

Biology 374 Conservation Biology Winter 2021

Message from Dr. Debbie Schlenoff:

Things look a little different this term but know that I am committed to our course—to experiencing our course material together, learning, questioning, and growing as a class community. We cannot proceed as originally planned, but we can:



IUCN Red List

<https://www.iucnredlist.org/>

- Be challenged to learn about the amazing biodiversity on our planet.
- Practice scientific literacy skills, which are cross-cutting, transferable skills.
- Develop life-long skills through the remote learning format including reflection, organization, analysis, focus, self-discipline, and communication.
- Engage in ethical dialogue that widens our perspectives and deepens our knowledge.
- Affirm our hopefulness about the future by endeavoring to understand the world around us and to seek solutions to conservation problems.

I recognize that many of us are experiencing difficulties in our lives that include concern for our physical and mental health as well as the health and safety of loved ones. Many of us are facing unprecedented uncertainty along with stress, anxiety, and fear. Please do not hesitate to contact me if you are facing challenges that affect your participation in this course. I will do my best to support you.

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Teaching Team

Instructor: Dr. Debbie Schlenoff schlenof@uoregon.edu

Office Hrs: via Zoom following class meetings on Mondays and Wednesdays and by appointment.

GEs/Discussion Leaders:

Savanah Bird savanahb@uoregon.edu

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Course Description:

Conservation Biology is a multidisciplinary, applied science devoted to preserving the remaining biological diversity of our planet. We will study the foundational concepts and principles of conservation biology and use case studies and examples to illustrate these principles in practice. We will examine the causes and consequences of diversity losses; the genetic and evolutionary consequences of small populations; population viability modeling, and other tools. We will discuss approaches to conserving diversity including reserve design, corridors, captive breeding, species reintroductions, conservation laws, and strategies where we live and farm. The prerequisite for this course is either Bi213 or Bi253. This is a REMOTE course: that means that, unlike WEB courses, we will meet during scheduled class meeting times. I'll make the most of these live sessions to build community and interaction, while providing make-ups for students as needed.

Course Objectives

- Learn the fundamental principles and concepts of conservation biology.
- Apply these principles to conservation strategies for species and ecosystem management.
- Independently and collaboratively research and evaluate conservation issues and actions.
- Improve scientific literacy skills such as analyzing journal articles.
- Improve science communication skills.
- Examine how conservation biology relates to our own lives.
- Contribute to public input on legislative and regulatory decisions.
- Gain an appreciation for the diversity of the natural world!

Technical Requirements

Website: All Course documents, readings, and assignments will be posted on the Canvas Course Website. No textbook is required. For each week of the term, links to content, assignments, and sources will be posted in the Weekly Modules.

Please see the Welcome Module for course information and links to resources.

Log into canvas.uoregon.edu using your DuckID to access our class. If you have questions about accessing and using Canvas, visit the [Canvas support page](#). Canvas and Technology Support also is available by phone or live chat:

541-346-4357 | livehelp.uoregon.edu

For Zoom support:

<https://service.uoregon.edu/TDClient/2030/Portal/KB/ArticleDet?ID=101392>

Remote Resources for Students <https://remote.uoregon.edu/students>

If you face Internet access challenges: companies are offering free access during this challenging time. To learn more about options visit Information Services' [web page on going remote](#).

Course Format

Each week, the Canvas site will contain recordings and documents to deliver content and explain assignments. All links are in weekly Canvas modules. ***Start with the Weekly Overview*** posted in each week's module. We will interact asynchronously through the discussion board and assignments, and synchronously, through Zoom meetings which will be scheduled during class times. Each week of the term, we will answer reading questions, watch narrated content recordings, meet on Zoom (Mondays and Wednesdays at 10:15) for a synchronous class session, meet on Zoom for discussion sections (scheduled Wednesday afternoons), and complete 2-4 learning activities. There is no textbook; readings (mostly from scientific journals) will be posted on Canvas. There are no midterms or final exams in this class. The assignments and projects will help foster deeper consideration of the material and showcase your learning.

