Conservation Biology (Biology 4350/5350, Section 001)
Fall 2013

Professor: Dr. Paul Chippindale
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Place and Time: Life Science, Room 424, M/W 5:30-6:50

Office hours: M/W 1:30-2:30, 7:00-7:30 (after class), or by appointment. You are welcome to drop in at other times, but please DO NOT come to see me right before class. I'm pretty quick to respond to email (the easiest way to reach me outside of class and office hours). NOTE: Please email me from your UTA MavMail account. This is a secured, encrypted connection and I cannot transmit any sensitive information to outside email addresses.

Prerequisites and information: Biology 1441, 2343, and Genetics 3315, or equivalent/my permission. This course does not have a lab component. This is an intensive and challenging course that requires students to think and do independent investigation.

Student Learning Outcomes: The goals of this course are to introduce students to the basis of conservation biology, investigate modern quantitative and applied approaches to analysis and preservation of biodiversity, and address current controversies in the field.

Textbook: *Principles of Conservation Biology*, 3rd edition, by Groom, Meffe, Carroll, and contributors, published by Sinauer Associates, 2006. NOTE: This text is very different from the 2nd edition. Occasionally I may assign additional readings; if so I will inform you of these in class.

Grading: Exam I: 25% (15% for graduate students)
Exam II: 25% (15% for graduate students)
Final (**comprehensive**): 50% (30% for graduate students)
Midterm assignment **(graduate students only)**: 10%
Term paper **(graduate students only)**: 20%
Presentation **(graduate students only)**: 10%

Grades for individual exams WILL NOT be curved (any grade adjustments will be made at the end of the course). Letter grades will be assigned according to the following scale: A = 89.5-100%, B= 79.5-89.4%, C = 69.5-79.4%, D = 59.5-69.4%, F = 59.5% or less.

Exams will be a mixture of multiple choice and written answer (definitions, compare/contrast, short essay, calculation, etc.). Most questions will be multiple choice, so bring a #2 pencil and green 882 Scantron. You must fill in the Scantron AND circle the answers on the test paper. If there is a problem with the Scantron, I will use the circled answers on the test paper to determine your grade.

No electronic devices may be used at exams -- I will provide basic calculators if needed.

For the midterm assignment **(graduate students only)**, you need to identify an area of conservation biology in which there is a current or recent controversy and find two papers from the primary literature (peer-reviewed scientific journals) in which the authors take opposing views. Examples of relevant journals include (but are not limited to): Conservation Biology, Biological Conservation, Animal Conservation, Conservation Genetics, Molecular Ecology, Evolution; Nature; Science; Proceedings of the National Academy of Sciences, USA; Proceedings of the Royal Society, London; and so on. You must receive my approval for the topic and the papers in advance. The papers should be from 2009 or later, unless I say otherwise. Your assignment should consist of a brief review of the area of study and a summary of the viewpoints of the authors. It should be between 1000-1500 words (approximately). I encourage you to discuss your topic with me.

For the term paper **(graduate students only)**, you should expand on this topic (or choose another, subject to my approval), and do a much more comprehensive review of the subject area, based on numerous papers from the literature. I will provide more detailed guidelines later in the semester. Graduate students will also be required to give a 15 minute presentation to the class on the subject of their term paper, followed by a question/discussion section that they will lead.

Missed exams/make-up exams: If you miss an exam, you must contact me as soon as possible (within one week of the missed exam) and provide a verifiable, written reason for the absence (e.g., medical emergency). Grades for excused missed exams will be substituted with the grade from the comprehensive final exam.

***Attendance at class*:** There is no explicit penalty for missing classes. However, students who attend class regularly almost always get better grades than those who do not. Material for the exams is drawn almost entirely from the lectures, and will not follow the book exactly.

Missed lectures: Do not expect me to inform you of material covered or provide you with individualized notes concerning missed lectures (you all have full access to my PowerPoints through the Biology website).

Grade disputes: I will be happy to consider possible errors in grading IF you present a clear, concise explanation of the problem. I will NOT consider any grade dispute more than two weeks after return of an exam.

***Electronic communication policy*:** The University of Texas at Arlington has adopted the University "MavMail" address as the sole official means of communication with students. MavMail is used to remind students of important deadlines, advertise events and activities, and permit the University to conduct official transactions exclusively by electronic means. For example, important information concerning registration, financial aid, payment of bills, and graduation are now sent to students through the MavMail system. All

students are assigned a MavMail account. ***Students are responsible for checking their MavMail regularly.*** Information about activating and using MavMail is available at http://www.uta.edu/oit/email/. There is no additional charge to students for using this account, and it remains active even after they graduate from UT Arlington.

***Course Withdrawals*:** Students can drop with an automatic W any time until the final drop date (this can be done through a Biology Academic Advisor, and they can sign for me if necessary). Students are responsible for checking drop dates; these are specified by the university and I have no control over them. NOTE: **Drop dates for graduate students may be different from those for undergraduates**. Don't assume that I will keep track of these!

Drop for non-payment of tuition: If you are dropped from this class for non-payment of tuition, you may secure an enrollment loan through the Bursar's office. You may not continue to attend class until your enrollment loan has been applied to outstanding tuition fees.

