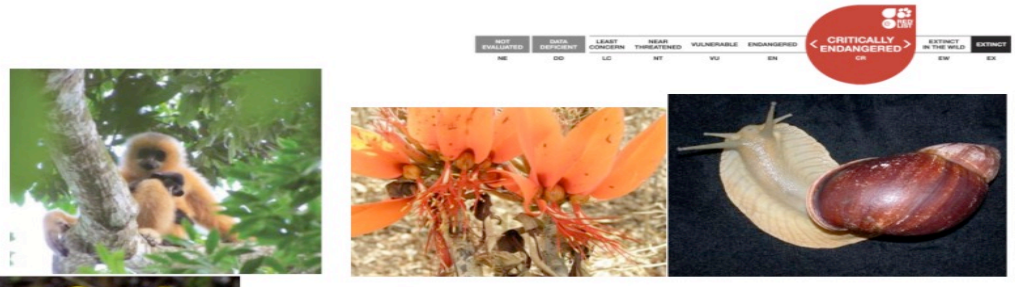
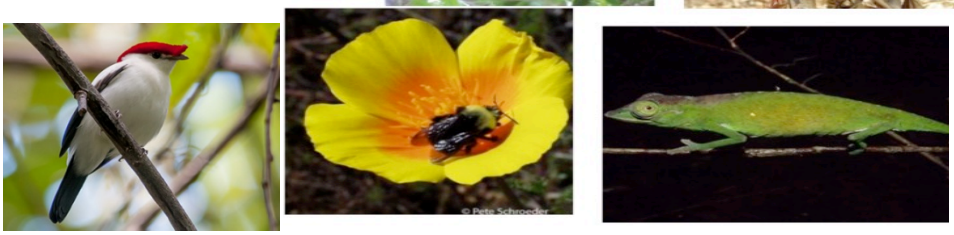
IUCN Red List
https://www.iucnredlist.org/





Antilophia bokermanni (Araripe manakin)
Nomascus hainanus (Hainan Gibbon)
Erythrina schliebenii (coral tree spp.)
Megalobulimus grandis (Brazilian land snail)
*Bombus franklini (*Franklin's Bumble Bee)
Calumma tarzan (Tarzan's chameleon)

Biology 374 "Conservation Biology"

Instructor: Dr. Debbie Schlenoff schlenof@uoregon.edu
Office hours: Wednesdays 10:30am and by appointment in 15A Klamath

GEs/Discussion Leaders:
Claire Goodfellow cgoodfel@uoregon.edu Office Hr: Friday 3:00pm in 32 KLA
Cory LeeWays cleeway2@uoregon.edu Office Hr: Tuesday 2:00pm in 32 KLA

BULA (Undergraduate teaching associate): Jack Peplinski jpeplin5@uoregon.edu
SLP Scholar: Sky Ramirez-Doble skyr@uoregon.edu

SCIENCE LITERACY PROGRAM

SLP courses include courses for science majors and General Education courses taught by teams of faculty, graduate fellows, and undergraduate scholars, who will include opportunities for you to engage with the class topics through a variety of activities. For more information about the program scilit.uoregon.edu

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.

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 interpreting graphs and analyzing journal articles.
- Improve verbal and written communication skills.
- Examine how conservation biology relates to our own lives.
- Contribute to habitat restoration.

- Gain an appreciation for the diversity of the natural world!

Website: All Course documents will be posted on the Canvas Course Website.

Course Format

Lectures. 12:00-1:20 MW in 112 Lillis

You will be responsible for all material presented in lecture. The course schedule is tentative and subject to change; adjustments will be announced in class.

Lecture meetings will be a mix of lecture and discussion. Discussions will include questions on assigned readings, so I have a strong expectation that you will have read the material *before* coming to class and arrive ready to participate. There are group and writing activities that occur during lecture. It is our expectation that you participate in these activities. Your active involvement promotes understanding of the material and preparation for exam questions.

There is a strong positive correlation between attendance in lecture and class grades.

Lecture PowerPoint slides are available on Canvas. Please keep in mind that these are outlines for your convenience in organizing notes. They are not meant to serve as a complete set of lecture notes when studying for the exams.

Questions are welcome and encouraged during and after lecture, during office hours, and via e-mail.

Discussion Sections Thursdays (9, 10, 11:00am) HUE 130. Please attend the section for which you are registered. Participation in discussion sections is a required part of this class and will count toward your final grade. Occasionally there will be short assignments associated with discussion section activities. These will be announced in class and on Canvas. Sections will provide an opportunity to explore some of the topics presented or to engage in participatory group activities. Project presentations will occur in section.

Readings, mostly journal articles from the scientific literature, are **required** reading for this course. Readings will be available on Canvas. The readings will be announced in class and on Canvas. We will be actively engaged in discussing the readings during class so please read them *before* the due date. To get the most out of each of the readings, you will be asked to submit written answers to guided reading questions.

