

## ECOLOGY LIFE 320 Spring Semester 2015

**INSTRUCTOR:** Dr. Liba Pejchar

**Office:** 234 Wagar

**E-mail:** liba.pejchar@colostate.edu

**Phone:** 491-1819

**Office Hours:** Tuesday 9:30-11am or by appointment

**TEACHING ASSISTANT:** Travis Gallo

**Office:** 211D Wagar

**E-mail:** travis.gallo@colostate.edu

**Office Hours:** Wednesdays 3:30-4:30pm or by appointment

### COURSE OBJECTIVES AND DESCRIPTION

This course will introduce you to the fundamental principles of ecology. You will learn about the mechanisms that generate ecological patterns and how organisms interact with each other and with their environment. After completing this course, you will have acquired a general understanding of the physical, chemical and biological factors that influence the distribution and abundance of organisms in nature.

We will spend most of the semester studying ecology at different levels of organization (populations, communities, and ecosystems). We will then explore how basic ecological principles can be applied to the study of practical ecological problems (e.g. loss of species diversity, urbanization, climate change). Although the course will be primarily in lecture format, I strongly encourage questions and interaction!

**LECTURES:** Tuesday/Thursday 8:00-9:15am, Glover 130

**OPTIONAL TEXT (recommended):** *Ecology and Field Biology* (6<sup>th</sup> edition) R.L. Smith and T.M. Smith (one copy is on reserve in the library)

**REQUIRED READING:** Scientific papers and/or online articles on relevant ecological topics will be assigned for most class periods. Please read the assigned paper before class and be prepared to discuss the content. All papers will be posted on the class web page.

**WEB PAGE:** The Canvas page for this course will contain links to copies of the lecture outlines, homework assignments, your grades, study guides, and links to PDFs of required articles. Please visit this page regularly! To login visit <http://info.canvas.colostate.edu/login.aspx>

### LECTURE OUTLINES

Lecture outlines will be available on the course website. They will be posted the previous day. Downloading outlines alone is NOT sufficient to perform well in this course. You must come to class and take notes to receive a satisfactory grade. If you miss a class, please ask a classmate for their notes.

## COURSE REQUIREMENTS

**Participation:** Research shows that people learn best when they *hear it, write it and talk about it*. I encourage you to get the most out of this class by attending and participating in all in-class activities. There will be frequent in-class exercises where you will have the opportunity to work alone or with a classmate to answer thought questions, followed by class discussion. I will have you write down and turn in your answers and I will use these exercises to assign your attendance and participation grade (50 points). It will not be possible to make up these exercises if you are late to class or if you miss class but I will allow two missed exercises with no penalty.

**Homework assignments:** There will be four homework assignments worth 25 points each that will give you practice with quantitative components and conceptual issues in Ecology. Late homework will not be accepted – all assignments must be turned in to the TA at or prior to the beginning of class on the due date.

**Exams:** Most of your performance in this course will be based on three “midterm” exams and a final exam (100 points each). The final exam will be cumulative. The exams will contain short-answer and multiple choice questions. I will drop the lowest midterm exam grade. Because of this policy, there will be **no make-up exams** without written confirmation from a doctor of a medical emergency.

**Seminar assignment:** You will go to a seminar off an approved list and write a 300-400 word summary of the seminar. The essay should describe the area of ecology the speaker works in, what his or her questions and hypotheses are, what methods were used to address them, what the findings were and how they were interpreted. In addition you will find, read and cite two primary research articles on the topic by the speaker or another scientist to provide background (websites, news articles, government reports and book chapters are not primary literature). This assignment is due within two weeks after the seminar you attended and is worth 50 points. A maximum of 20 people can get credit for a single seminar so you need to sign up in advance for a particular seminar. This is to prevent any single seminar from being flooded by LIFE320 students. The list of possible seminars will be posted on the course website within two weeks of the start of the semester. Please contact the TA if you know of a seminar that is not on the list but that you think would be appropriate.

## GRADING

|   | <u>Points</u> | <u>Percent</u> |
|---|---------------|----------------|
| Participation   | 50            | 10%            |
| Homework (4 x 25 points each)                           | 100           | 20%            |
| Seminar assignment                                      | 50            | 10%            |
| Exams (3 x 100 points but lowest score will be dropped) | 200           | 40%            |
| Cumulative Final  | 100           | 20%            |
| <b>TOTAL</b>  | <b>500</b>    | <b>100%</b>    |

Letter grades will be calculated as follows: A+ = 98-100%, A = 93-97%, A- = 90-92%, B+ = 88-89%, B = 83-87%, B- = 80-82%, C+ = 78-79%, C = 70-77%, D = 60-69%, F < 60%.

We are happy to answer questions regarding grading of homework and exams. Please adhere to the following guideline: If you would like to have an exam or question re-graded, submit a written explanation of your arguments along with the exam/assignment within a week after it was returned. After this period, no grade changes will be considered, although we are always happy to discuss the material.

### **CLASSROOM ETIQUETTE**

Do not talk amongst yourselves, read newspapers, or send text messages during class – this is very distracting to your classmates and to the instructor and will most certainly interfere with your learning. But, please do raise your hand to ask questions or contribute ideas!

### **ACADEMIC INTEGRITY**

I take academic integrity very seriously and will not tolerate cheating or plagiarism in any form. Please note that this course will adhere to the CSU Academic Integrity Policy as found in the [General Catalog - 1.6, pages 7-9](#) and the [Student Conduct Code](#). At a minimum, violations will result in a grading penalty in this course and a report to the Office of Conflict Resolution and Student Conduct Services.

### **SPECIAL NEEDS**

If you have special needs for lectures, homework or test taking, please contact the instructor as soon as possible after the first day of class to explain these needs. Please also speak with her anytime if something should develop later in the semester.

**\*Please note that the syllabus and course schedule are subject to change at instructor's discretion.**