## **Conservation Biology**

BIOL 3350 Spring 2024

Instructor: Jessica L. Coleman, MS.

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Office hours: Mon & Wed 10:30am – 12pm, Wed. 2 – 3pm or by appointment

Course Objectives: Conservation Biology is the scientific study of the phenomena that affect the maintenance, loss, and restoration of biological diversity. Topics covered include 1) the impacts of global warming, species invasions, and habitat destruction on biodiversity, 2) strategies developed to combat these threats, and 3) a consideration of key economic and ethical tradeoffs. Special attention will be paid to current debate and controversy within this rapidly emerging field of study.

## Student Learning Outcomes: After this class, you should be able to...

- To define conservation biology and understand how it is different from other ecological disciplines
- To demonstrate an understanding of the ecological principles upon which conservation are based
- To recall patterns of biodiversity including its many hierarchical levels
- To discern the primary threats to biodiversity
- To be able to make informed conservation decision of local, national and international concerns
- To have a clear understanding of how society shapes conservation efforts, including the forces of economics, policy, ethics, and institutions

**Textbook:** Primack, Richard B. 2010. Essentials of Conservation Biology. 6<sup>th</sup> Edition. Sinauer Associates, Inc. Sunderland MA.

## Grading:

	<b>Points Possible</b>
Exam 1	100
Exam 2	100
Exam 3	100
Debate	100
Op Ed.	100
Total	500

Grade Distribution			
Percentage	<b>Points</b>	Grade	
90-100%	500 - 448	A	
80-89%	447 - 398	В	
70-79%	397 - 348	C	
60-69%	347 - 298	D	
0-59%	297 - 0	F	

**Exam policy:** There will be three regular exams during the semester. All exams could include multiple-choice, short answer, compare and contrast, and essay questions. The material for each exam will be from the lecture, textbook and class discussions. Remember the textbook is a reference that is used to assist you with the lecture material! No exam will be curved!

**Make-up Exams:** If you are unable to take an exam when scheduled due to a documented emergency (e.g., death in the family, severe illness requiring hospitalization), a make-up exam will be arranged **ONLY** if the instructor is notified and arrangements are made **IN ADVANCE**. Additionally, you must take the exam **before** the regularly scheduled exam time.

**Debates:** Class debates will assign a team of students to each side of a controversial issue in conservation science and practice. These exercises are intended to encourage students to do independent research and to consolidate their learning by presenting the material in a concise and persuasive format to the class. The class will be divided into four groups; two teams will take part in the first debate, arguing the "pro" and "con" positions. The debate teams will submit brief position statements prior to the debate, and each side will make a presentation of their position and rebuttal of the other team. The other two teams will serve as the audience, asking questions of each presenting team. Roles will be reversed for the second debate.

**Opinion-Editorial:** Each student will be required to write a brief (500-700 words) opinion-editorial ("Op-Ed") article that synthesizes and takes a position on a current conservation science issue of his or her choice. Topics should be timely, provocative, and likely to be of interest to the general public, and the article should be written for a real newspaper of an appropriate scope (e.g., local, regional, national, or international) and geographic location.

**Attendance:** Attendance is essential to success in this class. If you miss class, it is your responsibility to contact another student (not the instructor) to get notes and other announcements made during class.

Academic Integrity: Students should be aware that absolute academic integrity is expected of every student in all undertakings at The University of Texas at Tyler. Failure to comply can result in strong university-imposed penalties. For instance, submitting plagiarized work to meet academic requirements including the representation of another's work or ideas as one's own (this includes copying other authors words; the unacknowledged word for word research results shall be grounds for charges of academic misconduct. Any cheating or other types of academic misconduct will be reported to the university administration and at a **minimum** will result in an automatic failure of the course.

**Students Rights and Responsibilities**: To know and understand the policies that affect your rights and responsibilities as a student at UT Tyler, please follow this link: <a href="http://www2.uttyler.edu/wellness/rightsresponsibilities.php">http://www2.uttyler.edu/wellness/rightsresponsibilities.php</a>

Grade Replacement/Forgiveness and Census Date Policies: Students repeating a course for grade forgiveness (grade replacement) must file a Grade Replacement Contract with the Enrollment Services Center (ADM 230) on or before the Census Date of the semester in which the course will be repeated. Grade Replacement Contracts are available in the Enrollment Services Center or at <a href="http://www.uttyler.edu/registrar">http://www.uttyler.edu/registrar</a>. Each semester's Census Date can be found on the Contract itself, on the Academic Calendar, or in the information pamphlets published each semester by the Office of the Registrar.

