



Department of Biology, University of Nevada, Reno

Experimental Field Ecology

BIOL 322

Summer semester 2014

Instructor information

Instructors:	Jacob Dittel Nick Pardikes
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Course information

Section:	2001-LEC(50289) , 2101-LAB(50328)																		
Credits:	3																		
Title:	Experimental field ecology																		
Meeting time / room:	6–8 PM, Wednesday / FA-253																		
Description:	This course is designed to give participants experience in the design and execution of ecological field experiments, and to enhance awareness and appreciation of the natural history and ecosystem dynamics of the eastern Sierra Nevada. Fieldwork will be performed during four weekend trips to the Whittell Forest and Wildlife Area located in the Carson Range 25 miles south of Reno. There will also be seven evening meetings on campus for discussion of relevant topics and presentation of students' research results. Specialists in several related fields (e.g., ornithology, forest management, bear biology) will give guest lectures at weekend campfires. Upon completion of this course you will have the tools to: (1) create an experimental design for the lab and/or field, (2) successfully execute experiments, (3) analyze experimental data, synthesize and interpret the results in a scientifically meaningful context, and (4) present and evaluate alternative approaches to field ecology research																		
Text:	No required text																		
Assessment:	<table><tr><td>Participation</td><td>10%</td></tr><tr><td>Plant press</td><td>10%</td></tr><tr><td>Field notebook</td><td>20%</td></tr><tr><td>Paper critique</td><td>5%</td></tr><tr><td>Statistics assignment</td><td>10%</td></tr><tr><td>Pre-proposal</td><td>5%</td></tr><tr><td>Final proposal</td><td>10%</td></tr><tr><td>Research presentation</td><td>15%</td></tr><tr><td>Research paper</td><td>15%</td></tr></table>	Participation	10%	Plant press	10%	Field notebook	20%	Paper critique	5%	Statistics assignment	10%	Pre-proposal	5%	Final proposal	10%	Research presentation	15%	Research paper	15%
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Final proposal	10%																		
Research presentation	15%																		
Research paper	15%																		

Grading scale:	A	$\geq 92\%$
	A-	$< 92 \geq 90\%$
	B+	$< 90 \geq 88\%$
	B	$< 88 \geq 82\%$
	B-	$< 82 \geq 80\%$
	C+	$< 80 \geq 78\%$
	C	$< 78 \geq 72\%$
	C-	$< 72 \geq 70\%$
	D+	$< 70 \geq 68\%$
	D	$< 68 \geq 62\%$
	D-	$< 62 \geq 60\%$
	F	$< 60\%$

Assessment

Attendance: Attendance is mandatory for all meetings and weekend fieldtrips. Attendance will not be counted for points, but points will be lost for absences not excused. Excused absences are limited to emergencies as understood by the discretion of the instructors (two reasonable people) and require documented proof (e.g., doctor's note, police report). Students with unexcused absences will have a whole letter grade dropped per unexcused absence.

Plant press: Over the first two weekend fieldtrips, you will be required to collect, identify, and press 5 plant specimens. We will discuss the details of how to press and prepare specimens in class.

Field notebook: Traditionally, field notebooks follow a system developed by Joseph Grinnell and are divided into 4 sections: (i) the field notebook, (ii) the **Journal**, (iii) the **Species Accounts**, and (iv) the **Catalog**. For the purpose of this class, we will be keeping a journal, species, account, and catalog.

The **Species Accounts** of the Grinnellian field notebook include information about any species that are of particular interest to you. You will record detailed accounts of a total of five animal species accounts, including birds, mammals, reptiles, insects, or other arthropods.

A personal **Catalog** will be a taxonomic list of each species recorded in your journal. For this class, you will record all species that you can identify to the genus or species level.

The **Journal** consists of accurate accounts of your field activities. There should be an entry in your Journal for every trip you make into the field. Trips taken on your own can be included, as long as they follow the format discussed below. Your objective is to record date and location information in the most detailed, least ambiguous way possible so that others can know exactly when, where, and under what conditions your work was done. In keeping a field journal, your objective is to create a permanent, accurate, written record of your field activities and observations. Your entire field notebook should be turned in along with your final projects. Because maintenance of your field notebook is a daily responsibility, late notebooks will not be accepted.