Grading Evaluation:

42% **Assessment (Exams)**

- *21%* Midterm
- *21%* Final

40% **Projects**

- *11%* Endangered Species Group Project
- *22%* Term paper (includes abstract posting and Canvas discussion board comments)
- *5%* Service Learning project
- *2%* Report on out-of class talk or presentation attended

18% **Lecture Readings and Discussion Section**

- *8%* Discussion Section Participation and Assignments
- *10%* Reading Quizzes/Reading Questions

Total = 100%

Exams: Exams will include material from the lectures, readings, in-class activities, discussion sections, and the video clips shown in class.

Exams will be mixed format (short answer, multiple choice, short essay). Details will be announced in class.

Make-up Exam Policy: **There will be NO make-up exams** except in the case of a documented severe medical condition or other extreme documentable emergency. It is your responsibility to contact the instructor as soon as possible.

Endangered Species Group Project
You will work in groups of three to create a presentation focused on an endangered species listed on the IUCN Red List. Your presentations will be evaluated to determine how well you have described the conservation needs of your focal species and developed a plan for their recovery. You will be expected to answer questions about your species and to be an inquisitive audience toward other groups. Presentations are due 4/25. Your group will be randomly assigned to one of the in-class presentation sessions. You will receive more information about what your project should include and how it will be evaluated in discussion section and on Canvas.

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 which will be handed in as a hard copy *and* submitted via Canvas Vericite on 5/23. You will also post an abstract of your paper electronically on Canvas and will be expected to comment on some of your colleagues' abstracts and respond to comments from other students in the class. More details about the project requirements will be provided in class and on Canvas.

Discussion Activities Your score for each week will be determined by attendance, participation, and completion of any assigned exercises. May include check-in assignments on projects.

Reading Quiz: We will present a short quiz on the readings and/or assess written answers to questions based on the readings twelve times during the term. Ten of these will count toward your final grade. You can miss two without penalty. Make-ups will not be administered.

Class Participation This course requires more than sitting as a warm body in class. Please come to class prepared to participate in self-reflection, group work, and class discussions. Participation includes respect for your learning community by being on time and prepared, turning off cell phones, and paying attention during class.

Service Learning Project: Participation and write-up
You will do a short service project (part of a day) and write a reflection paper about your work and how it relates to conservation concepts. A separate information sheet will provide details. Write-ups are due within one week of your event.

Out of class presentation: April 23 at 7:20pm. Noah Strycker in 177 Lawrence Hall, Birds of the Photo Ark. If you cannot make this event, we will post other opportunities to attend conservation-related presentations. See: https://noahstrycker.com/

https://www.nationalgeographic.org/projects/photo-ark/?utm_source=nationalgeographic.com&utm_content=animals_kicker&utm_campaign=photoark&utm_medium=referral

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 come visit us, so we can meet you and learn more about your interests. 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. Note that I will also stay in the classroom after lecture to speak with anybody who wants to ask questions, or discuss their interests or concerns.

A few things to help you succeed in this course

1. Attend classes.
2. Complete the readings and assignments before class.
3. Participate and engage in every class activity.
4. Attend office hours and review sessions.
5. When questions arise, send me an email, see me after class, or visit office hours.
6. Start your projects early. As you develop your ideas for be curious, detailed, and diligent.
7. Keep track of all your assignments with the course calendar and transfer everything to your personal calendar throughout the term so there are no surprises.
8. Study material over a number of relatively short sessions with repeated review. Interacting with the material is a good way to learn it. Don't just read it- Write it, explain it, and discuss it.

Class Courtesy

Please arrive in class on time. Late arrivals distract the instructor and the other students. Please turn off cell phones during the class meeting times. Use your laptop *only* for class activities. Do not leave class early unless you have cleared it with the instructor in advance. Ask questions if you did not hear or understand something. Contribute to your group: Everybody is expected to come to class prepared to discuss the readings and to engage in small group discussion.

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 difference 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.

Academic integrity

All students will be expected to adhere to the University's guidelines on academic integrity as outlined in the Student Conduct Code: https://policies.uoregon.edu/vol-3-administration-student-affairs/ch-1-conduct/student-conduct-code. As detailed in the policy, academic misconduct means the violation of university policy involving academic integrity. This includes cheating ("any act of deception by which a student misrepresents or misleadingly demonstrates that the student has mastered information on an academic exercise that the student has not mastered"), and plagiarism ("using the ideas or writings of another as one's own.") The instructor has a zero tolerance policy for academic dishonesty. All persons involved in academic dishonesty will be disciplined in accordance with University regulations and procedures.

Campus resources 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.
Tutoring and Academic Engagement Center (https://engage.uoregon.edu/services/) Drop-in math and writing support in addition to tutoring, study skills support, and Class Encore. Located in the 4th Floor Knight Library (541) 346-3226, engage@uoregon.edu.

