# NATURAL RESOURCES 458 BIODIVERSITY AND CONSERVATION BIOLOGY FALL SEMESTER 2021, 3 CREDITS

**Contact Info** 

Instructor: Dr. Marie Perkins (she/her)

Office Hours: Wed. 10:00 - 11:00 or by appointment

Join URL: https://uwsp.zoom.us/j/5266245041

Passcode: 262380525

Email: mperkins@uwsp.edu

Lecture: TNR 352; Monday and Wednesday 8:00 - 9:15

Course Goal: The field of conservation biology seeks to preserve biological diversity and ecosystem function. Conservation biology is an interdisciplinary science that draws on the disciplines of ecology, genetics, biology, geology, chemistry, economics, sociology, and anthropology to seek solutions to the multitude of threats to biodiversity. This course will introduce students to the fundamental principles of conservation biology. Broadly, this will include topics related to sustainable development, population genetics, landscape ecology, ecosystem ecology, policy, and environmental economics. Ultimately, students in this course will be expected to develop critical thinking skills to investigate challenges and concerns associated with conservation biology as well synthesize basic biological and ecological information.

# **Learning Objectives:**

- 1. Discuss concepts in conservation biology as they relate to local, national, and global issues.
- 2. Understand the nature and extent of threats to the biodiversity of the planet and analyze the challenges related to conservation biology.
- 3. Describe the current practices of conservation biology.
- 4. Critically evaluate and apply peer-reviewed literature on biodiversity and conservation.
- 5. Demonstrate effective written and oral communication skills.

## **Required Textbook:**

An Introduction to Conservation Biology, 2nd Edition. Anna A. Sher and Richard B. Primack. Oxford University Press, New York, New York.

<u>Course Structure:</u> Lecture will be conducted in person and lecture periods will be a combination of formal lectures, activities, and class and small group discussions. Readings from the text will be required (see below) and will aid in class discussions.

<u>Canvas:</u> Course materials including copies of lecture slides, assigned and recommended readings, recorded Zoom lectures (if needed), and other related materials will be posted to Canvas. All assignments will be submitted in Canvas. I will communicate information related to the course using Canvas announcements.

**Exams:** Three exams will be given during the semester; each exam will be worth 100 points. These exams will focus on new material, however, many of the concepts in this class build on each other. Understanding of previous topics will be incorporated in the exams.

**Required Readings:** Each week you will be expected to read the portions of the textbook we will be discussing during the class meetings. You will write down some notes from the readings and submit these to Canvas. Each of these will be worth 5 points. There will be 22 due throughout the semester and they will count towards 100 points of your grade (you will get 2 freebies). You will get 5 points for turning them in and 0 points for not turning them in.

<u>Assignments:</u> You will have a variety of assignments to complete over the course of the semester aimed to improve your critical thinking and communication skills. Details for all assignments will be posted in Canvas.

#### **Grading:**

<b>Evaluation:</b>	Grades:		
	<b>Points</b>	93% and above	A
Exam 1	100	90-92%	A-
Exam 2	100	87-89%	B+
Final Exam	100	83-86%	В
Required Readings	100	80-82%	B-
Assignments	100	77-79%	C+
TOTAL	500	73-76%	$\mathbf{C}$
		70-72%	C-
		67-69%	D+
		64-66%	D
		62 and below	F

<u>Face Coverings\*:</u> At all UW-Stevens Point campus locations, the wearing of face coverings is mandatory in all buildings, including classrooms, laboratories, studios, and other instructional spaces. Any student with a condition that impacts their use of a face covering should contact the Disability and Assistive Technology Center to discuss accommodations in classes. Please note that unless everyone is wearing a face covering, in-person classes cannot take place. This is university policy and not up to the discretion of individual instructors. Failure to adhere to this requirement could result in formal withdrawal from the course.

\* Face covering mandates may change throughout the semester, you are expected to follow the most up-to-date requirements.

#### **Other Guidance:**

- Please monitor your own health each day using this screening tool. If you are not feeling well or believe you have been exposed to COVID-19, do not come to class; email your instructor and contact Student Health Service (715-346-4646).
- As with any type of absence, students are expected to communicate their need to be absent and complete the course requirements as outlined in the syllabus.
- Maintain a minimum of 6 feet of physical distance from others whenever possible.
- Do not congregate in groups before or after class; stagger your arrival and departure

- from the classroom, lab, or meeting room.
- Wash your hands or use appropriate hand sanitizer regularly and avoid touching your face
- Please maintain these same healthy practices outside the classroom.

