

Principles of Ecology
Biology 3403 – sec. 010
Fall 2014

Instructor: Dr. Caryn Vaughn

Office: Bldg 134 South Campus (Oklahoma Biological Survey)

Office phone: 325-4034 **Email:** cvaughn@ou.edu

Office Hours: Tuesday 1:30 - 4:30, Thursday 9:00 - 12:00, or by appointment.

Lecture time and location: Monday and Wednesday, 11:30 -12:20, SRTC 1030

Laboratory times and location:

011: Monday 1:30-4:20, 214 RH

012: Wednesday 1:30-4:20, 214 RH

Laboratory instructors: Aaron Geheber and David Hille

Course documents and resources: We are using an online textbook, SimUText Ecology. You will be provided instructions on how to download the program and readings. Other readings will be posted on the D2L site. You will need to purchase a composition book (ca. 100 pages) to use as a field notebook.

Grades: Quizzes/assignments - 100 (12 @10 pts each, drop lowest two scores)

Exam 1 - 200

Exam 2 - 200

Final Exam - 250

Lab - 250 (20 pts each lab X 9 = 180; field notebooks/fieldtrip = 70)

Laboratory: The laboratory is an integral part of the course and will account for a quarter of your grade. Most labs will be out in nature, so come prepared to work outside and get dirty!

As part of the lab, students will either (1) attend a weekend class field trip to the OU Biological Station on Sept. 5 – 7 and submit a field notebook about the activities on the trip or (2) complete an individual field notebook based on observations that you will make locally each week.

Missed Exams and Assignments: In general, there will be no opportunity to make up missed assignments. Missed exams and assignments will receive a grade of 0. The exception to this policy will be for students who miss an exam or assignment due to a suitable and documented reason. Suitable reasons might include a confining illness or injury or death in the immediate family, and appropriate documentation might include a letter from a physician. Determination of whether an excuse is suitable is at the discretion of the instructor. Students missing exams must report their reason to the instructor on the day of the exam or a grade of 0 will be recorded.

Reasonable accommodation: Any student in this class who has a disability that may prevent her or him from fully demonstrating their abilities should contact the instructor as soon as possible to discuss accommodations necessary to ensure full participation and facilitate your educational opportunities.

Cheating and academic misconduct: You, the student, are responsible for understanding and abiding by the guidelines published in the Student Code, including the Academic Misconduct Code. Cheating will not be tolerated.

| WEEK | DATE | DAY | TOPIC | ASSIGNED READING | DUE |
|------|----------------------|---|--|--|---------|
| 1 | 8/18/12 8/20/12 | Monday Wednesday <i>Lab 1</i> | Introduction Physical Environments | SimUText - Physiological Ecology | |
| 2 | 8/25/12 8/27/12 | Monday Wednesday <i>Lab 2</i> | Environmental Constraints Environmental Constraints | SimUText - Physiological Ecology SimUText - Physiological Ecology | Quiz 1 |
| 3 | 9/1/12 9/3/12 | Monday Wednesday <i>Weekend field trip to OU Biological Station Sept. 5 - 7</i> | Labor Day Holiday - no class Evolution | SimUText - Evolution for Ecology | Quiz 2 |
| 4 | 9/8/12 9/10/12 | Monday Wednesday <i>Lab 3</i> | Evolution/Life histories Life histories | SimUText - Life History SimUText - Life History | Quiz 3 |
| 5 | 9/15/12 9/17/12 | Monday Wednesday <i>Lab 4</i> | Distribution and abundance Population growth & regulation | Material posted on D2L SimUText - Population Growth | Quiz 4 |
| 6 | 9/22/12 9/24/12 | Monday Wednesday <i>Lab 5</i> | Population growth & regulation Population growth & regulation | SimUText - Population Growth SimUText - Population Growth | Quiz 5 |
| 7 | 9/29/12 10/1/12 | Monday Wednesday <i>Lab 6</i> | EXAM 1 Interactions - competition | SimUText - Competition | |
| 8 | 10/6/12 10/8/12 | Monday Wednesday <i>Lab 7</i> | Interactions - competition Interactions - predation/herbivory | SimUText - Competition SimUText - Predation, Herbivory & Parasitism | Quiz 6 |
| 9 | 10/13/12 10/15/12 | Monday Wednesday <i>Lab 8</i> | Interactions - parasitism Positive species interactions | SimUText - Predation, Herbivory & Parasitism Material posted on D2L | Quiz 7 |
| 10 | 10/20/12 10/22/12 | Monday Wednesday <i>Lab 9</i> | Communities Communities | SimUText - Community Dynamics SimUText - Community Dynamics | Quiz 8 |
| 11 | 10/27/12 10/29/12 | Monday Wednesday | Communities Ecosystems | SimUText - Community Dynamics SimUText - Ecosystems | Quiz 9 |
| 12 | 11/3/12 11/5/12 | Monday Wednesday | Ecosystems Decomposition | SimUText - Ecosystems SimUText - Decomposition | Quiz 10 |
| 13 | 11/10/12 11/12/12 | Monday Wednesday | EXAM 2 Nutrient Cycling | SimUText - Nutrient Cycling | |
| 14 | 11/17/12 11/19/12 | Monday Wednesday | Ecosystem Services Biogeography | Material posted on D2L SimUText - Biogeography | Quiz 11 |
| 15 | 11/24/12 11/26/12 | Monday Wednesday | Conservation Ecology <i>Thanksgiving Holiday - no class</i> | Material posted on D2L | Quiz 12 |
| 16 | 12/3/12 12/5/12 | Monday Wednesday | Global-scale problems Global-scale problems | SimUText - Climate Change | |

FINAL EXAM Thursday Dec. 11, 1:30-3:30