.e., doctor's note needed). All assignments must be submitted to get a passing grade in the laboratory component.

As with any course which includes laboratory work, students will be required to make satisfactory standing in both parts of this course. Results in laboratory work will be announced by the department concerned prior to the final examinations, and students who have not obtained a grade of at least D in their laboratory work will NOT be permitted to write the examination, nor receive credit for the course.

If you must miss a lab you are required to either make it up by attending another lab section (with both TA's permission) or by doing a relevant replacement assignment as to be decided between you and your TA with the professor being the overriding decision maker.

Final letter grades will be assigned based on standard UVic grading policies where:

A+ A A

: This is a tentative outline and is subject to change

| | | <i>readings will be added as needed</i> |
|----------------|-------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|
| January 5-8 | Intro, Concepts of sustainability and environmental systems | Chapter 1, 5 |
| January 11-15 | Energy in the Environment Global climate | Chapter 2 |
| January 18-22 | Water Resources Biogeochemical cycles | Chapter 4 & 11 |
| January 25-29 | Introduction to Ecology Energy in ecosystems | Chapter 3 & 4 |
| February 1-5 | Biomes I People-biomes interactions | Chapter 4, 9 & 10 |
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| February 15-19 | Biomes II People-biomes interactions | Chapter 4 & 8 |
| February 22-23 | Concept of the Anthropocene | Crutzen, P. J., E. F. Stoermer (2000). The 'Anthropocene'. <i>Global Change Newsletter</i> 41 - 18 |
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Feb 29 - March 4