Through this structure, we will foster **interactive learning at three levels:**

- Student & student
- Student & instructor
- Student & course material

For students in another time zone, please note that all times for meetings, due dates, etc. are Pacific Time.

Weekly Course Structure:

I. Lectures:

For each class meeting on Monday and Wednesday at 10:15:

- 1) Reading and reading questions (submitted on Canvas before Zoom session).
- 2) Recorded narrated slide session for content delivery (viewed at the time of your choosing but should be before synchronous Zoom session).
- 3) Synchronous (live) Zoom sessions for content and inquiry. These will typically include polls and small group break-out sessions for discussions in real time. Class will start at the course's scheduled lecture time but will end 20-30 minutes early.

*Taken together, asynchronous recordings and synchronous content will not exceed the time allotment for lectures (90 minutes).

II. Discussion section

Meetings via Zoom occur at 12:30, 2:00, or 3:30. Please attend the session for which you are registered.

- 1) Some weeks will involve an assignment to prepare for the discussion/activity. These will be noted in Canvas Modules.
- 2) A live, synchronous meeting during the scheduled discussion time. These sessions will typically consist of a short overview followed by break-out room discussions and activities. In many cases, you will be asked to have a worksheet accessible during the sessions or to access a shared Google document or Canvas discussion post.

III. Varied Weekly Learning Activities *to be completed and submitted on Canvas:*

Learning activities may include Canvas submitted assignments, discussion posts in response to prompts, replies to the posts of classmates, assigned readings with reading questions, surveys and weekly quizzes, and project related activities.

Live Sessions/Virtual Classes

Please make a genuine effort to attend the scheduled live virtual class and discussion sessions. This is where we can interact to establish community and develop ideas about conservation biology. Active participation can be more rewarding than passively reading and watching recordings. If you must miss a synchronous session, the material will be made available through posted slides and Zoom recordings. These recordings will be available as a resource *only* to the students who are enrolled with you in our class this term.

All of us occasionally need to "hide" video but please know that I enjoy seeing your faces and believe that it helps to promote class interaction, especially in small group break-out sessions. Whenever you can, I appreciate video on.

"Participation" in a traditional class means that students raise their hand, ask and answer questions, contribute input to small group and whole class discussion, answer "Clicker" questions, etc. We will attempt to foster this through Zoom meetings using polling, Q & A opportunities, chat, and break-out sessions for smaller groups to discuss questions and issues. It is important that you participate in these synchronous session methods to receive credit for your participation and to promote deeper understanding.

Office Hours:

We are here to help guide your learning and help you succeed during the course. We are available during office hours to answer questions about this course or provide additional resources. We invite you to virtually visit with us, so we can meet you and learn more about your interests. Office hours and Zoom links are posted in the Welcome Module: "Communicating with Debbie and the GEs." Note the GE office hours: you may attend any that fit your schedule even if it is not the GE leading your discussion section. Office Hours are a great way to make connections with faculty and graduate students, which may be helpful when you need future letters of recommendation or academic advice. I will stay on Zoom after each of our class meetings to speak with anybody who wants to ask questions, or discuss their interests or concerns. Generally, I will start with group office hours immediately following class and then meet individually with anybody who desires to chat further.

I am also be available to answer questions via email and will frequently check in on the Canvas Discussion Board "Class Question and Answers." Don't hesitate to email me with any questions or concerns.

The situation we're experiencing is fluid and, thus, uncertainty will impact the class plan and, potentially, your participation in the class. During this unusual time, if you are not able to do an assignment, please communicate with me and we will strive to create an alternative plan to complete required coursework. Let's all endeavor to support one another and to be as flexible as we can.

How will your grade be calculated?