***Academic Dishonesty*:** It is the philosophy of The University of Texas at Arlington that academic dishonesty is a completely unacceptable mode of conduct and will not be tolerated in any form. All persons involved in academic dishonesty will be disciplined in accordance with University regulations and procedures. Discipline may include suspension or expulsion from the University. Scholastic dishonesty includes but is not limited to cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributable in whole or in part to another person, taking an examination for another person, any act designed to give unfair advantage to a student or the attempt to commit such acts. (Regents' Rules and Regulations, Part One, Chapter VI, Section 3, Subsection 3.2, Subdivision 3.22).

Students enrolled in this course are expected to adhere to the UT Arlington Honor Code:

> *I pledge, on my honor, to uphold UT Arlington's tradition of academic integrity, a tradition that values hard work and honest effort in the pursuit of academic excellence.*
>
> *I promise that I will submit only work that I personally create or contribute to group collaborations, and I will appropriately reference any work from other sources. I will follow the highest standards of integrity and uphold the spirit of the Honor Code.*

Student support services: The University of Texas at Arlington provides a variety of resources and programs designed to help students develop academic skills, deal with personal situations, and better understand concepts and information related to their courses. These resources include tutoring, major-based learning centers, developmental education, advising and mentoring, personal counseling, and federally funded programs. For individualized referrals to resources for any reason, students may contact the Maverick Resource Hotline at 817-272-6107 or visit www.uta.edu/resources for more information.

Student Feedback Survey: At the end of each term, students enrolled in classes categorized as lecture, seminar, or laboratory shall be directed to complete a Student Feedback Survey (SFS). Instructions on how to access the SFS for this course will be sent directly to each student through MavMail approximately 10 days before the end of the term. Each student's feedback enters the SFS database anonymously and is aggregated with that of other students enrolled in the course. UT Arlington's effort to solicit, gather, tabulate, and publish student feedback is required by state law; students are strongly urged to participate. For more information, visit http://www.uta.edu/sfs.

Final Review Week: A period of five class days prior to the first day of final examinations in the long sessions shall be designated as Final Review Week. The purpose of this week is to allow students sufficient time to prepare for final examinations. During this week, there shall be no scheduled activities such as required field trips or performances; and no instructor shall assign any themes, research problems or exercises of similar scope that have a completion date during or following this week unless specified in the class syllabi. During Final Review Week, an instructor shall not give any examinations constituting 10% or more of the final grade, except makeup tests and laboratory examinations. In addition, no instructor shall give any portion of the final examination during Final Review Week. NOTE: Graduate student presentations will be held during this week.

Students with Disabilities: The University of Texas at Arlington is on record as being committed to both the spirit and letter of federal equal opportunity legislation; reference Public Law 93112---The Rehabilitation Act of 1973 as amended. With the passage of new federal legislation entitled Americans with Disabilities Act (ADA), pursuant to section 504 of the Rehabilitation Act, there is renewed focus on providing this population with the same opportunities enjoyed by all citizens. As a faculty member, I am required by law to provide "reasonable accommodation" to students with disabilities, so as not to discriminate on the basis of that disability. Student responsibility primarily rests with informing faculty at the beginning of the semester and in providing authorized documentation through designated administrative channels. If anyone in this class has a documented physical or learning disability that requires special accommodation, please see me in the first two weeks of class to discuss the matter.

***Emergency exit procedures*:** Should we experience an emergency event that requires us to vacate the building, students should exit the room through the front and move toward the nearest building exit doors, down the stairs to the left (west, past the elevators) or right (east, then turn right again to the stairs -- this stairwell opens directly to outside on the ground floor). When exiting the building during an emergency, one should never take an elevator but should use the stairwells. Faculty members and instructional staff will assist students in selecting the safest route for evacuation and will make arrangements to assist handicapped individuals.
email compliance@uta.edu

Class schedule: Biology 4350/5350: Fall 2013

Note: This schedule is intended to be flexible, and represents only a rough guide to the topics we will cover. I will adjust coverage and timing according to our progress.

Unit 1

Conceptual Foundations for Conservation Biology

1) What is conservation biology?
2) Global biodiversity.
3) Threats to biodiversity.
4) Conservation values and ethics (brief overview)
5) Ecological economics and nature conservation.

EXAM I

Unit 2

Focus on Primary Threats to Biodiversity

1) Habitat degradation and loss.
2) Habitat fragmentation.
3) Overexploitation.
4) Species invasions.
5) Biological impacts of climate change.
6) Conservation genetics

EXAM 2

Unit 3

Selected topics from Approaches to Solving Conservation Problems

Last 3 classes: Graduate student presentations

Important dates

End of September: TOPIC AND PAPER TITLES DUE FOR MIDTERM ASSIGNMENT -- GRADUATE STUDENTS ONLY (I will inform you of the due date for the assignment itself -- approx. 3rd week of October).

Dec. 9: FINAL EXAM 5:30-8:00 (in lecture room).

Dec. 12: TERM PAPER DUE -- GRADUATE STUDENTS ONLY