

Syllabus:
Environmental Biology
The School of Arts & Sciences
St. Thomas Aquinas College

Course Description

This 3 credit course covers the basic structure and function of the ecosystem and the ways in which humans alter the structure and function. The course is intended for non-science majors and there is no prerequisite or lab component.

Evaluation

There are 4 non-cumulative exams and the final grade will be determined by averaging the 4 grades.

Course Objectives

At the completion of this course, students will be familiar with:

- a) The homeostasis of the ecosystem (balance of nature)
- b) Energy flow through the ecosystem
- c) Recycling of matter through the ecosystem
- d) Human influences on ecosystem homeostasis or sustainability
- e) The concept of trade-offs or the advantages and disadvantages of how we carry out our lives
- f) The elimination of species and the long term effects
- g) Evidence for global warming and concerns for global sustainability

Course Format

This is a lecture course which follows many of the topics in the text. The topics and related readings are given on the next page.

Text

The Environment and You by N. Christensen, Pearson Press, 2013, ISBN 978-0-321-73438-9

Academic integrity

A commitment to honesty, fairness, respect, and responsibility, is the foundation of the learning process. All members of the St. Thomas Aquinas College community are held to the highest standards of academic honesty. While we recognize the participatory nature of education, we take academic integrity very seriously, and the College policy on academic dishonesty details consequences that can include dismissal from the College. That policy can be found in both the Student Handbook and the College Catalog. As a student in this class, you must demonstrate your commitment to academic integrity by submitting work which originates in your own imagination, analytical faculties, or your own knowledge, which you have done yourself, and which represents your very best efforts. When appropriate, your work should be supplemented and supported by other sources; however, you must always ensure that these sources are properly cited using the recommended documentation system. Students needing accommodations for a documented disability should notify the instructor at the beginning of the semester.

Topics	Chapter in text
Ecology and sustainability	1.1
Ecosystem structure	1.2-1.3
Energy Flow	6.4
Productivity and food chains	3.3
Nutrient cycles	7
Interactions	6.2 - 6.3
 Exam 1	
Succession	6.5
Major world biomes	10 and 12
Biocides and modern agriculture	13
Radiation and nuclear power plants	15.6
 Exam 2	
Metal pollution	9.2
Air pollution and the internal combustion engine	9
Introduced and endangered species	11
 Exam 3	
The energy crisis: coal, oil natural gas and solar power	16
Cultural eutrophication and sewage treatment	18
Waste disposal	18
Global warming and attendant concerns	8
 Final Exam	

COLLEGE POLICY ON ELECTRONIC DEVICES IN THE CLASSROOM

Students are not to use any electronic device at any time without the expressed consent of the professor. This policy includes cell phones, laptop computers, or any other device the use of which constitutes a distraction to the professor or to the other students in the class as determined by the professor. Students with documented disabilities that require the use of a laptop in class may use them after informing their professor.

When a professor designates a time during which laptop computers may be used, they are only to be used at the discretion of the faculty member and in accordance with the mission of the college; visiting sites which the professor deems to be inappropriate to the needs of the class is forbidden.

Professors have the latitude to develop specific and reasonable policies to deal with violations of these general policies as they see fit. For more extreme cases of classroom disruption, see the College's Disruptive Student Policy.