Grading Evaluation

- Participation in Zoom meetings: 6%
 - Discussion sections (Participation + Section Assignments): 8%
 - Weekly reading questions: 12%
 - Weekly quizzes (Drop lowest; 2 pts each): 16%
 - Canvas discussion posts (and other assignments): 12%
 - Term paper draft and peer review: 3%
 - Abstracts and Q&A (format canvas discussion posts): 4%
 - Term paper: 18%
 - Endangered Species Report and Recovery Plan Group project: 5%
 - "Take Action" comments or letters to legislators/policymakers: 4%
 - Final Essay Recovery Plan: 12%
- Total =100%

How you know you're learning (Assessment):

Discussion Posts and Assignments: All links will be available in the weekly Canvas module. Several assignments and discussion posts involve multiple parts as well as research, reading, or reflection so please give yourself plenty of time to get them done. Please answer all parts of the posted prompts. Discussion posts are due Friday by midnight. You will then have 48 hours (until Sunday night) to respond to the posts of two of your classmates.

Reading Questions: We will read relatively short articles from the scientific literature that are associated with each lecture. Reading questions will be posted on Canvas and answers should be submitted by the time of our scheduled meetings (10:15 on Mondays and Wednesdays). During the first week of classes, no scientific articles associated with lecture will be assigned although we will discuss a reading in discussion sections on Wednesday. We will not use a textbook this term.

Quizzes: Weekly quizzes will be posted in Canvas Quizzes mid-week and due by Friday at 11:59pm. The quizzes will allow for review over the entire week and will cover content from pre-recorded narrated slides and Zoom meetings, readings, and learning activities for the week. The lowest score will be dropped.

Term Paper Project: Each of you will independently research a topic in conservation biology that results in an individually-written six to seven page term paper, submitted via Canvas through its anti-plagiarism software program (due week 7). You will also post an abstract of your paper on Canvas and will be expected to comment on some of your colleagues' abstracts and respond to questions from other students in the class. More details about the project requirements will be provided in class and on Canvas.

Group Project Endangered Species Report and Conservation Plan: You will work with classmates to gather information about species listed on the IUCN Red List and develop a recovery plan. You will then present your findings to your discussion section groups. Instructions will be provided.

Final Essay Recovery Plan: An opportunity to synthesize some of the strategies we have discussed to write up a recovery plan for an endangered species. Details to be announced. Due Friday of week 10.

Class Participation: Community means a lot to us. Please be prepared to participate in self-reflection, group work, and class discussions. Participation includes respect for your learning community by being on time and prepared, and directing your attention toward our discussions and activities.

Course Policies

Academic integrity: The University Student Conduct Code defines academic misconduct, which includes unauthorized help on assignments and examinations and the use of sources without acknowledgment. Academic misconduct is prohibited at UO. I will report misconduct to the Office of Student Conduct and Community Standards—consequences can include failure of this course. I will ask you to certify that your submissions and papers are your own work. You are expected to do your own work on homework assignments, projects, and quizzes. When writing up your homework assignments, papers, etc., submit original work for this course. Students may not submit papers that they have submitted in other courses. You are expected to paraphrase (use your own words) and give credit to the sources of your information. You are encouraged to discuss ideas with each other and to study together, but don't copy someone else's work, or allow them to copy yours. Quizzes are administered in Canvas and untimed. I have designed them with the expectation that you will have access to course materials when you take them—and that's just fine. Note that you do not have permission to post any course related material on outside private or public websites (i.e. coursehero, chegg, groupme, etc.). Academic dishonesty is so unfair to your fellow students who are working to achieve their course goals. All persons involved in academic dishonesty will be disciplined in accordance with University regulations and procedures.

Classroom Etiquette: Please see the Welcome Module: “Guidelines for Participating in Our Remote Class” which includes proper “netiquette,” Guidelines for Remote Class Participation, Canvas Discussions, and Zoom.

Class Courtesy:

Class rosters are provided to the instructor with the student's legal name. I will gladly honor your request to address you by an alternate name or gender pronoun. Please advise me of this preference early in the quarter so that I may address you properly.

Open inquiry, freedom of expression, and respect for differences are fundamental to a comprehensive and dynamic education. We are committed to upholding these ideals by encouraging the exploration, engagement, and expression of divergent perspectives and diverse identities. Classroom courtesy and sensitivity are especially important with respect to individuals and topics dealing with differences of race, culture, religion, politics, sexual orientation, gender, gender variance, and nationalities. Our classroom is a learning environment, and as such should be a safe, inclusive and respectful place. Being respectful also includes using preferred pronouns for your classmates. Disrespecting fellow students as well as combative approaches, tones and/or actions are not acceptable. Please make me aware if there are classroom dynamics that impede your (or someone else's) full engagement.