<u>Getting Help:</u> Please do not be shy about asking for help. You are welcome to email me to schedule a time to meet with me in Zoom. If you are having any trouble understanding something in class, do not hesitate to get in touch, as those problems will likely only get worse as the material becomes more complex and builds on itself.

Academic Dishonesty and Late Work Policy: Trust between students and the instructor is of paramount importance in academic settings. Academic dishonesty will not be tolerated in the classroom (e.g., cheating on exams) or in research efforts (e.g., plagiarism). Academic dishonesty will be punished to the fullest extent that University policy permits. Late work will lose 10% for every 24 hours after the designated deadline. If you (or your group) are having a hard time submitting assignments on time, please contact me.

<u>Inclusivity Statement:</u> It is my intent that students from all diverse backgrounds and perspectives be well-served by this course, that students' learning needs are addressed both in and out of class, and that the diversity all students bring to this class is viewed as a resource, strength, and benefit. It is my intent to present materials and activities that are respectful of diversity: gender identity, sexuality, disability, age, socioeconomic status, ethnicity, race, nationality, religion, and culture. Your suggestions are encouraged and appreciated. Please let me know ways to improve the effectiveness of the course for you personally, or for other students or student groups.

If you have experienced a bias incident (an act of conduct, speech, or expression to which a bias motive is evident as a contributing factor regardless of whether the act is criminal) at UWSP, you have the right to report it (https://www.uwsp.edu/dos/Pages/Bias-Hate-Incident.aspx). You may also contact the Dean of Students office directly at <a href="dos@uwsp.edu">dos@uwsp.edu</a>.

Equal Access for Students with Disabilities: UW-Stevens Point will modify academic program requirements as necessary to ensure that they do not discriminate against qualified applicants or students with disabilities. The modifications should not affect the substance of educational programs or compromise academic standards; nor should they intrude upon academic freedom. Examinations or other procedures used for evaluating students' academic achievements may be adapted. The results of such evaluation must demonstrate the student's achievement in the academic activity, rather than describe his/her disability.

If modifications are required due to a disability, please inform the instructor and contact the <u>Disability and Assistive Technology Center</u> to complete an Accommodations Request form. Phone: 346-3365 or Room 609 Albertson Hall.

## **Online Materials and Class Recordings:**

Lecture materials and recordings for NRES 458 are protected intellectual property at UW-Stevens Point. Students in this course may use the materials and recordings for their personal use

related to participation in this class. Students may also take notes solely for their personal use. If a lecture is not already recorded, you are not authorized to record my lectures without my permission unless you are considered by the university to be a qualified student with a disability requiring accommodation. [Regent Policy Document 4-1] Students may not copy or share lecture materials and recordings outside of class, including posting on internet sites or selling to commercial entities. Students are also prohibited from providing or selling their personal notes to anyone else or being paid for taking notes by any person or commercial firm without the instructor's express written permission. Unauthorized use of these copyrighted lecture materials and recordings constitutes copyright infringement and may be addressed under the university's policies, UWS Chapters 14 and 17, governing student academic and non-academic misconduct.

# **Tentative Lecture Schedule:**

Date		Lecture Topic	Reading in Textbook	
		Introduction and Syllabus		
Wed.	8	·		
Mon.	13	Defining Conservation Biology	3-20	
Wed.	15	What is Biodiversity I	23-34	
Mon.	20	What is Biodiversity II	34-52	
Wed.	22	The Value of Biodiversity	55-64 & 86-90	
Mon.	27	Threats to Biodiversity I	95-112	
Wed.	29	Threats to Biodiversity II	112-126	
October	4	EXAM 1		
Mon.				
Wed.	6	Climate Change I	129-149	
Mon.	11	Climate Change II	150-164	
Wed.	13	Extinction Risk I	167-187	
Mon.	18	Extinction Risk II	187-202	
Wed.	20	Conserving Populations and Species I	205-230	
Mon.	25	Conserving Populations and Species II	230-243	
Wed.	27	Establishing New Populations I	247-259	
November	1	Establishing New Populations II	259-275	
Mon.				
Wed	3	EXAM 2		
Mon.	8	Protected Areas I	279-301	
Wed.	10	Protected Areas II	301-314	
Mon.	15	Conservation Outside Protected Areas I	317-333	
Wed.	17	Conservation Outside Protected Areas II	334-346	
Mon.	22	Restoration Ecology I	349-363	
Wed.	24	Restoration Ecology I	363-371	
Mon.	29	Challenges of Sustainable Development I	375-386	
December	1	Challenges of Sustainable Development II	386-403	
Wed.				
Mon.	6	TBA		
Wed.	8	TBA		
Final Exam: Final Exam: Mon. Dec. 13 - 12:30 - 2:30PM				