

NR 5724 Conservation Ecology

Offered: Fall, Spring, Summer-I (12 weeks, even number years)

INSTRUCTOR: Megan M. Draheim, Ph.D., mdraheim@vt.edu

REQUIRED TEXT: *Essentials of Conservation Biology* (6th Edition), R. B. Primack
(ISBN: 978-1-605-35289-3)

COURSE DESCRIPTION:

Human activities are having a cumulative effect on the natural systems upon which life depends. Future land and ocean management decisions will occur in the face of unprecedented change in environmental conditions. More integration of the traditional natural resources fields will be required to develop innovative approaches to sustainable resource development. Conservation Ecology provides insights to the many benefits and services that nature offers and explores strategies for management options to sustain ecological integrity and the production of goods and services. It is an interdisciplinary approach to harmonizing the interactions between people and nature at ecosystem scales. The course is designed to explore the knowledge, theories, and research related to the total environment in which we practice conservation. Emphasis will be on the synthesis and integration of knowledge, skills, and abilities that are needed as conservation issues become more complex. A problem-based learning format will require students to actively participate in their own learning by researching and analyzing real-life problems to arrive at “best” solutions. The instructor serves as a cognitive coach by modeling inquiry strategies and guiding students in exploring relevant contact.

COURSE REQUIREMENTS AND GRADING:

This is a writing intensive course. Students are expected to participate weekly in online forum discussions related to the readings (from both the textbook and additional selected readings); this will constitute the majority of your participation grade. In addition, students will have four major assignments during the semester (some more writing-intensive than others). Three of the assignments will be group work; groups will be chosen randomly and rotated for each assignment.

Grades will be computed on the following basis:

Course Participation	35%
Biome Assignment	20%
Peer Review Assignment	5%
Case Study Assignment	20%
Cumulative Final Exam	20%

SCHEDULE:

1. Introduction: What is Conservation Ecology?
2. Biodiversity
3. Human Dimensions of Conservation Ecology: Part One
4. Human Dimensions of Conservation Ecology: Part Two
5. Extinction
6. Threats to Biodiversity: Part One
7. Threats to Biodiversity: Part Two
8. Population Ecology
9. Conservation Techniques
10. Protected Areas: Part One
11. Protected Areas: Part Two
12. Beyond Protected Areas
13. Conservation Ecology and Sustainable Development
14. Looking Forward
15. Final Exam

SAMPLE