

BIOL/EVPP 318/518: CONSERVATION BIOLOGY

FALL 2019

TR 12-1:15 Robinson Hall B222 3 credits

Instructor: Dr. Travis Gallo

Office: 3018 David King

Office hours: 2-3:30pm Tuesdays or by appointment

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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. 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 readings will be posted on Blackboard.

Textbook (optional):

Richard B. Primack. Essentials of Conservation Biology. Any edition

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 Blackboard and reviewed in class at the beginning of the semester.

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).

Participation:

Attending class is important. There will be 8 participation assignments throughout the semester. These will consist of “responses” to various topics we will be discussing in class. Each response will be worth 5 points and you will need to obtain 25 points for full participation credit.

Midterm and Final Exam:

We will have one midterm and a final exam. The midterm will cover all material up to the previous class period. The final exam will be designed to encourage students to review and synthesize all 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.

Grading

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

	TOTAL POINTS
Term Paper	
First Draft	100 points
Revision	50 points
Term Paper Peer Review	25 points
Oral Presentation (speed talk)	50 points
Discussion Lead	25 points
Discussion/Debate Questions	25 points
Op-ed	50 points
Elevator talk	25 points
Participation/Attendance	25 points
Final	75 points
TOTAL	450 points

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.

Lecture Slides:

I will do my best to post the a PDF of the lecture slides by midnight the night before class. Please note that portions of the posted lecture slides will be missing information that can be filled in during lecture.

Mental Health:

Diminished mental health, including significant stress, mood changes, excessive worry, or problems with eating and/or sleeping can interfere with optimal academic performance. The source of symptoms might be strictly related to your course work; if so, please speak with me. However, problems with relationships, family worries, loss, or a personal struggle or crisis can also contribute to decreased academic performance and I recognize that.

Counseling and Physiological Services (CAPS) <http://caps.gmu.edu> provides mental health services to support the academic success of students. Their free and confidential psychological services include group counseling, skills-based workshops, case management, crisis consultations, time-limited individual counseling as well as faculty and staff consultation. They also have great online resources under the Well-Being tab.

In the event I suspect you need additional support, I will express my concerns and the reasons for them, and remind you of these resources that might be helpful to you. It is not my intention to know the details of what might be bothering you, but simply to let you know I am concerned and that help, if needed, is available.

Getting help is a smart and courageous thing to do -- for yourself *and* for those who care about you.

Notice of mandatory reporting of sexual assault, interpersonal violence, and stalking:

As a faculty member, I am designated as a “Responsible Employee,” and must report all disclosures of sexual assault, interpersonal violence, and stalking to Mason’s Title IX Coordinator per University Policy 1202. If you wish to speak with someone confidentially, please contact one of Mason’s confidential resources, such as Student Support and Advocacy Center (SSAC) at 703-380-1434 or Counseling and Psychological Services (CAPS) at 703-993-2380. You may also seek assistance from Mason’s Title IX Coordinator by calling 703-993-8730, or emailing titleix@gmu.edu.

Academic Integrity:

It is expected that students adhere to the George Mason University Honor Code as it relates to integrity regarding coursework and grades. The Honor Code reads as follows: “To promote a stronger sense of mutual responsibility, respect, trust, and fairness among all members of the George Mason University community and with the desire for greater academic and personal achievement, we, the student members of the University Community have set forth this: Student members of the George Mason University community pledge not to cheat, plagiarize, steal and/or lie in matters related to academic work.” More information about the Honor Code, including definitions of cheating, lying, and plagiarism, can be found at the Office of Academic Integrity website at <http://oai.gmu.edu>

Special Needs:

If you have special needs for lectures, assignments or tests, please contact me 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.