Failure to file a Grade Replacement Contract will result in both the original and repeated grade being used to calculate your overall grade point average. Undergraduates are eligible to exercise grade replacement for only three-course repeats during their career at UT Tyler; graduates are eligible for two grade replacements. Full policy details are printed on each Grade Replacement Contract.

The Census Date is the deadline for many forms and enrollment actions that students need to be aware of.

## These include:

- Submitting Grade Replacement Contracts, Transient Forms, requests to withhold directory information, approvals for taking courses as Audit, Pass/Fail or Credit/No Credit.
- Receiving 100% refunds for partial withdrawals. (There is no refund for these after the Census Date)
- Schedule adjustments (section changes, adding a new class, dropping without a "W" grade)
- Being reinstated or re-enrolled in classes after being dropped for non-payment
- Completing the process for tuition exemptions or waivers through Financial Aid

**State-Mandated Course Drop Policy**: Texas law prohibits a student who began college for the first time in Fall 2007 or thereafter from dropping more than six courses during their entire undergraduate career. This includes courses dropped at another 2-year or 4-year Texas public college or university. For purposes of this rule, a dropped course is any course that is dropped after the census date (See Academic Calendar for the specific date). Exceptions to the 6-drop rule may be found in the catalog. Petitions for exemptions must be submitted to the Enrollment Services Center and must be accompanied by documentation of the extenuating circumstance. Please contact the Enrollment Services Center if you have any questions.

**Disability Services**: In accordance with Section 504 of the Rehabilitation Act, Americans with Disabilities Act (ADA) and the ADA Amendments Act (ADAAA) the University offers accommodations to students with learning, physical and/or psychiatric disabilities. If you have a disability, including nonvisible disabilities such as chronic diseases, learning disabilities, head injury, PTSD or ADHD, or you have a history of modifications or accommodations in a previous educational environment you are encouraged to contact the Student Accessibility and Resources office and schedule an interview with the Accessibility Case Manager/ADA Coordinator, Cynthia Lowery Staples. If you are unsure if the above criterion applies to you, but have questions or concerns please contact the SAR office. For more information or to set up an appointment please visit the SAR office located in the University Center, Room 3150 or call 903.566.7079. You may also send an email to cstaples@uttyler.edu

**Student Absence due to Religious Observance**: Students who anticipate being absent from class due to a religious observance are requested to inform the instructor of such absences by the second class meeting of the semester.

**Student Absence for University-Sponsored Events and Activities**: If you intend to be absent for a university-sponsored event or activity, you (or the event sponsor) must notify the instructor at least two weeks prior to the date of the planned absence. At that time the instructor will set a date and time when make-up assignments will be completed.

**Social Security and FERPA Statement**: It is the policy of The University of Texas at Tyler to protect the confidential nature of social security numbers. The University has changed its computer programming so that all students have an identification number. The electronic transmission of grades (e.g., via e-mail) risks violation of the Family Educational Rights and Privacy Act; grades will not be transmitted electronically.

**Emergency Exits and Evacuation**: Everyone is required to exit the building when a fire alarm goes off. Follow your instructor's directions regarding the appropriate exit. If you require assistance during an evacuation, inform your instructor in the first week of class. Do not re-enter the building unless given permission by University Police, Fire department, or Fire Prevention Services.

Schedule of Topics		
Topics	Chapters	
Defining Conservation Biology		
What is Conservation?	1	
What is Biodiversity?	2	
Where is the Biodiversity?	3	
The Value of Biodiversity		
The Value of Biodiversity	4	
Indirect Economic Values	5	
Environmental Ethics	6	
Exam I – *February 13 <sup>th</sup>		
Threats to Biodiversity		
Extinctions	7,8	
Habitat Destruction	9	
Over exploitation, Invasive Species & Disease	10	
Conservation a Populations and Species levels		
Problems of Small Populations	11	
Applied Population Biology	12	
Establishing New Populations	13	
Ex Situ Conservation Strategies	14	
Exam II – *March 21st		
Practical Applications		
Establishing Protective Areas	15	
Designing Networks of Protective Areas	16	
Managing Protective Areas	17	
Conservation Outside Protective Areas	18	
Restoration Ecology	19	
Conservation and Human Societies		
Conservation and Sustainable Development	20	
An International Approach to Conservation	21	
An Agenda for the Future	22	
Exam III – Finals Week: April 30th @ 11am		

<sup>\*</sup>Tentative Exam dates

Spring Break	March 11 – 15 <sup>th</sup> , 2024
Last Day to Drop with a "V	/" March 25th 2024