Counseling Center Call anytime to speak with a therapist who can provide support and connect you with resources. Located on the 2nd Floor of the Health Center(541)346-3227

Accessible Education Center The University of Oregon is working to create inclusive learning environments. The instructor believes strongly in creating 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. Located on the 1st Floor of Oregon Hall (541) 346-1155, uoaec@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.

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 receive 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.

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**. We are a schedule-ahead service and riders can (1) call once we open to schedule a ride with a dispatcher or (2) leave a voicemail on the day of their ride request. We do not call riders ahead of time to confirm due to capacity constraints, but riders are always welcome to call us to double-check that their ride was scheduled. We are a feminist, 'for-the-students/by-the-students' organization and operate out of the Women's Center in EMU 12F.
Operating hours:
Spring term Sunday - Thursday | 7p - midnight
Friday + Saturday | 7p - 2a

Policy and rules: 1. We are a **schedule-ahead service**, we **do not call ahead**, and we can only wait for riders for 5 minutes at their pick-up time and location.
2. We only give rides to groups of **3 or fewer** to prioritize groups that are at higher risk. 3. We are a **free service** and do not accept tips.

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.
The University of Oregon Counseling Center provides students with confidential consultation 24 hours a day, 7 days a week. From 8-5 Monday through Friday you will be connected with the front desk, and after hours, the same number connects to their support line. **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.

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 barriers to your participation. You are also encouraged to contact the Accessible Education Center in 155 Oregon Hall at 541-346-1155 or uoaec@uoregon.edu.

The following tentative schedule is a work in progress and is subject to change. Changes will be announced in class and on Canvas.

Check Canvas for assigned readings and reading questions.

WK	LECTURE TOPICS and READINGS	DISCUSSION SECTION (Thursdays)
PART I: Identifying the Problems		
1	**4/1 L:** Introduction to Conservation Biology **Read the syllabus!** **4/3 L:** Biodiversity, Species concepts **Reading: What is Conservation Biology? (Soule)** **Assigned TED talk: The Power of belief -- mindset and success | Eduardo Briceno | https://www.youtube.com/watch?v=pN34FNbOKXc**	**4/4 Discussion intro.** Endangered Species Project description. Form project groups. Activity: *Measuring biodiversity*
2	**4/8 L:** Conservation values, Ecosystem Services **Reading: *Check Canvas for information*** **4/10 L:** Extinction and Threats to Biodiversity **Reading: *Check Canvas for information***	**4/11** *Measuring biodiversity* activity continued. Finalize focal species for project. Identify a reference with a relevant data figure.
3	**4/15** L: Threats to biodiversity I: Habitat loss & fragmentation **Reading: *Check Canvas for information*** **4/17 L:** Threats to biodiversity II: Overexploitation, Invasives, and Climate change **Reading: *Check Canvas for information***	**4/18 Check-in on presentations-- Bring worksheet. Bring laptops if available.** *Genetic Drift simulation*
4	**4/22 L:** Conservation genetics and the problems with small populations **Reading** **4/24 L:** More problems with small populations: Allee effect and inbreeding, Stochasticity and Ne **Reading**	**4/25 All Presentations Due.** **Presentations Session 1** **Begin to identify potential individual term paper topics.**
PART II: Conserving Species		
5	**4/29 L:** Modeling: MVPs, PVA, Protecting species, Establishment Programs **Reading** **5/1 L:** Midterm EXAM	**5/2 Presentation Session 2**. *Submit term paper thesis with data figure and relevant citation on Canvas by 5/5.*
6	**5/6** L: Conservation Behavior **Reading** **5/8** Conserving Imperiled Species-- ESA and other laws protecting species **Reading**	**5/9** **See hand-out in preparation for class activity.**

PART III: Conserving Ecosystems		
7	**5/13 Protected Areas: Reserve Programs** **Reading** **5/15 Guest Lecture: Josh Laughlin of Cascadia Wildlands (plus wolves and trophic cascades.)** **Reading:** (Ripple and Beschta) Restoring Yellowstone's aspen with wolves.	**5/16** Assignment due: Bring a *complete draft* of your term paper to section for assignment credit. **Peer Review Term paper**
8	**5/20 L:** Protected areas and restoration **Reading** **5/22 L** Reserve planning, Corridors. Where to designate Protected Areas **Reading**	**5/23 Term paper DUE.** **See schedule for abstract postings and comments.** *Activity: marine reserves*
9	**5/27** Memorial Day- NO Meeting. **5/29 L:** GAP analysis, Conservation in the Matrix **Reading**	**5/30 Complete posted reading in preparation for section activity.** **Due:** *Mock Trial*
10	**6/3** Urban Conservation **Reading** **6/5 L:** Impact of Conservation Efforts and Conclusions	**6/6 TBA Participatory discussion and last assignment for credit**
	FINAL EXAM Monday, June 10 at 10:15	