The University of Oregon is working to create inclusive learning environments. Please notify me if there are aspects of the instruction or design of this course that result in disability-related barriers to your participation. You are also encouraged to contact the Accessible Education Center at 541-346-1155 or uoac@uoregon.edu.

As the university community adjusts to teaching and learning remotely in the context of the COVID-19 pandemic, course requirements, deadlines, and grading percentages are subject to minor adjustments. I will be mindful of the many impacts the unfolding events related to COVID-19 may be having on you. Though attendance and participation is valued, we will allow make-up activities if you need to miss more than two sessions. During this unusual time, I encourage you to talk with me about what you are experiencing so we can work together to help you succeed in this course.

We want to support your learning

If you are having a problem that interferes with your ability to do the work in this class, please tell us about it as soon as you can. We may be able to refer you to someone for help or to make special arrangements if the need is real and if you have done your best to deal with the situation in a timely manner.

A few things to help you succeed in this course

- Complete the content recordings and reading questions before class.
- Participate and engage in every class and learning activity.
- Ask questions- attend office hours, ask questions during class, email, use the Canvas “Class Questions and Answers” discussion forum.
- Start your term project early.
- Use a planner. Keep track of all your assignments in Modules and transfer everything to your personal calendar throughout the term so there are no surprises. Allocate regular, recurring blocks of time for each class. Explicitly build in time for exercise, eating, sleeping, and socializing.
- Tailor your work environment to avoid distractions and promote engagement. Try not to multitask.
- Plan for the week’s activities: Although due dates for each activity are posted in Canvas, note that many of them involve multiple parts or reading/research that cannot be done right before the deadline. For each week, read the overview and plan accordingly. Any assignments associated with discussion sections are due before the first section at 12:30 on Wednesdays. Most other activities (proposals, papers, assignments, discussion posts) are due by Friday night. The peer review and discussion forum replies should occur within 48 hours of the due date of the posted assignments and so are due by Sunday nights.
- Begin work early, well before the due date. Allow extra time. Break up assignments into parts so as not to be overwhelmed.
- Study material over a number of relatively short sessions with repeated review. It’s easy to lose focus if you try to do too much at once. Interacting with the material is a good way to learn it. Don’t just read it- Write it, explain it, and discuss it. Studies have shown that writing things down (rather than typing) helps with internalizing and retaining information.

In addition to these tips, read: *Welcome Module: Tips for Success in Remote Courses*.

TENTATIVE COURSE SCHEDULE:

This is an abbreviated version. Details on meetings, assignments, etc. can be found in Weekly Modules, the Canvas “To Do” bar, and on the Canvas course calendar. The following tentative content schedule is a work in progress and is subject to change. Changes will be announced on Canvas. With the exception of the first week, there is a reading assignment that is due before each Zoom lecture meeting. See Canvas Modules for ALL readings, assignments, and projects due each week.

WK	<u>LECTURE TOPICS</u>	DISCUSSION SECTION (Wednesdays)
<u>PART I: Identifying the Problems</u>		
1	<p>1/4 L: Introduction to Conservation Biology.</p> <p>1/6 L: Biodiversity, Species concepts.</p> <p>Suggested TED talk: The Power of belief -- mindset and success Eduardo Briceno https://www.youtube.com/watch?v=pN34FNbOKXc</p>	<p>1/6 Discussion intro. Reading: Aldo Leopold essay posted on Canvas Activity: <i>Discussion on What is wilderness?</i></p>
2	<p>1/11 L: Approaches to Conservation, Ecosystem Services.</p> <p>1/13 L: Threats to biodiversity I: Habitat loss & fragmentation.</p>	<p>1/13 <i>Measuring biodiversity activity.</i> Prioritizing areas for conservation.</p>
3	<p>1/18 <i>MLK holiday. No class meeting.</i></p> <p>1/20 L: II: Overexploitation,</p>	<p>1/20 <i>Invasive Species analysis.</i></p>
4	<p>1/25 L: III. Invasive species and Climate change.</p> <p>1/27 L: Conservation genetics and the problems with small populations.</p>	<p>1/27 <i>Genetic Drift simulation.</i></p>