The notebook will be graded on accuracy, format, clarity, completeness, neatness, and attention to detail.

Paper

- critiques:** A paper critique will be assigned to familiarize students with experimental field ecology studies. The assigned paper must be read and annotated. Each annotation must include (i) the research question, (ii) summary of the methods, (iii) summary of the results, and (iv) critique. The annotation must not exceed two double-spaced pages.

Additionally, five questions generated from the reading must be prepared for class discussion.

Statistics

- assignment:** During week four students will complete an individual in-class assignment due at the end of class based on lecture and workshop material.

- Pre-proposal: As a group, prepare three to four potential research projects summarized one-half single-spaced page each. Each summary should include (i) research question and (ii) brief methodology. No statistical analyses included.

Final

- proposal:** Before beginning the group research project, a final proposal must be provided by the group for instructor approval. Each proposal must be turned in as a group, and include, (i) title, (ii) group members' names, (iii) introduction, (iv) hypothesis(es), and (v) methodology. It should not exceed two single-spaced pages, and must include a minimum of two citations.

Research

- presentation:** Each group will present their project and findings to the class. Presentations will be 15 minutes long, with five minutes for questions.

Research paper:

- Each student will turn in a comprehensive research paper. The introduction, methods, and results will be the same for each group, but the discussion will be written by each individual. The discussion should be 1–2 single-spaced pages with a minimum of five citations.

Rules, regulations, and what to do when things go wrong (i.e., the fine print)

- If in doubt: ASK!!! Jake or Nick are happy to answer questions at any time.

- ## What do I do if I have a disability?

- The Disability Resource Center provides support for students with verified disabilities. The DRC support may include alternative testing, extra time, readers, note-takers, interpreters, etc. If you require the service of the DRC, contact them at Thompson building room 101 or on (775) 784-6044, and notify Jake or Nick of the special circumstances and the DRC's recommendations for support.

Academic dishonesty:

The University has a very clear policy on academic dishonesty that is set out in the course catalog. It is important that all students are aware that plagiarism, including buying essays, is considered a very serious offence by the Academic community, the University, the College and the Biology Department. Plagiarism includes re-use of previous assignments or the unreferenced use of published material or material from the internet. If you are in any doubt about appropriate use of published material, please speak with Jake or Nick or any other member of faculty. Likewise, any form of cheating, such as copying the work of another student (with or without that student's knowledge) or taking proscribed materials into tests or exams, will not be tolerated. Where there is clear evidence of such academic dishonesty (plagiarism or cheating), a student will receive a failing grade in the course.

Where do I hand in assignments?

All assignments should be handed in to Jake or Nick (during class time or at one of their offices) or to the Biology Department administrative staff located in FA, room 147. Some assignments may be able to be submitted to Jake or Nick by email.

What if I can't get it finished in time?

Reports and assignments should be handed in on time, whenever possible. Extensions may be granted under reasonable circumstances. If an extension is required, you should request one, from Jake or Nick, with as much notice as possible. Please do this BEFORE the deadline for the assignment. Late, unexcused assignments will be marked off 10% of the total assignment value per 24 hours and not accepted after 120 hours (five days, including weekends).

How can I get help with basic study skills?

Writing: Most courses at University require written assignments, tests and exams. If you feel challenged in meeting the required writing standard, contact the UNR Writing Center at E.J. Cain Hall room 206 or on (775) 784-6030.

Math: This course, like many courses in the sciences, requires some familiarity with basic arithmetic, algebra, statistics, and graphing. If you need additional help, contact the UNR Mathematics Center at Ansari Business building room 639 or on (775) 784-4433.

What's the best way to give feedback?

Jake and Nick welcome constructive feedback at all times—help them to make this a valuable course for you. They endeavor to remain approachable at all times. If you feel uncomfortable about approaching them directly, ask a classmate or friend to act as an intermediary.

What's the best way to complain?

If you feel you have not been fairly treated during this course, please raise the issue with Jake or Nick in the first instance. If you do not receive

satisfaction from Jake or Nick, you should speak with the Biology Department Departmental Chair (Professor Jack Hayes).

How do I get more information on student support and services?

There is a whole lot more information on all services at the following webpage: <http://www.unr.edu/content/students.asp>