

SYLLABUS
NAT SCI 191: “First Year Seminar”: Conservation Biology 101
Fall 2018

Class Meeting: Fr 9:05AM – 9:55AM (02): Hasbrouck Lab 136
Fr 10:10AM – 11:00AM (01): Hasbrouck Lab 107

Discussion Sections: NA

Office Hours: by appointment

Instructor:

Tanya M. Lama

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Note: please put NAT SCI 191 in the subject header

Course Overview and Objectives: Life on Earth has gone through five mass extinction events caused by volcanic eruptions, ice ages and clashing continents. Scientists are now sounding the alarm on a sixth extinction, predicted to be the most devastating event since the asteroid impact that wiped out the dinosaurs. We will learn about the incredible diversity of life and explore how humans are altering environmental conditions and pushing many species to extinction. Throughout this course we will discuss research findings from experts in wildlife conservation, genetics, climate science, and evolution as we piece together an understanding of extinction, what it means for our future, and what we can do to stop it.

In this course you will explore the field of “biodiversity science,” discover the many forms that biodiversity can take, weigh its value and importance, and understand the processes that maintain and create diversity. You will also build community and develop “survival skills” that will help you evolve, adapt to change, and persist through your time here at UMass. We will use Earth’s five mass extinction events to provide context for contemporary extinction rates and the factors influencing species loss. In this course you will be encouraged to think critically, to formulate your own questions, develop positions on controversial issues and communicate them effectively in discussion with your peers.

Reading: There is no textbook. Instead, important materials relating to each topic will be posted on the course website each week. Once materials are posted, they will remain available on the course Moodle site for the rest of the semester.

Other Course Resources: The course Moodle site provides extensive information about the kinds of careers that are available for life scientists, how to develop skills to become more competitive, graduate testing exams (e.g. MCAT, GRE, etc.), and other useful information.

Required Materials for the lecture: iClicker remote (Have back-up batteries on hand!). You will need to register your remote so that your name is associated with your clicker.

Class culture expectations: Use of laptops, tablets, cell phones, etc. and chatting with your classmates off-topic in class are not allowed. Please give your respectful attention to the speaker(s).

Grading: A possible 101 points can be earned in this course. Participation is at the core of this class. A written assignment is scheduled in the first few minutes of **every class**. Be punctual, or you will miss the opportunity to earn credit for those assignments.

The points are distributed as follows:

Extra credit	1
Attendance & in-class participation	50
Individual assignments	20
Group assignments	15
Final project	15
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101 TOTAL POINTS	

Academic Honesty: No form of academic dishonesty will be tolerated in this course. Academic dishonesty includes, but is not limited to, plagiarism, cheating, and facilitating dishonesty (e.g. using someone else's iClicker). The university's academic honesty policy and the procedures for dealing with suspected dishonesty are described in detail at the Dean of Students Office website: http://www.umass.edu/dean_students/codeofconduct/acadhonesty/

Disclaimer: This syllabus represents the instructor's current plans for the course. Any part of this plan is subject to change without notice due to circumstances beyond our control (e.g. snowstorms, failure of outside speakers to arrive, etc.). To the best of our ability, we will email you with information regarding significant changes in the schedule or curriculum via the Moodle system and your student email.

Attendance Policy: You may miss one class without penalty. Please discuss additional absences with me. **When in doubt, communicate!**

Tentative Lecture Schedule

This is a tentative schedule. Changes may become necessary based on speakers' needs.

Date	Topic
September 7th	Introductions & The Sixth Extinction
September 14th	The Concept of Extinction
September 21st	The "Big Five"
September 28th	Evolution, Natural Selection and Catastrophe
October 5th	Welcome to the Anthropocene
October 12th	Climate
October 19th	Ocean
October 26th	Hotspots
November 2nd	Fragmentation
November 9th	Global transport

November 16th	introducing the final project
November 23rd	NO CLASS
November 30th	Final Project
December 7th	Final Project