5	<p>2/1 L: More problems with small populations: Allee effect and inbreeding, Stochasticity and N_e.</p> <p><u>PART II: Conserving Species.</u></p> <p>2/3 L: Modeling: MVPs, PVA, Establishment Programs.</p>	<p>2/3. Activity: Corridors</p> <p><i>Due: term paper thesis with data figure and relevant citation</i></p>
6	<p>2/8 L: Protecting Species Relocations.</p> <p>2/10 L: Conservation Behavior and Wildlife Conflict, Wolves.</p> <p><i>Draft of term paper due for peer review.</i></p>	<p>2/10</p> <p>Activity: Mock Trial</p>
<u>PART III: Conserving Ecosystems</u>		
7	<p>2/15 L: Conserving Imperiled Species-- ESA and other laws protecting species.</p> <p>2/17 L: Public lands/timber projects.</p> <p>Term paper DUE</p> <p><i>See schedule for abstract postings and comments.</i></p>	<p>2/17.</p> <p>Activity: marine reserves</p>
8	<p>2/22 L: Protected areas and restoration.</p> <p>2/24 L: Reserve planning, Corridors.</p>	<p>2/24</p> <p>Organize Group Project.</p> <p>Activity TBA.</p>
9	<p>3/1 L: Where to designate Protected Areas.</p> <p>3/3 L: GAP analysis, Conservation in the Matrix.</p>	<p>3/3</p> <p><i>Endangered Species Recovery Plan</i></p> <p><i>Group presentations</i></p>
10	<p>3/8 L: Urban Conservation</p> <p>3/10 L: Impact of Conservation Efforts and Conclusions.</p> <p>Final Recovery Plan Essay due Friday.</p>	<p>3/10 <i>Participatory discussion on "Comment on issues" for credit assignment</i></p>

CAMPUS RESOURCES TO SUPPORT YOUR LEARNING:

See links in Welcome Module for more info and resources: [General Remote Education Resources: https://remote.uoregon.edu/](#)

Tutoring and Academic Engagement Center <https://engage.uoregon.edu/>

Counseling Center <https://counseling.uoregon.edu/>

The University of Oregon Counseling Center provides students with confidential consultation. **Their number is (541) 346-3227.** Students often believe that their issues are not “severe” enough for them to call, but at the Counseling Center, there is no problem too small.

Accessible Education Center The University of Oregon is working to create inclusive learning environments. If there are aspects of the instruction or design of this course that result in barriers to your participation, please notify us as soon as possible. You are also encouraged to contact the Accessible Education Center. If you are not a student with a documented disability, but you would like for us to know about class issues that will impact your ability to learn, we encourage you to come visit during office hours so that we can strategize how you can get the most out of this course. (541) 346-1155, <https://aec.uoregon.edu/>

Center for Multicultural Academic Excellence (CMAE) mission is to promote student retention and persistence for historically underrepresented and underserved populations. We develop and implement programs and services that support retention, academic excellence, and success at the UO and beyond. We reaffirm our commitment to all students, including undocumented and tuition equity students. Located on the 1st Floor of Oregon Hall (541) 346-3479, cmae@uoregon.edu

The **UO Access Shuttle** is an on-campus ride service provided at no cost to students with conditions that limit mobility. More information and a sign-up form can be found on the parking & transportation department website: <https://parking.uoregon.edu/content/access-shuttle>.

