

EEB 484 – Conservation Biology

Spring 2023 – Fully Online – CRN: 27009 – 3 credits

Class ----- Monday, Wednesday & Friday – 4:10pm to 5pm
Instructor ----- Diane Le Bouille – dlebouille@utk.edu
TA ----- Bekki Chastain – rchasta4@vols.utk.edu
Zoom ID ----- Zoom Id: 986 796 83195
<https://tennessee.zoom.us/j/98679683195>

Communication with your instructor (Dr. Le Bouille) and TA (Bekki Chastain)

You can always contact us by email (allow 24 hours for a response).

If you need to meet out of class time, please email any or both of us using your UTK e-mail with a list of 3 days/times when you are available and we will work out something!

Course Description

■ Catalog Description

Learn to quantify biodiversity and patterns of biodiversity loss and change. Examine the role of different drivers of biodiversity loss in the US and elsewhere. Explore the efficacy of different strategies aiming to conserve species and ecosystems and to safeguard the benefits that people derive from them. Discuss relevant professions and how they apply principles of conservation biology with outside speakers.

Prerequisites

BIO 260 or equivalent

Textbook

Kareiva, P. & Marvier, M. 2014. Conservation Science: Balancing the Needs of People and Nature (2nd Ed.) Macmillan Learning

■ Objectives

Whether you are a future ecologist, sustainability professional, natural resource manager, or conservationist, the goal of this online Conservation Biology course is to enable you to apply the principles of conservation ecology to your discipline. If you fully engage with the content, discussions, and projects, by the end of this course you will be able to:

1. Summarize what biodiversity is, what is happening to biodiversity and what arguments have been advanced to support actions to conserve biodiversity.
2. Assess the evidence attributed to drivers of biodiversity declines.
3. Compare benefits and drawbacks for strategies for addressing declines in biodiversity
4. Examine how conservation strategies can be deployed most effectively.
5. Critically review ways to balance the needs of humans and nature.
6. Summarize scientific research on conservation solutions for a professional audience.

Canvas

All readings and assignments will be posted on Canvas: <http://utk.instructure.com/>

Make sure you have access to the course's home page. You will need to regularly check the home page and inbox for weekly announcements related to this class. I will send a "Welcome to EEB 484" announcement on the first week of class: if you have not received it by the time we have our first discussion, let me know immediately!

Course Structure

■ Timeline

Each week, we will cover 2 modules. Each module is comprised of various tasks, which are not necessarily graded tasks. When a task is ungraded, it is up to you to decide what schedule for completing it is best for you. Just remember that the ungraded tasks prepare you for graded tasks, so I strongly encourage you to make time for them and reach out to me if you have questions while working on them.

By Wednesday, class time:

- Watch the 2 Lectures (and take notes) 2 hr
- Read the assigned Textbook Chapters (and take notes) 2 hrs
- Answer the Discussion Prep questions..... 30 min

Class (Wednesday - 4pm)

- Participate in the Zoom class..... 1 hr
- After class, finish posting for the Canvas Discussion 20 min

By Saturday, 11:59pm

- Study your notes 1 hr
- Take the 2 Quizzes 30 min

A piece of advice:

Watching the Lecture and reading the Textbook Chapters are the two tasks that will take you the most time every week. Make sure to organize your week so that you do not have to rush those: take your time going through them, and take extensive notes while you do. Spending time and efforts on taking notes now will make studying for quizzes and exams easier and faster down the line, so it is a worthwhile investment!

In addition, doing those two things in advance of the class means that you will have time to email me with questions, should you have any, before we meet. This will help you navigate the Discussion Prep questions and will save you time down the line, when it comes to studying for quizzes and exams!

■ Tasks description

Lecture and Textbook Chapters

With pauses for careful notes and review, you can expect Lectures to take ~1 hour of your time.

