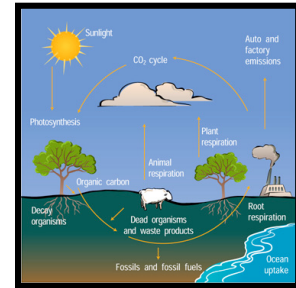


INSTRUCTOR

Dr. Aimée Classen
 Email: aclassen@utk.edu
 Phone: 974-7898
 Office: Dabney Hall 576
 Office hours: Tues & Thurs 12:30 – 1:30

TEACHING ASSOCIATES

Stesha Pasachnik	Melissa Cregger	Megan Todd-Thompson
spasachn@utk.edu	mcregger@utk.edu	mtoddtho@utk.edu
Hesler 526	Dabney 570	Hesler 537
Tues 10:00-11:00	Wed 11:00-12:00	Tues 10:00-11:00
Tues 4:30-5:30	Fri 12:00-1:00	Wed 1:00-2:00



CLASSROOM COMMUNICATION. Check the Blackboard site and your email frequently. We will post lecture outlines after each class. Handouts, readings, and out-of-class assignments will be available on the site. Lecture will meet in HSS 123.

TEXTBOOK. We are using *Ecology* by Cain, Bowman, and Hacker. The lectures will make more sense if you do the reading (or at least skim the reading) before coming to class. When it comes to the exams, what I say in lecture is more important than what is in the textbook. In addition, you will be assigned several supplementary papers to read, and you will be tested on them.

LEARNING OBJECTIVES. By the end of this course, you will understand the major ecological patterns in nature and the factors that cause them. Your writing skills, analytical and quantitative abilities, and talents in the field will be reinforced and improved. In short, you will be better suited to be a practicing ecologist and an ecologically aware citizen.

ASSESSMENT. To assess how well you meet these objectives, you will have comprehensive exams, in-class discussions of and quizzes on the primary literature, and you will spend time in the computer lab enhancing your quantitative skills. You will also do several small ecological research projects and one major research project in the field.

	Points possible
Mid-term exams (3)	150
Final exam	75
Quizzes and lab points*	100
Rapid Ecological Study	100
Final project	125
(Bonus points from seminar series)	(10)
Total	550

*This is an estimate of the number of quiz and lab points.

I do not grade on a curve. Your grades will be based on the following scheme:

A	93-100	C	73-76
A-	90-92	C-	70-72
B+	87-89	D+	67-69
B	83-86	D	63-66
B-	80-82	D-	60-62
C+	77-79	F	0-59

MID-TERM EXAMS. Exams will focus on reasoning, problem solving, interpreting graphs, and understanding of concepts. The format of exams will include short-answer, essay, multiple choice, and simple math problems. All exams are comprehensive, but you should focus on the “new” material. I will give you a review sheet about one week before the exam. The exams will also include material from the book that I might not have focused on in class.

QUIZZES AND IN-CLASS ASSIGNMENTS. First things first: don't let the quizzes scare you. They serve to help you stay on top of the material. Quizzes will generally happen at the beginning of class and can not be made up. The quizzes will often be based on the supplementary readings.

LABS. The aim of labs is threefold. First, you will learn the tools of the trade, i.e., how ecologists do ecology. Second, I hope the principles you learn in lecture will be reinforced in the lab and field. Third, I hope that you will be stimulated to think creatively, critically, and quantitatively and to identify and understand ecological patterns in the field. In short, I hope you learn how to do ecology. Many of the labs will be in the field, so be sure you have raingear, sturdy shoes, a hat, snacks (or whole lunch), water, pens, a field notebook, and a bag to carry all of this stuff. Be prepared to get wet and muddy. And make sure you know what poison ivy looks like.

Your first major lab project will be a Rapid Ecological Study (RES) and will introduce you to the process of doing ecology. You will identify an ecological question. You will collect and analyze data. And you will write a succinct (400 words, max.) paper, with an introduction, methods, results, discussion, literature cited, and figures or tables. More detailed instructions will be given to you soon. Labs will always meet in Hesler 302.