Safe Ride 541-346-7433 ext 2 pages.uoregon.edu/saferide

Safe Ride is an **assault prevention shuttle** that works to provide free, inclusive, and accessible alternatives to traveling alone at night for **UO students, faculty, and staff.**

Discrimination and Harassment

Prohibited Discrimination and Harassment

Any student who has experienced sexual assault, relationship violence, sex or gender-based bullying, stalking, and/or sexual harassment may seek resources and help at safe.uoregon.edu. To get help by phone, a student can also call either the UO’s 24-hour hotline at 541-346-7244 [SAFE], or the non-confidential Title IX Coordinator at 541-

346-8136. From the SAFE website, students may also connect to Callisto, a confidential, third-party reporting site that is not a part of the university.

Students experiencing any other form of prohibited discrimination or harassment can find information at respect.uoregon.edu or aaeo.uoregon.edu or contact the non-confidential AAEO office at 541-346-3123 or the Dean of Students Office at 541-346-3216 for help. As UO policy has different reporting requirements based on the nature of the reported harassment or discrimination, additional information about reporting requirements for discrimination or harassment unrelated to sexual assault, relationship violence, sex or gender based bullying, stalking, and/or sexual harassment is available at [Discrimination & Harassment](#).

Reporting

The instructor of this class is a Student-Directed Employee. As such, **if you disclose to me, I will respond to you with respect and kindness. I will listen to you, and will be sensitive to your needs and desires. I will not judge you. I will support you.** As part of that support, I will direct students who disclose sexual harassment or sexual violence to resources that can help. **I will only report the information shared to the university administration when you as the student requests that the information be reported** (unless someone is in imminent risk of serious harm or is a minor). Please note the difference between ‘privacy’ and ‘confidentiality.’ As a Student-Directed Employee I can offer privacy because I am not required to report certain information to the university. However, I cannot be bound by confidentiality in the same way that a counselor or attorney is. Confidential resources such as these means that information shared is protected by federal and state laws. Any information that I as a student-directed employee receives may still be accessed by university or court proceedings. This means, for example, that I could still be called as a witness or required to turn over any related documents or notes that I keep.

Please note also that I am required to report all other forms of prohibited discrimination or harassment to the university administration. Specific details about confidentiality of information and reporting obligations of employees can be found at titleix.uoregon.edu.

Mandatory Reporting of Child Abuse

UO employees, including faculty, staff, and GEs, are mandatory reporters of child abuse. Child abuse pertains to individuals who are under the age of 18. This statement is to advise you that your disclosure of information about child abuse to the instructor may trigger my duty to report that information to the designated authorities. Please refer to the following links for detailed information about mandatory reporting: [Mandatory Reporting of Child Abuse and Neglect](#).

Please reach out!

Life at college can be very complicated. Students often feel overwhelmed or stressed, experience anxiety or depression, struggle with relationships, or just need help navigating challenges in their life. If you're facing such challenges, you don't need to handle them on your own--there's help and support on campus.

As your instructor if I believe you may need additional support, I will express my concerns, the reasons for them, and refer you to resources that might be helpful. It is not my intention to know the details of what might be bothering you, but simply to let you know I care and that help is available. Getting help is a courageous thing to do—for yourself and those you care about.

Please don't hesitate to reach out to me or to others on campus.

University Health Services help students cope with difficult emotions and life stressors. If you need general resources on coping with stress or want to talk with another student who has been in the same place as you, visit the Duck Nest (located in the EMU on the ground floor) and get help from one of the specially trained Peer Wellness Advocates.

University Counseling Services (UCS) has a team of dedicated staff members to support you with your concerns, many of whom can provide identity-based support. All clinical services are free and confidential. Find out more at counseling.uoregon.edu or by calling 541-346-3227 (anytime UCS is closed, the After-Hours Support and Crisis Line is available by calling this same number).

Basic Needs

Example: Any student who has difficulty affording groceries or accessing sufficient food to eat every day, or who lacks a safe and stable place to live and believes this may affect their performance in the course is urged to contact the Dean of Students Office (346-3216, 164 Oregon Hall) for support.

The Student Sustainability Center also provides help including free “produce drops”.

<https://emu.uoregon.edu/sustainability>

The UO Basic Needs Resource Guide includes resources for food, housing, healthcare, childcare, transportation, technology, finances, and legal support.