

BIOL 7346 – CONSERVATION BIOLOGY

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Office Hours: T, R 9-11:00 am, or by appointment

Lecture: SUPP 255, T, R 11:00 am -12:15 pm

General Course Content: This course focuses on conservation biology, providing students with a sound understanding of the principles, theories, hypotheses, and applications that pertain to the maintenance of biodiversity throughout the world. Conservation biology is a synthetic field uniting basic and applied aspects of biology in the face of declining biodiversity worldwide. Students that have completed this course should possess:

- Know the basic principles of conservation biology.
- Know and understand the primary threats to biodiversity.
- The ability to describe and discuss many of the case studies involving conservation efforts, both successful and unsuccessful efforts at protecting biodiversity.
- The knowledge and ability to distinguish among the many approaches to biological conservation.
- The knowledge and ability to use many of the numerous contemporary tools available to scientists to conserve biological diversity.

Textbooks:

Groom, M.J., G.K. Meffe, and C.R. Carroll. 2006. Principles of Conservation Biology, 3rd edition. Sinauer Associates, Inc. Sunderland, Massachusetts, USA.

IMPORTANT: Attendance of lectures is required – see class participation grading. If the student has more than 3 unexcused absences they may be required to drop the class.

Class Schedule--Subject to Change

Topic	Date	Chapters	Readings	Debate
Introduction	01/15	1	Hardin, G. 1968	
Global Biodiversity	01/17	2	May, R.M. 1988.	
Threats to Biodiversity	01/22	3	Pimm et al. 1995.	
Threats continued, Cons V&E	01/24	3, 4	Edwards & Abivardi 1998	
Conservation Value and Ethics	01/29	4		Private lands
Ecological Economics	01/31	5	Balmford et al. 2002	
Habitat Degradation, Loss	02/05	6		
Habitat Fragmentation	02/07	7	Watling & Donnelly 2006	
Overexploitation	02/12	8		Animal rights
Overexploitation continued	02/14	8		
Species Invasions	02/19	9		Predator control
Exotics continued	02/21	9		
Climate Change	02/26	10		
Climate Change continued	02/28	10		Climate change
Midterm Exam	03/04			
Conservation Genetics	03/20	11	Keller and Waller 2002	

Conservation Genetics continued	03/25	11	Crandall et al. 2000	
Source-sink, metapopulations	03/27	12		Amphib. decline
PVA	04/01	12		
Ecosystem Management	04/03	13		
Protected area types, Gap Analysis	04/08	14		
Reserve Design	04/10	14	Worm et al 20005	
Ecological Restoration	04/15	15		
Sustainability	04/17	16	Costanza & Daly 1992	
Science and Policy	04/22	17		Advocacy
Challenges for 21 st century	04/24	18		
Final Exam	05/01			

Grading

Exams (60%)

- Midterm (25%)
- Final Exam (35%)

Debate Project (25%)

- Debate presentation (15%)
- Debate position paper (10%)

Class Participation (15%)

- I will take role in class and unexcused absences will result in reduction of class participation grade (5 points off for each unexcused absence after first offense).

Exam Make-up Policy: If you miss the midterm exam and have a valid, documented excuse, you may, at the instructor's discretion, substitute the final exam grade for the missing grade. If the final exam is missed for a valid, documented reason, I will give the student an oral exam at the earliest possible date. Any unexcused missed exams will result in a grade of zero.

Academic Integrity: Students are expected to adhere to the University's Academic Integrity Policy. If you are caught cheating on a test, report, or other work, you will be assigned a grade of zero. The instructor reserves the right of turning the names of cheating students over to the appropriate disciplinary board for possible expulsion. www.txstate.edu/effective/upps/upps-07-10-01.html

Texas State University-San Marcos Honor Code

As members of a community dedicated to learning, inquiry, and creation, the students, faculty, and administration of our University live by the principles in this Honor Code. These principles require all members of this community to be conscientious, respectful, and honest.

We Are Conscientious:

We complete our work on time and make every effort to do it right. We come to class and meetings prepared and are willing to demonstrate it. We hold ourselves to doing what is required, embrace rigor, and shun mediocrity special requests, and excuses.

We Are Respectful:

We act civilly toward one another, and we cooperate with each other. We will strive to create an environment in which people respect and listen to one another, speaking when appropriate, and permitting other people to participate and express their views.

We Are Honest:

We do our own work and are honest with one another in all matters. We understand how various acts of dishonesty, like plagiarizing, falsifying data, and giving or receiving assistance to which one is not entitled, conflict as much with academic achievement as with the values of honesty and integrity.

The Pledge for Students

Students at our University recognize that, to insure honest conduct, more is needed than an expectation of academic honesty, and we therefore adopt the practice of affixing the following pledge of honesty to the work we submit for evaluation: I pledge to uphold the principles of honesty and responsibility at our University.

The Pledge for Faculty and Administration

Faculty at our University recognize that the students have rights when accused of academic dishonesty and will inform the accused of their rights of appeal laid out in the student handbook and inform them of the process that will take place. I recognize students' rights and pledge to uphold the principles of honesty and responsibility at our University.