COURSE INFORMATION

INSTRUCTOR

Dr. Heather Blackburn
Office: 238 Biology
Email: Please use Canvas messages. After the semester: heather.blackburn@colostate.edu
Office hours: By appointment. Available daily after class.

LECTURES M-F 9:00-11:00 AM, 107 Behavioral Sciences Building

SCHEDULE OF TOPICS:

Week	Topics
1	Intro to class; The science of ecology (Chapter 1) Climate and Biomes (Chapter 2) Movement of energy, carbon and nitrogen through ecosystems (Chapters 19, 20) Life histories (Chapter 7)
2	Reproductive strategies (Chapter 8) Population distribution (Chapter 10) Population growth and dynamics (Chapters 11 and 12)
3 (Memorial Day)	Predation and herbivory (Chapter 13) Competition and coexistence (Chapter 15) Mutualisms (Chapter 16) Community structure and succession (Chapters 17, 18)
4	Biodiversity (Chapter 21, 22) Landscapes and fragmentation (Chapter 21) Invasive species

COURSE OBJECTIVES

Ecologists study the distributions and abundances of organisms and how organisms interact with each other and with their environment. In this course you will have the opportunity to learn about ecological patterns and the mechanisms that generate those patterns. You should come out of this class with an increased ability to integrate knowledge from multiple fields of study and to critically evaluate the implications of scientific literature. If you are interested in ecology and natural resources for your career, this class leaves you well positioned to take more specialized courses, and to get jobs or internships.

COMMUNICATION

- I'm always happy to talk about Ecology. Talk to me after class to set up an appointment.
- Please DO ask questions in class!! This keeps the class more interesting and easy to understand.
- Please send me a Canvas message or talk with me to let me know if we are going too slowly or too quickly, or if you would like more detail as we go. Also, if there are any topics that you would particularly like to focus on during the semester, please let me know as early as possible and I may be able to adapt the lectures to address your interests. I am also always interested in journal articles or current events that you feel are relevant to the course.

RECOMMENDED TEXTBOOK (Not required)

The Economy of Nature, Ninth Edition by Robert E. Ricklefs. This class will follow the information in the book closely for some chapters, and for others there will be only small sections assigned. The course will include some information that is not in your textbook. I recommend that you read the assigned pages for the upcoming topic before coming to class each session. Several copies of older editions are on reserve in the library.

COURSE CANVAS PAGE

Check Canvas daily for announcements and for course materials. The course Canvas page is organized into modules. The "Course Information" module contains the syllabus, information on bonus papers, and general information. Specific material for each week is posted in the Canvas module for that week (Module 1 for week 1, and so on). The module for each week will contain assignments, **selected** slides from lectures, and links to additional lecture materials and required readings for discussions. I do not post slides of complete lectures, but I will post slides that contain complex figures and citations, plus individual slides upon request.

HOMEWORK AND IN-CLASS ASSIGNMENTS

Readings for in-class discussion will be posted on Canvas in the module for each week. These readings will be associated with a due date (usually the Thursday of each week). The in-class discussion regarding these readings will be held on the due date, and the discussion will be worth points. You must be present to earn points for the discussion. Pre-discussion questions will be posted to help you prepare for each discussion, and answers must be submitted by the due time before the in-class discussion. Other in-class activities may not be announced ahead of time. If points are available for in-class activities, you must be present and participate to be eligible for the points. In-class activities may not be announced in advance. There will be several homework assignments that will give you practice with the mathematical components of the course, and greater familiarity with conceptual issues. Homework may be given in class or posted in Canvas. Homework is due at the BEGINNING of class on the due date; ***late homework will be penalized.***

BONUS AND MAKE-UP REVIEW PAPERS

You have the option of writing a make-up paper to compensate for a missed assignment, and/or doing a bonus project. Either bonus or make-up work is worth up to 15 points. Information regarding bonus and make-up projects is posted as a file in the Course Information module.

TOPICS

Topics will be arranged in the order found on the syllabus. Depending upon the class discussions, we may need to adjust the timing of certain assignments or lectures as the class progresses. Changes will be posted; you should check Canvas daily for new information.

EXAMS

Exams will contain mostly short-answer and multiple-choice questions, with several short essays and/or math problems and graphs. There will be **three** exams during the summer term **plus one final**. Exams will be given during the first hour of class on each Friday. (Short lectures will follow in the second hour.) **THERE WILL BE NO MAKE-UP EXAMS** unless there is clear documentation **in advance** of a university-sanctioned conflict, or a doctor's written confirmation

of a medical emergency. Make-up exams typically will be in an essay format, and will be given earlier in the week.

The final will be cumulative. Roughly 60-70% of the material will be from the last week of class, and the remainder will be on material presented throughout the course. The final exam will be on the last day of class, from 9-11 AM, in our usual classroom.

COURSE GRADING

	Total Points
Homework, readings, and in-class activities	~120-160
Regular Exams (3)	300
Final Exam	150
Total	~570-610

Letter grades will be calculated as percentages of the total, and rounded to the nearest integer. A = 90-100%, B = 80-89%, C = 70-79%, D = 60-69%, F < 60%. There will be no +/- grades.

ACADEMIC INTEGRITY

Cheating is unethical, and your character is more important than any grade. While I encourage group work and helping each other on homework assignments, if you work with a friend, always write down your answers yourself, in your own words.

Plagiarism is the unauthorized or unacknowledged use of another person's academic or scholarly work. Plagiarism is wrong, whether done intentionally or carelessly. Regardless of how it occurs, plagiarism is a theft of intellectual property. Be very careful to avoid too closely imitating text written by others, and be very careful to cite all sources.

Additionally, if you cheat in this class, you risk both failing the assignment, and failing the course. Any evidence of cheating will result in a negative (less than zero) grade on the exam or assignment, and a report to the university. Each instance of plagiarism, classroom cheating, and other types of academic dishonesty will be addressed according to the principles published here http://facultycouncil.colostate.edu/files/manual/sectioni.htm#I.5 and here http://www.catalog.colostate.edu/FrontPDF/1.6POLICIES1112f.pdf .