

**Conservation Biology, BIOL 3470  
Spring Semester, 2017  
3 Credits**

**Community Engaged Learning Course  
Fulfills Intellectual Explorations-Applied Sciences Gen-Ed Requirement**

**Instructor** – Amy Sibul

**Email** [-amy.sibul@utah.edu](mailto:amy.sibul@utah.edu)

**Phone** – 801-585-7472/(text cell 801-891-2819 for emergencies)

**Office Location** – Biol 086, Main Biology Bldg

**Drop-in Office Hours** – TBD

**TH 2:00-3:20**

**Location TBD**

**Graduate Teaching Assistant:** Graham Goodman, [grahamgoodman@gmail.com](mailto:grahamgoodman@gmail.com)

**Lab (Biol3485) Instructor:** Mark Chynoweth, [chynoweth.mark@gmail.com](mailto:chynoweth.mark@gmail.com)

**Community Engaged Learning TA:** Colter Dye, [colter.dye@gmail.com](mailto:colter.dye@gmail.com)

### **COURSE OVERVIEW**

This class will focus on the defining principles of ecology and conservation biology. We will explore the nature of rarity, how human impacts influence rarity in the natural world, and what actions we can take to reduce or reverse the negative impacts. The class will discuss current conservation management, monitoring, and research techniques, with a particular emphasis on habitat and species interactions. Students will also get hands-on experience in applying conservation techniques by collaborating with conservation-oriented community partners working in the field.

### **EXPECTED LEARNING OUTCOMES**

**By the end of this course students should be able to:**

1. Define major principles, scales, patterns and research methods of conservation biology
2. Identify the major human threats to biodiversity and the key methods for diminishing those impacts and restoring degraded populations, communities, and ecosystems
3. Explain the defining processes in population biology and metapopulation dynamics
4. Engage with a community partner to apply techniques for 1) identifying priorities for species and habitat conservation; 2) maintaining population connectivity; 3) monitoring rare species populations; and, 4) implementing ecological restoration actions.

### **INSTRUCTOR-TA-STUDENT INTERFACE**

**CANVAS** will be the expected method of communicating outside of class lectures. Lecture slides, class assignments & announcements, dates of exams, community engaged learning opportunities, grades etc. will all be posted to CANVAS. You are expected to check the site regularly and stay up to date.

### **COURSE TEXT - Required**

Primack & Sher. *An Introduction to Conservation Biology*, 2016.

This textbook is an excellent reference for class lectures. Assigned reading is required and will complement the lecture material.

### **INSTRUCTION METHODS**

This course will be taught using a variety of methods including lectures, group discussions, guest speaking, project site visits and community engaged learning. The expectation for the class atmosphere is one of reciprocity and open-mindedness. We will explore ideas from multiple points of view, including your point of view. As such, you are expected to participate in group discussions,

answer inquiries, and ask questions posed by the instructor, community partners, and fellow students.

## **CLASS POLICIES**

**Attendance & Participation:** Please attend class. Attendance is required for work with the community partners and in-class activities, and can not be made up later (see dates below). It is not required for normal lectures, but strongly suggested. Those who attend class will understand the class material better and likely have higher quiz & exam scores. Quiz & exam questions will come from presentations by the instructor and guest lectures by community partners.

**Cell Phones & Computers:** Feel free to use your laptop or iPad during class to view lecture slides and take notes. However, please do *not* feel free to surf the web, text your friends, or engage in behaviors that are generally considered rude during a class.

**Cheating/Plagiarism:** Not tolerated. Considered academic misconduct. Standard U of U policy will be followed which can include a grade reduction, a failing grade, probation, suspension or dismissal from a program or the University, or revocation of a student's degree or certificate, community service, and a written statement of misconduct put into your student and professional record.

## **COURSE GRADES**

### **Quizzes, Exams & Assignments**

**Quizzes:** There will be 3 non-cumulative mid-semester quizzes based on class lectures, guest lectures, & group presentations. Expect a mix of fill in the blank, true or false, multiple choice and short paragraph answers.

**Final Exam:** Cumulative., expect a mix of fill in the blank, true or false, multiple choice and short paragraph answers. <http://registrar.utah.edu/academic-calendars/final-exam-schedule.php>

**In-class Activities:** those of you who come to class regularly and reliably will be rewarded. In class activities range from 10-25 pts each for a total of 100 pts.

**Group Presentation:** You will be assigned to a group that will choose a current conservation biology topic to research and present to class. See below for details.