THE FINAL PROJECT. This project is really the most important part of the course. I want you to do ecology, and this is your biggest opportunity to do it. I also want you to work with your colleagues because almost nothing in science can be done alone. By the 8th week of the semester, you and probably 2-3 other students will have gone to the field and decided on an idea for a final project. You will then have about one month to collect the data and prepare the paper. During this month, your group is required to meet with your TA or me at least two times. We are happy to review procedures, drafts of papers, and statistical analyses. We are really happy to help in almost any way you would like. More instructions for the final project will be available soon.

THE SEMINAR SERIES (A.K.A., BONUS POINTS). Most Fridays at 3:30, the Department of Ecology and Evolutionary Biology has a seminar in Science and Engineering 307. This is a tremendous opportunity for you to learn about many different topics in ecology and to see how different people convey their findings. Once you have attended one of these seminars, write a one-page summary of it and email it to Stesha (spasachn@utk.edu) within one week of the seminar, i.e. by the following Friday. You may get up to 2 bonus points for each one. You can get points for attending 5 seminars, and these write-ups are due one week after the seminar. If you can't make the seminars, you can read one of the speakers recent papers and write about that and have it turned in by the following Friday. Don't come in at the end of the semester to ask about extra credit.

MISSED AND LATE ASSIGNMENTS. Only under very special circumstances will I give a makeup exam. You might be able to take a makeup exam if you alert me that you are going to miss it. If you know you are going to miss a lab, you must alert your TA as far in advance as possible. Email is always the best way to contact me or your TA. Unless there are incredibly extenuating circumstances (and those circumstances can be verified), work turned in late will lose 25% of the total available points each day it is late. You cannot make up quizzes.

SCHEDULE OF EVENTS – LECTURE

Week	Day	Lecture	CBH Reading
1	20-Aug	The science of ecology	
2	25-Aug	Doing ecology	1
	27-Aug	The physical environment	2, 3
3	1-Sep	Coping with the environment	4, 5
	3-Sep	Evolution and ecology	6
4	8-Sep	Life history	7
	10-Sep	Extinction	
5	15-Sep	Exam	
	17-Sep	Populations	8
6	22-Sep	Population growth and dynamics	9, 10
	24-Sep	Competition	11
7	29-Sep	Predation and herbivory	12
	1-Oct	Parasitism and mutualism	13, 14
8	6-Oct	Indirect interactions	
	8-Oct	Biological invasions	
9	13-Oct	The nature of the community	15, 16
	15-Oct	No class, fall break	
10	20-Oct	Exam	
	22-Oct	Species diversity	18
11	27-Oct	Production	19
	29-Oct	Energy flow and food webs	20
12	3-Nov	Nutrient supply and cycling	21
	5-Nov	Ecosystem management	23
13	10-Nov	Global ecology	24
	12-Nov	Global ecology 2	
14	17-Nov	Conservation biology	22
	19-Nov	Sustainability	
15	24-Nov	Exam	
	26-Nov	No class (Thanksgiving break)	
16	1-Dec	Summary	
	10-Dec	Final	

SCHEDULE OF EVENTS – LAB

Week beginning	Lab	Location
August 31	1- Generating Hypotheses	Field – Ijams N.C.
Sept 7	2- Addressing Hypotheses	Field – Ijams N.C.
Sept 14	3- Statistics and Graphics	Lab
Sept 21	4- Models	Lab
Sept 28	5- Toolkit 1 – Forest	Field
Oct 5	6- Toolkit 2 – Water	Field
Oct 12-14	<u>Discuss group project with TA</u>	<u>TA office</u>
Oct 19	Group projects	Field
Oct 26	Group projects	Field
Nov 2	Group projects	Field
Nov 9	Group projects	Field
Nov 16	Final Presentation	Lab

NOTES ON THE LAB

- The Lab will always meet in Hesler 302
- Many of the labs will be spent in the field (with mud, rain, high temperatures, biting insects, etc.). Please be prepared – bring water, snacks, a hat, sunscreen, bug spray. And do not wear open-toed shoes. We also don't recommend wearing shorts on field days. On "Lab" days, feel free to wear open-toed shoes and shorts. You probably won't need your bug spray on those days either.
- On "Group projects" days, you will NOT meet in the lab. Those are days you and your group should spend in the field working on your final project. Of course, the project will require more time than the three 3-hr lab periods we give you, so plan accordingly.
- Do not miss labs. If you have to miss a lab for a good reason, make sure you let your TA know at least one week in advance.

Any student who feels s/he may need an accommodation based on the impact of a disability should contact me privately to discuss your specific needs.