FW 455

PRINCIPLES OF CONSERVATION BIOLOGY

FALL 2014

TR 10-11:15 107 Wagar  3 credits

Instructors: Dr. Kevin Crooks and Dr. Liba Pejchar

Department of Fish, Wildlife, and Conservation Biology

Dr. Kevin Crooks
Office: 115 Wagar
Phone: 970-491-7936
Office hours: 1:30-2:30 Thursday or by appointment
E-mail: kevin.crooks@colostate.edu

Dr. Liba Pejchar
Office: 234 Wagar
Phone: 970-491-1819
Office hours: by appointment
E-mail: liba.pejchar@colostate.edu

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 course emphasizes student involvement and participation. Although there will be regular lectures by the instructors and guest speakers, the focus of the course will be on student-led in-class discussions, writing assignments, debates and presentations.

Assigned Readings:

The optional textbook for the course, available in paperback from the CSU bookstore, will be an established conservation biology text:

A Primer of Conservation Biology, Fifth Edition by Richard B. Primack

CourseSmart eBook: ISBN: 978-0-87893-896-4 (180 day subscription). This basic eBook is less expensive, reproduces the look of the printed book exactly, and includes convenient tools for searching the text, highlighting, and note-taking. The eBook is viewable in any Web browser, and via free apps for iPhone/iPad, Android, and Kindle Fire.

This textbook is suggested, but not required; we will recommend that you read a subset of chapters that will compliment material presented in class. Additional course materials include articles from the primary literature and occasionally from other media sources. All course materials will be posted on the class RamCT Blackboard page. To login visit https://ramct.colostate.edu/webapps/login/.

Discussion and Debate

During many class periods we will have an in-class discussion focused on papers from the scientific literature. Typically, a team of 2 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 RamCT no later than the class period before the discussion. Each student in the course must come to each discussion section prepared to discuss these questions and critique the paper. At the start of the discussion, the lead students will provide a concise 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. 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.

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. Make-up or early exams will only be given if you speak with us several weeks prior to the exam with a valid reason.

**Term Paper & Oral Presentation: Literature Review**

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 1 other student and the instructor. Peer reviews will be returned to the author, who will then be expected to revise the paper according to the reviews and submit a final revision toward 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).

**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.

**Grading**

Tentative point allocation for evaluation of students (all late assignments will incur a 10% drop in grade per day):

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Term Paper</td>
<td>450</td>
</tr>
<tr>
<td>First Draft</td>
<td>100</td>
</tr>
<tr>
<td>Revision</td>
<td>50</td>
</tr>
<tr>
<td>Term Paper Peer Review</td>
<td>25</td>
</tr>
<tr>
<td>Oral Presentation (speed talk)</td>
<td>50</td>
</tr>
<tr>
<td>Discussion Lead</td>
<td>25</td>
</tr>
<tr>
<td>Debates</td>
<td>50</td>
</tr>
<tr>
<td>Op-ed</td>
<td>25</td>
</tr>
<tr>
<td>Elevator talk</td>
<td>25</td>
</tr>
<tr>
<td>Participation/Attendance</td>
<td>25</td>
</tr>
<tr>
<td>Final</td>
<td>75</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>450</strong></td>
</tr>
</tbody>
</table>

Cutoffs for grades will be based on the following percentages: 94-100 = A; 90-93 = A-; 88-89 = B+; 84-87 = B; 80-83 = B-; 78-79 = C+; 70-77 = C; 60-69 = D; ≤ 59 = F.

**Academic Integrity**

This course will adhere to the Academic Integrity Policy of the Colorado State University General Catalog and the Student Conduct Code. Plagiarism and all other forms of academic misconduct will not be tolerated.

**Special Needs**

If you have special needs for lectures, assignments or tests, please contact us as soon as possible after the first day of class to explain these needs. Please also speak with me anytime if something should develop later in the semester.