Textbook Chapters are usually around 30 (rather dense) pages. They will focus on various concepts and applications of conservation biology. Budget a good chunk of time, probably more than 2 hours every week, to read those and take notes. Some weeks have no assigned Textbook Chapter reading or have only one. Do not hesitate to use those weeks to get a head start and read the upcoming chapters – this class is quite challenging, so every opportunity you get to work ahead, please to do not hesitate to do so. Do your best to understand the chapters. Anything you do not fully get or have questions about, write it down, so we can address it in class. I do not expect you to always perfectly understand the articles, but I do expect you to have read them well enough to bring good questions and interesting thoughts to the Zoom Discussion class that follows.

Discussion Prep questions

Before class, you will have to answer the Discussion Prep questions, which are higher-level questions that ask you to apply and synthesize that week's material.

During and after class, you will use those to engage in discussion threads with your classmates, reacting and replying to others' opinion in a constructive and thoughtful manner, around the concepts addressed in this week's modules.

Class Zoom Meetings

(3 pts) Synchronous Class Zoom Meetings will be held every Wednesday evening, 4:10-5pm. Discussions are a place for you to deepen your learning, make connections and hear others' points of view.

Make sure to come prepared with thorough notes from watching the Lecture and reading the Textbook Chapters, as well as thoughtful answers to the Discussion Prep questions.

I want to encourage you to attend class with your camera on, so we can all see each other instead of being talking to a void. I will take a screenshot of my Zoom call screen, at the end of the class: all those who have their camera on throughout the class will be directly recorded as having attended that class. For those who could not turn their camera on, I will assign at a random time during discussion an exit ticket that you will have to post to the Class Zoom Discussion assignment after class to prove attendance.

Discussions, quizzes and Exams

(5pts) Provide at least 2 substantive posts a week, in any Canvas Discussion thread. A substantive post includes a statement or question (usually taken from the Discussion Prep questions, but feel free to come up with your own) and a proposed response/explanation to it. It can also be a thoughtful response to one of your classmates posts. They are due at noon on Fridays.

(10pts) Quizzes provide you with an incentive to review material as the semester progresses, as well as making sure you remember older material (several questions on each quiz will pull from previous modules). They are due at 11:59pm on Saturdays.

(80pts) There will be 2 exams in the semester: the midterm and the final. Both quizzes and exams also provide you with feedback on what you have learned.

To prepare, you should read the assigned material, watch the assigned lectures, and participate in discussions. Quizzes and exams are both open-note, but they are also timed. To do well, you will need have taken notes and studied the material before starting the quiz or exam. You will not be allowed to work with someone else during a quiz. For each quiz, you will be able to see the answers after the module for that quiz the next Monday at noon.

■ **Special Project**

We will have a special project this semester: that will break up the routine a bit!

Interview with a Professional (133 pts)

We will seek connections between conservation biology and other fields as we go through this semester, but you will have to do the finishing work to really connect the concepts and practices of conservation biology to your particular field or interests. An excellent way to discover the real-world applications of conservation biology is to question those who are using conservation biology in the real world. Your group will find and interview a professional who uses conservation biology in their work and share the interview with the class.

You will get started right away, by first choosing a group during your first week. You'll spend parts of the following weeks figuring out who your group wants to interview and starting to contact those persons. The interviews and associated work will take place during Modules 20 to 24 (the last 4 weeks of class). During finals week (Module 24), you will complete the Interview Critical Reflection, in which you will take information collected from other groups' interviews to synthesize concepts gained throughout the semester. See the Interview with a Professional Module on Canvas for more detailed schedule, roles, and exemplars.

