Research in Ecology, BIOL 4970-050
University of Oklahoma Biological Station
May 15 - 26, 2017

Instructor
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Course format
Our focus is field research for the study of populations and communities in their natural setting, and the method we will employ is learning by doing. We will work in groups to design, conduct, analyze, and document ecological research. Along the way, we will encounter topics in experimental design and analysis, field methods for sampling and censusing populations, presenting scientific results, and related subjects.

To a large degree, this course will be student-led, and students will work together in groups to undertake research projects that no individual could achieve alone. There are no pre-planned “cookbook” experiments—you will develop the research projects based on your field observations and group discussions early in the course. Projects could take many forms, although projects must be original and feasible, and must address an interesting ecological problem.

Much of our time will be spent outdoors in the Ecological Research Area of the OU Biological Station, and we will also use our classroom for discussions, presentations, sorting and counting samples, and analysis. Expect long days and nights immersed in the nitty-gritty of ecological field research—and expect a rewarding learning experience.

Grading
This course is designed around active engagement in all facets of the process of science, and for that reason appropriate participation in your group, as determined by the instructors and peers, constitutes an important component of the grade. Assessment will also include quality of written work and class presentations.

Grading breakdown:
Quality of participation (instructor assessment) 25%
Field notebook 10
Quizzes 20
Written report 15
Final presentation 30

Course Materials
- There is no text for the course (supplementary materials will be provided by the instructors).
- All students will need a waterproof field notebook. We recommend Rite in the Rain notebooks. Notebooks are available for purchase upon arrival at the Biological Station (about $7.00 depending on size and style).
- Bring pencils for field notes (inexpensive mechanical pencils work well), and you should consider bringing a regular spiral notebook and pens for general use.
- If you have a laptop computer, we suggest you bring it for use indoors in the classroom. If you don't have laptop, computers are available for general use.
Working outdoors
We will be spending lots of time working in the wilds of nature. We will always observe safety precautions, like having plenty of water available, avoiding thunderstorms, and making sure everybody can identify (and hopefully avoid) poison ivy. Please come prepared for conducting research in a forest or grassland environment. Be prepared to protect yourself from the sun by having a lightweight hat, a long-sleeve shirt or two, and sunscreen. Be prepared to protect yourself from the effects of hot weather by wearing lightweight synthetic clothing (not cotton) and drinking plenty of water. Protect yourself from mosquitoes and ticks by using a repellant that is effective for both ticks and mosquitoes. Bring field shoes that you can get wet and dirty. Old sneakers work well. Heavy boots are also okay, but can be uncomfortable. A rain jacket is encouraged (umbrellas are useless in the field). If you are especially allergic to poison ivy, we recommend you bring products that prevent or treat exposure.

Questions or additional information?
For additional information on this course contact Dr. Gary Wellborn (office: (405) 325-1421; e-mail: gwellborn@ou.edu). For enrollment information or a brochure contact the Biological Station (Norman office: 304 Sutton Hall; (405) 325-5391), or visit the Biological Station web site at http://www.ou.edu/uobs/.

General University Policies

Reasonable accommodation
Any student in this course who has a disability that may prevent the full demonstration of his or her abilities should contact me personally as soon as possible so we can discuss accommodations necessary to ensure full participation and facilitate your educational opportunities.

Adjustments for pregnancy/childbirth related issues
Should you need modifications or adjustments to your course requirements because of documented pregnancy-related or childbirth-related issues, please contact me as soon as possible to discuss. Generally, modifications will be made where medically necessary and similar in scope to accommodations based on temporary disability. Please see www.ou.edu/content/eoo/pregnancyfaqs.html for commonly asked questions.

Title IX resources
For any concerns regarding gender-based discrimination, sexual harassment, sexual misconduct, stalking, or intimate partner violence, the University offers a variety of resources, including advocates on-call 24.7, counseling services, mutual no contact orders, scheduling adjustments and disciplinary sanctions against the perpetrator. Please contact the Sexual Misconduct Office 405-325-2215 (8-5) or the Sexual Assault Response Team 405-615-0013 (24.7) to learn more or to report an incident.

Religious holidays
It is the policy of the University to excuse the absences of students that result from religious observances and to provide without penalty for the rescheduling of examinations and additional required classwork that may fall on religious holidays.