**Community Engaged Learning & Reflection Essays:** You will need to complete the class-assigned CEL work with the community partners, participate in 2 in-class group discussions, and submit a final reflection essay based on your CEL experiences. See below for details.

### **Evaluation Methods & Criteria**

**Possible Points for class: 900**

**Quizzes & Final Exams 400 points possible.**

**In-Class Quizzes:** 200 possible points for 2 best grades out of 3. Each quiz is worth 100 pts. I will automatically drop the worst of your 3 in-class quiz grades. There will be NO MAKEUP quizzes. If you are absent, for any reason, on quiz day, that zero automatically becomes your dropped grade. **Dates:** TBA

**Final Exam:** 200 possible points on cumulative final exam. **Date:** TBA

**In-class activities:** 100 pts possible, attendance required, no makeups

**Group presentation:** 150 points possible, graded on content, clarity, and professionalism of style. 50 of the 150 points will come from peer review, 10 from meeting with the class librarian. **Dates:** Oct 26 & 28 **Description:** Students will be assigned to a small group and will choose a current conservation biology topic to research. You will then develop a 10 min Powerpoint presentation for the class. Presentations should include a background description, identify "stakeholders", describe relationships to broader conservation issues, and cite sources. Research should take place online AND in the library. You are also encouraged to interview working conservation biology professionals.

**Community Engaged Learning:** 250 points possible.

- There will be 8 days of required in-class CEL Activity attendance. Each day's attendance and participation counts as 20 points. Total possible points earned for this activity is 140,

which gives you one free day for illness or other unexpected absence. Use this free day wisely!

- 2 Breakout Reflection Discussions (20 points each) graded on attendance and participation. *Attendance is mandatory. You will not be able to make these up.* **Dates:** Th Jan 26, Th Apr 26
- Final CEL Reflection Essay (70 points) graded on depth of content, connectivity to class topics, & grammar. **Date:** Th Apr 20 **Description:** Your essay should be a minimum of 3 full pages of text, double spaced, 12 pt font, and normal margins. Content should reflect on your community engaged learning experiences, your interactions with the community partners and their missions, how they connect with this and other class lectures, what you have learned while planning/working, etc. It should be personal, thoughtful, and connective. Creativity is encouraged: poetry, photography, and other artwork can augment your words.

## CALENDAR

Week/Date	Content	Reading	Assignments
<b>Week 1</b> T Jan 10 H Jan 12	Syllabus review/ What is Conservation Biology & Biodiversity? (L1) Value of Biodiversity L2) ( <i>Guest: Librarian Amy Brunvand</i> )	Chapter 1 Chapter 3	<b>Librarian visit-research prep</b>
<b>Week 2</b> T Jan 17 H Jan 19	Guest lecture: CEL Community Partner Bruce Pavlik RBG Conservation Lab The Nature of Rarity (L3)	N/A Chapter 2	<b>CEL attendance</b>  ( <i>Meet in research groups</i> )
<b>Week 3</b> T Jan 24 H Jan 26	Threats to Biodiversity (L4) CEL Reflection Discussion 1: <i>First impressions</i>	Chapter 4 N/A	<b>In-class time for group presentations</b> <b>CEL attendance</b>
<b>Week 4</b> T Jan 31 H Feb 2	Extinction & Endangered Spp (L5) Utah's Listed Spp (L6)	Chp 5 pgs 151-172 & Chp 6 pgs 212-232	<b>In-class activity</b> N/A
<b>Week 5</b> T Feb 7 H Feb 9	Quiz 1 Population Dynamics (L7)	N/A Chp 5 pgs 172-184	<b>Quiz</b> <b>In-class activity</b>
<b>Week 6</b> T Feb 14 H Feb 16	Quiz Review/ Applied Population Bio (L8) Ex Situ conservation Techniques (L9)	Chp 6 pgs 194-211 Chapter 7	<b>N/A</b> <b>In-class time for group presentations</b>
<b>Week 7</b> T Feb 21	Conservation Tools (L10)	N/A	

