"Teach your children what we have taught our children, that the earth is our mother. Whatever befalls the earth, befalls the children of the earth. If we spit upon the ground we spit upon ourselves. This we know. The earth does not belong to us; we belong to the earth...."

Attributed to Chief Seattle, 1855

Instructor:
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Course Objectives:
• To engender a sense of understanding of environmental problems, create a sense of purpose and direction for solutions to those problems, and develop an involvement in conservation biology
• To provide an up-to-date synthesis and understanding of the multiple disciplines relating to the conservation of living organisms
• To encourage thought, reflection, and action among students interested in fields related to conservation biology

Expectations:
Class attendance for every class meeting is expected as is stated in the Bucknell University Student Handbook. Each student should be prepared for class by reading the assigned materials before class. Failure to adequately prepare for class will adversely affect students’ performance in the course.

Academic-honesty Policy:
I expect that every student has read and understood Bucknell’s academic-honesty policy, and also the technological-use policy. I expect strict adherence to both of these policies. Each student will need to carefully prepare assignments with these issues in mind. If there are any questions throughout the semester, please ask me BEFORE any assignment is submitted.

Assignments:
3 Journal Summaries       Mon, Sep 11, 18, & 25
Term Project Outline & Bibliography due    Wed, Oct 4
Mid-term Examination      Mon, Oct 9
Special Lecture Summaries Fri, Oct 20
Letter to Congress or State Legislature Wed, Oct 25
Term Project Paper due     Mon, Dec 4
Final Examination (Comprehensive) Week of Dec 7-14

To reduce impacts on forest resources, all written materials should be submitted in single-spaced format with no more than 1” margins. Printing pages back-to-back is required.

Grading:
Journal Summaries, Letter to Congress, Summaries of Two Special Lectures 10%
Term Project including oral-paper presentation 25%
Midterm Examination 20%
Class participation, discussion leadership 20%
Final Examination 25%

Assigned Readings:
Course Content:

Part I. Major Issues That Define Conservation Biology
1. Course expectations
2. What is conservation biology?
3. What is biological diversity?
4. Where is the World’s biological diversity found?

Readings:
Primack, R.B. 2006. Chapters 1, 2, and 3.

Part II. Valuing Biodiversity
4. Ecological economics and direct economic values
5. Indirect economic values
6. Ethical values

Readings:

Part III. Threats to Biodiversity
7. Early mass extinction & current rates of extinction
8. Vulnerability to extinction
9. Habitat destruction, fragmentation, degradation, and global climate change
10. Overexploitation, invasive species, & disease

Readings:
Primack, R.B. 2006. Chapters 7, 8, 9, and 10.

Part IV. Conservation at the Population and Species Levels
11. Problems in small populations
12. Applied population biology
13. Establishing new populations
14. *Ex situ* conservation strategies

Readings:
Part V. Practical Applications

15. Establishing protected areas
16. Designing networks of protected areas
17. Managing protected areas
18. Outside protected areas
19. Restoration ecology

Readings:

Part VI. Conservation and Human Societies

20. Conservation and sustainable development at the local and national levels
21. An international approach to conservation and sustainable development
22. An agenda for the future
23. Student Term Project Presentations

Readings: