Course Description:

This course focuses on the scientific foundations of conservation. We will address major threats to biodiversity and discuss approaches for overcoming these threats in ways that balance the needs of people and nature. Students will gain a greater understanding of the major principles and contemporary issues in Conservation Biology, while practicing techniques for communicating conservation science to diverse audiences. The course is intended for upper-division undergraduate students. This interactive class emphasizes student involvement and participation. Although there will be regular lectures by the instructor and guest speakers, the focus of the course will be on student-led in-class discussions, writing assignments, debates and presentations.

Assigned Readings:

Course materials include articles from the primary literature and occasionally from other media sources. All course materials will be posted on the class canvas page.

Discussions:

During many class periods we will have an in-class discussion focused on papers from the scientific literature. Typically, a team of 2-3 students will be assigned to lead each discussion section. The lead students are expected to submit 3-5 discussion questions on the reading for posting on canvas no later than the class period before the discussion. Students not leading discussion must come to each discussion section with brief, typed answers to these discussion questions and be prepared to discuss and critique the paper. At the start of the discussion, the lead students will provide a thorough yet concise (no more than 5 minutes!) overview of the paper. In the summary, you should: 1) review the major points of the paper, 2) highlight novel results and conclusions, 3) relate the paper to other readings or discussions in class or your own knowledge, and 4) raise questions or objections you have with the methods, results, and/or conclusions. Following the summary, the lead students should then be prepared to actively generate and facilitate discussion for the rest of the allocated time. You will be assigned a grade for leading the discussion. A grading rubric will be posted on Canvas and reviewed in class at the beginning of the semester.

Debates:

There will also be two debates during the semester that focus on important emerging issues in conservation biology. Details on the topic and structure of the debates will be provided in class.

Op-Ed Article and Elevator talk:

Each student will be required to write a brief (300-500 word) “Op-ed” on a current conservation biology topic or issue of their choice. The article should be written for an appropriate newspaper (may be local, regional, national or international, depending on the scope of your issue). We will workshop the articles in class and your classmates will provide suggestions for improvement before submission to the instructors and (optional) submission to the newspaper. You will also give a 60-90 second “elevator talk” on your topic in class towards the end of the semester. More details on this assignment will follow.

Term Paper & Oral Presentation:
Each student will use the primary literature to research and prepare a literature review on a conservation biology topic. Your paper should consolidate what is known about your topic, highlight information gaps, and set priorities for future research and practice. More detailed information on this assignment will be provided early in the semester, including examples of review papers. The paper will be submitted mid-semester, at which point it will be graded and receive a formal peer review by one other student and the instructor. Students will then be expected to revise the paper according to feedback from the peer review and instructor, and submit a revised paper along with a letter with explaining how comments were addressed towards the end of the semester.

Each student will also present their paper topic before the class in the style of a speed talk at a scientific conference (5 minute powerpoint talk, 2-3 minutes of questions from the audience).

Final:

The final exam will be a take-home exam consisting of short answer and essay questions and will be designed to encourage students to review and synthesize course material. Exam questions will be taken from lectures, discussions, debates, presentations, and assigned readings. An alternative exam date will only be approved if you speak with me at least several weeks in advance with a valid reason.