ALL MY FRIENDS ARE DEAD: HUMANS DRIVE EARTH'S 6TH MASS EXTINCTION

Instructor: Tanya Lama
Office Hours: by appointment
Email: tlama@eco.umass.edu (please put NAT SCI 191 in the subject header)
Fr 9:05AM – 9:55AM (02): Hasbrouck Lab 136
Fr 10:10AM – 11:00AM (01): Hasbrouck Lab 107

COURSE DESCRIPTION

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.

COURSE GOALS

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.

GRADING/ ASSIGNMENTS

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.

Participation is at the core of this class. We will:

- Arrive to class on time and ready to work
- Participate in class discussion
- Share your ideas in a respectful way
- Stay up to date with course materials

Each week we will introduce a topic and hold a group activity or discussion. Discussion and activities require engagement during class and **will be graded**. Points earned with each assignment will contribute equally to the maximum of 100 points.

Attendance & Participation/ in-class activities	50
Individual Assignments	20
Group Work	15
Final Project	15
Total	**100**

WEEKLY TOPICS
May be subject to change

Date	Topic
September 7th	Introductions & The Sixth Extinction video (2:57)
September 14th	The Concept of Extinction & What is extinction video (2:52)
September 21st	The "Big Five" & The Craziest Extinctions Ever video (4:26)
September 28th	Evolution, Natural Selection and Catastrophe
October 5th	Welcome to the Anthropocene & Vanishing video
October 12th	Climate
October 19th	Ocean
October 26th	Hotspots
November 2nd	Fragmentation
November 9th	Global transport
November 16th	The thing with feathers: introducing the final project
November 23rd	NO CLASS
November 30th	Final Project
December 7th	Final Project

CLASS POLICIES
Classroom conduct: Our classroom is a safe space to express your thoughts, debate, ask questions, and contribute to discussion.

Missing class: You may miss **one class**, although you will need to make up any in-class assignments. If you need to miss more than one class, please discuss it with me to avoid losing attendance / participation points. Your classmates may be depending on you, especially during group projects. Please be respectful of them by letting them know if you will be absent, late, or unprepared for group assignments. **Your peers' review of your performance will contribute to your final grade.**

When in doubt, communicate!

CLASS MATERIALS
There are no required texts. All reading assignments will be accessible online. You will need access to a computer to access materials online.