Biology 130 – Introduction to Ecology
Instructor: Dr. C. Ben Crabtree
Required Text: Molles, M.C. Ecology. 5th Edition.

Welcome to Ecology. You have chosen a course that will tantalize your curiosity daily as you explore the natural world. We will focus on three areas of ecology: populations, communities, and ecosystems. We will not treat these areas as isolated entities as the world is not quite as neatly organized as we might hope. The relationships among and between members of populations in a community are often quite complex, particularly when we factor in the influences of the physical environment. This is what makes the study of ecology difficult, but it is also what makes it exciting. A common thread with our treatments will be to consider the impact of humans on the natural environment, past, present and future.

Lectures will be daily (Monday – Thursday) 10:00-11:50. Attendance will not be taken, but it is strongly recommended. I will post lectures, but that is the starting point for discussions and you will miss a significant amount of material if you miss lectures. If you must miss a lecture, I encourage you to get the notes from another person in the class. Discussions will be in 112 Huestis following lectures on Tuesday and Wednesday (13:00-13:50). **The required field trip is on August 8 (Friday) 9 am to 5 pm.**

Grading will be as follows:

Midterm Exam	25%
Group Project/Presentation	20%
Final Exam	30%
Lab Assignments and Activities	15%
Individual Paper (Topic TBA)	10%

Course evaluation
The lecture exams will be given based upon the scheduled times. In the event of serious illness or other emergency, please contact me as soon as possible such that we are able to address the situation. That is, if you know you have a conflict with the scheduled exam, please let me know such that we can make alterative arrangements. **The final exam will be given only at the time specified by the finals schedule – there will be no exceptions.**

The group project and presentation will be twenty percent of your grade. Students will work in groups (4-6 students per group) to create and execute a presentation on a topic relevant to ecology. Topics will be selected by the second discussion meeting at which time we will spend that period working on your topic. During the final week of discussion, groups of students will present their findings to the class in the form of a PowerPoint presentation or a poster. If you select the poster option, you will still need to be available for questions regarding your project. Expenses for materials will be up to the individual groups.

There will also be an individual paper (5-10 pages, double spaced, 12 font). This ***may*** be related to your project, but will involve the selection of a single scientific article. You will analyze this paper and research relevant articles associated with this topic.

Students with disabilities
The University of Oregon is working to create inclusive learning environments. Please notify us if there are aspects of the instruction or design of this course that result in barriers to your participation. You may also wish to contact Disability Services in 164 Oregon Hall at 346-1155 or disabsrv@uoregon.edu.

Professional conduct
Academic dishonesty devalues the reputation of our institution, its faculty, its students, and your academic degree. Academic misconduct is particularly unfair for students who do their work with integrity and honor. The University Student Conduct Code (available at
http://studentlife.uoregon.edu/StudentConductandCommunityStandards/

StudentConductCode/tabid/69/Default.aspx) defines academic misconduct. Please familiarize yourself with this code. Additional information about a common form of academic misconduct, plagiarism, is available at www.libweb.uoregon.edu/guides/plagiarism/students.

We want you to learn and to do well in the course, but we have **zero tolerance** for academic dishonesty. Sanctions for academic dishonesty will be a lowering of the final grade or failure. If you find yourself in trouble, or if you are aware of academic dishonesty occurring, please talk to one of the instructors. Personal crises do happen. If you are having difficulties that are interfering with your ability to do well in the class, please tell an instructor as soon as possible. We may be able to refer you to someone for help or to make special arrangements if the need is real and if you have done your best to deal with the situation in a timely manner. Finally, we promise to respect you as students and as individuals, and ask that you return that respect to us and to your fellow classmates.

Lab/Office – 112 Huestis – contact email: *bcrabtre@uoregon.edu*
Office Hours – Monday, Tuesday and Wednesday – 12:00 to 1:00 or by appointment

Date	Topic	Reading – Text
21 Jul	Introduction to Ecology/Course Structure and Evolution	Ch 1, 4.3-4.5
22	Climate, the Biosphere and the Biomes	Ch 2, 3
23	The Biosphere and the Biomes (continued)	Same
24	The Physical Environment and Physiological Ecology	Ch 5, 6
Discussion Sections – Natural Selection and Evolution of Populations		
28	Population Growth	Ch 11
29	Population Regulation, Fluctuations and Metapopulations	Ch 9, 10
30	Life Histories and Review for midterm	Ch 12
31	Midterm (covers material through populations)	None
Discussion Sections – Work on Group Projects		
04 Aug	Symbiotic Relationships, Coevolution, Mutualism	Ch 15
05	Competition and Modeling	Ch 13
06	Predator/Prey Interactions	Ch 14
07	Community Definition and Structure	Ch 16,17,22
Field trip to H.J. Andrews Experimental Forest 8 August from 9 am to 5 pm		
11	Ecosystems, Energy Flow and Nutrient Cycling in Ecosystems	Ch 7,18,19
12	Complete Ecosystems and "*The Queen of Trees"*	Ch 23
13	Field trip – **Walk** to Alton Baker Park	
14	Review Session for Final Exam (covers all material)	
15	**Final Exam** (10:15 am – 12:15 pm)	
Discussion Sections – Group Presentations		

The grade you receive in this class will be based upon the number of points that you earn during the four week session. I will periodically discuss your individual performances on graded materials if you wish, or if I see a potential problem. If the entire class does very well on the evaluated materials, I have no problem giving grades that reflect that level of performance. Alternatively, if I write exams that are too difficult, or too long, I will evaluate my expectations. However, I expect students completing this class have an appreciation for ecology and ecological concepts and you will be graded based upon your demonstration of that knowledge.

During this class, several exercises will be conducted as part of the lab. These activities and group project will form the basis of much of your lab grade. Although much of the work in the lab will be performed in groups, please remember that your individual assignments and your individual papers are independent efforts. We in science rely on the work of others to provide a foundation for the advancement of science and our own research efforts, but we must also give credit to those that have provided that foundation with appropriate recognition where credit is due.