Course Schedule

■ **University's Key Dates**

- Jan 30 - Last day to drop without a "W"
- April 17 - Last Day to Drop with a "W" (WP/WF)
- May 9 - Last Day for a Total Withdrawal from the University Deadline

■ Grading

Final letter grades will be determined by the percentage of all available points, accumulated as follows:

A 93 – 100%	B+ 87 – 89%	C+ 77 – 79%	D+ 67 – 69%
A- 90 – 92%	B 83 – 86%	C 73 – 76%	D 63 – 66%
	B- 80 – 82%	C- 70 – 72%	D- 60 – 62%
			F <60%

■ Special Monday Zoom Meetings

The only Mondays we will be meeting are the following ones – please save the date! (All other classes will be on Wednesdays)

- Mar. 6, Module 11, Midterm Exam Preparation
- Apr. 24, Module 22, Final Exam Preparation

■ Schedule of learning activities

- Tentative and subject to change: I reserve the right to alter this schedule, usually in favor of giving students more time. Any changes will be announced on Canvas and through email. -

Week of:	Module	Topic	Textbook Chapter
Jan 23	0	Getting Started	-
Jan 30	1+2	Human Impacts What is Conservation Biology?	Chapter 1 + Soulé, 1985
Feb 6	3+4	Biodiversity Ecosystem Services	Chapters 2 and 3
Feb 13	5+6	Policy responses Protected Areas	Chapters 4 and 5
Feb 20	7+8	Conservation Decision Making Fundamental Objectives	Chapter 6
Feb 27	9+10	Small Populations Population Viability	Chapters 7 and 8
March 6	11	Midterm Exam	-
March 13	-	(No class/quiz – Spring Break)	
March 20	12+13	Assessing Threats Habitat Loss	Chapters 9 and 10
March 27	14+15	Restoration & reintroduction Adaptive Management	Chapters 11 and 12
April 3	16+17	Reversing Deforestation Balancing Agriculture and Conservation	Chapters 13 and 14
April 10	18+19	Sustainable Marine Fisheries Fresh Water Management	Chapters 15 and 16
April 17	20+21	Introduced Species Climate Change problem and Solutions	Chapters 17 and 18
April 24	22	Final Exam	
May 1	23	Interviews	Chapter 19 (wrap up)
May 8	24	Interview Summaries and Critical Evaluation	

Course Policies

Disability Accommodations

If you require additional time for quizzes, or any other learning accommodations, please reach out to me now. Please also contact the Office of Disability Services at 865-974-6087, in 2227 Dunford Hall, to coordinate reasonable accommodations for exams. ***I will need a message from them before the first exam.***

Late Assignments

Projects' deadline will be communicated as the class progress. If you happen to need extra time to complete one of those assignments, please contact me as soon as possible, so we can work around your constraint.

Late assignments without excuse

When they do not affect your peers, late assignments will be penalized 5% per calendar day (including weekends). However, if an assignment is meant to be collaborative and a collaboration is ineffective due to the lateness of your assignment, you can expect to get no more than 50% of the points.

Quizzes

Note that there are no make-ups for quizzes.

Course Etiquette

Participate actively to group projects and get materials to your groupmates in a timely manner.

Respect diversity: This course is a safe space for all genders, races, sexual orientations, political affiliations, abilities, ages, and religions. No form of harassment will be tolerated.

Be polite: Show each other intellectual respect by engaging with and challenging each other's ideas. In groups and during discussions, disagree (politely) when you can, so things stay interesting. Acknowledge the points made with which you agree and suggest alternatives for those with which you don't. Criticism must be constructive, well-meaning, and well-articulated. Rants and profanity are not acceptable in this space.

Plagiarism

By enrolling in the course, you agree that written work may be examined using plagiarism detection software at the discretion of the instructor. Plagiarism is using the intellectual property of someone else without giving proper credit. The undocumented use of someone else's words or ideas in any medium of communication (unless such information is recognized as common knowledge) is a serious offense. Plagiarism software will be used to check some of the written assignments for this class. Committing plagiarism will result in a zero (0) on that assignment and may result in a report to the Office of Student Conduct.

Specific examples of plagiarism are: collaborating on a quiz or exam without instructor's approval / using materials from someone who took this class before to complete graded tasks rather than trying to come up with answers on your own / borrowing a classmate's assignment and copying their answers rather than trying to come up with answers on your own / copying texts excerpts directly from an internet search rather than trying to come up with answers on your own.