

**BIO 3450-80 Conservation Biology Online
Winter Session 2012-13**

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Course Description:

An examination of the recent, unprecedented losses of global biological diversity, and analysis of conservation strategies designed to prevent, minimize, and/or repair ecological damage. Conservation of biodiversity is considered from an ecological perspective, then integrated with economical and political issues to explore the implications of national and international conservation efforts.

Course Objectives:

- a. Knowledge: Basic understanding of the principles of Conservation Biology, relevant ecological theory, and the concepts utilized in ecological restoration.
- b. Quantification: Mensurative and manipulative approaches that address endangered organisms and habitats at the population, community, and ecosystem levels.
- c. Application of Theory: Use of ecological theory in the development of conservation strategies.
- d. Synthesis of Information: Multidisciplinary approach to the conservation of biodiversity.
- e. Appreciation: Awareness of inherent life-support value of biosphere, the increasing anthropogenic impacts on ecosystem structure and function, and the difficulty in resolving conservation/preservation issues.

Student Learning Outcomes:

Students will be able to:

- a. Organize and synthesize biological information into a logical sequence.
- b. Communicate clearly, in writing and orally, in an organized fashion the broad aspects of biology using specific examples:
- c. Use graphs, charts, tables and other visual media to summarize and clarify information and data for oral and written presentation.
- d. Use information systems in the library to locate biological source material.
- e. Articulate the several types of values associated with biodiversity.

- f. Describe anthropogenic impacts to biodiversity and strategies to minimize the impacts.

Prerequisite: BIO 2490 or permission of the instructor.

Required Text: Essentials of Conservation Biology, 5th edition. Richard B. Primack. Sinauer. Available as hardcopy or e-book.

Content and Calendar [Exams open and close at 11:59 pm on the date indicated.]

			Chapter	Topic
Sun	Dec	26	1, 2	Biodiversity & Conservation Biology
Mon		27	3	Diversity Patterns,
Tue		28	4	Valuing Biodiversity
Wed		29	5, 6	Indirect Economic Values & Ethical Values
Thu		30	7	Extinction Exam 1 Opens
Fri		31	8	Vulnerability to Extinction.
Sat	Jan	1	9	Habitat Destruction, Fragmentation, Climate Exam 1 Due
Sun		2	10	Exploitation, Invasive Species, Disease.
Mon		3	11	Problems of Small Populations
Tue		4	12	Applied Population Biology
Wed		5	13	Establishing New Populations
Thu		6	14	Ex-Situ Conservation Strategies Exam 2 Opens
Fri		7	15	Establishing Protected Areas.
Sat		8	16	Designing Networks of Preserves Exam 2 Due
Sun		9	17	Managing Protected Areas.
Mon		10	18	Outside Protected Areas
Tue		11	19	Restoration Ecology
Wed		12	20, 21	Sustainable Development, International Approach
Thu		13	22	An Agenda for the Future Exam 3 Opens
Fri		14	22	. Exam 3 Due

Assessments & Grading

Knowledge of facts, understanding of concepts, and the ability to apply these to the analysis of conservation problems will be assessed by three examinations at approximately weekly intervals as indicated in the calendar above. These examinations will require short explanations and longer essays in which students apply facts and concepts to the analysis of conservation problems. Examinations will constitute 75% of the final course grade. Quantity and quality of contributions to online activities (discussion and related assignments) will constitute the remaining 25% of the grade.

Teaching Methods

This is a fully online course. Instead of lectures in a classroom, students and instructor will interact entirely online by use of the Blackboard course management system (abbreviated as “Bb”.) You should log on to Blackboard at least twice per day, early and late, to check postings and contribute to discussion and questions/answers. Three examinations will be completed and submitted online. The learning process will depend, as always but more-so, on diligent independent study of the text and materials provided by the instructor. The textbook is comprehensive and of manageable length (about 20 pages of reading per day), but mastering it will require disciplined commitment to reading and study almost every day for three weeks. Mastering the material will also require that we take maximum advantage of opportunities for mutual aid thru online discussion, answering each others’ questions, sharing of ideas, etc. as if we were in a 24-hour classroom or study center. To keep everyone on schedule, I will require regular contributions to discussion, with allowance for occasional lapses.

Special Considerations

Schedule of Work: The schedule of work is intense and will require a high level of commitment throughout the session. We will cover a standard textbook of 22 chapters in about three weeks, requiring that students study (not skim) approximately one chapter per day. Students should expect to read and participate every day, including weekends, with only occasional lapses. Any missed day should be considered a lapse requiring extra work to catch up.

Technical Difficulties: It is essential that students have high-speed internet access, a reliable computer, and the ability to use Blackboard and standard application software including an internet browser, email, and word processing software. You are responsible for all technical issues, including browser compatibility, and should read carefully the information posted by the Bb support staff. If you have technical difficulties, you are to contact the Bb support staff directly. Work ahead of schedule so that problems can be resolved in advance of any deadlines. You will not be excused from any requirements or deadlines because of technical difficulties.

Academic Integrity:

We all share a heightened responsibility for Academic Integrity in the online environment and I will expect the highest level of academic integrity from every individual. That means a clear understanding of the requirements, a clear understanding of how to comply with them, and a commitment to full compliance. There will be zero tolerance for any violations, which means an F for the course and a letter in your file at the Dean of Students Office. No excuses, no second chances. The WPUNJ policy on Academic Integrity is found in full on pages 46-48 in the undergraduate catalog, available online at <https://webapps.wpunj.edu/catalog/front.cfm?section=ARR>. Contact me immediately if you have any questions or concerns about academic integrity.