H Feb23	Guest Lecture: CEL Community Partner Hawkwatch International, Kestrel Nest monitoring 1	N/A	<b>CEL Attendance</b>
<b>Week 8</b> T Feb 28 H Mar 2	Quiz 2 Protecting Habitat /Quiz Review (L11)	Chapter 8	<b>QUIZ</b> N/A
<b>Week 9</b> T Mar 7 H Mar 9	<b>Group Presentations</b> <b>Group Presentations</b>	N/A	N/A
<b>Week 10</b>	<b>SPRING BREAK</b>		N/A
<b>Week 11</b> T Mar 21 H Mar 23	Invertebrate Conservation: Pollinators and Beyond (L12) RBG Conservation Lab visit 1	N/A N/A	<b>In class activity</b> <b>CEL Attendance</b>
<b>Week 12</b> T Mar 28 H Mar 30	Ecosystem Conservation & Sustainable Development (L13) Quiz 3	Chapter 11 N/A	N/A <b>QUIZ</b>
<b>Week 13</b> T Apr 4 H Apr 6	Monitoring Kestrel Nests 2 Quiz Review /Restoration Ecology (L14)	N/A Chapter 10	<b>CEL Attendance</b> N/A
<b>Week 14</b> T Apr 11 H Apr 13	RBG Conservation Lab visit 2 CEL Reflection Discussion 2: <i>Conclusion</i>	N/A N/A	<b>CEL Attendance</b> <b>CEL Attendance</b>
<b>Week 15</b> T Apr 18 H Apr 20	Kestrel Nest monitoring 3 Conservation Biology & the Future (L15)	N/A Chapter 12	<b>CEL Attendance</b> <b>CEL Refl. Essay</b>
<b>FINAL</b>	<b>TBA</b>		

*Note:*

*This syllabus is meant to serve as an outline and guide for the course. Please note that the instructor may modify it at any time so long as reasonable notice of the modification is provided to students. The instructor may also modify the General Course Outline at any time to accommodate the needs of a particular class. Should you have any questions or concerns about the syllabus, it is your responsibility to contact the instructor for clarification.*

**Academic Conduct** In order to ensure that the highest standards of academic conduct are promoted and supported at the University, students must adhere to generally accepted standards of academic honesty. Acts of academic misconduct include cheating, plagiarizing, research misconduct, misrepresenting one's work, and inappropriately collaborating. Suspected cases of academic misconduct are dealt with according to the rules found in the Student Code, University Policy 6-400(V): <http://www.regulations.utah.edu/academics/6-400.html>. All instances of academic misconduct are recorded in a University database, which is shared by all academic units on campus.

**Americans with Disabilities Act (ADA) Statement** The University of Utah seeks to provide equal access to its programs, services and activities for people with disabilities. If you will need accommodations in the class, reasonable prior notice needs to be given to the Center for Disability Services, 162 Olpin Union Building, 581-5020 (V/TDD). CDS will work with you and the instructor to make arrangements for accommodations. All information in this course can be made available in alternative format with prior notification to the Center for Disability Services. ([www.hr.utah.edu/oeo/ada/guide/faculty/](http://www.hr.utah.edu/oeo/ada/guide/faculty/))

**Wellness Statement** Personal concerns such as stress, anxiety, relationship difficulties, depression, cross-cultural differences, etc., can interfere with a student's ability to succeed and thrive at the University of Utah. For helpful resources contact the Center for Student Wellness - [www.wellness.utah.edu](http://www.wellness.utah.edu); 801-581-7776.

**Student Support** If you are a **student veteran**, I want you to know that the U of Utah has a Veterans Support Center on campus. They are located in Room 161 in the Olpin Union Building. Hours: M-F 8-5pm. Please visit their website for more information about what support they offer, a list of ongoing events and links to outside resources: <http://veteranscenter.utah.edu/>. Please also let me know if you need any additional support in this class for any reason. If you are a member of the **LGBTQ community**, I want you to know that my classroom is open and non-discriminatory.. Additionally, please know that the U of Utah has an LGBT Resource Center on campus. They are located in Room 409 in the Oplin Union Building. Hours: M-F 8-5pm. You can visit their website to find more information about the support they can offer, a list of events through the center and links to additional resources: <http://lgbt.utah.edu/>. Please also let me know if there is any additional support you need in this class.

If **English is your second language**, please be aware of several resources on campus that will support you with your language development and writing. These resources include: the Department of Linguistics ESL Program (<http://linguistics.utah.edu/esl-program/>); the Writing Center (<http://writingcenter.utah.edu/>); the Writing Program (<http://writing-program.utah.edu/>); the English Language Institute (<http://continue.utah.edu/eli/>). Please let me know if there is any additional support you would like to discuss for this class

I have thoroughly read the entire syllabus for Spring 2017 Biol3470, Conservation Biology. I have asked for clarifications if needed, and I understand the course requirements and grading criteria.

\_\_\_\_\_ Print your Name

\_\_\_\_\_ Signature and Date