

EVOLUTIONARY ECOLOGY
ZOOLOGY 485

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Office Hours: T/R 3-4
Office: LS II 355B

COURSE OVERVIEW

This course will examine how phenotypic variation in organisms is optimized and constrained by ecological and evolutionary factors. This course will draw material heavily from perspectives of life history, behavioral ecology, and population ecology. Course material will cover both animals and plants. In this course, you will:

- Overview the tools of quantitative genetics and demography that underlie much of the theory of evolutionary ecology
- Overview the theoretical frameworks of major areas of research in evolutionary ecology
- Read and discuss classic and modern case studies in evolutionary ecology
- Develop critical thinking skills through discussion, presentation, and writing

COURSE TEXTS

There is *NO* required text for this course (what a bargain!). Instead, I will provide readings from the primary literature and from chapters of various texts as deemed appropriate for the material at hand.

COURSE WEB PAGE

Materials (syllabus, pdfs, assignments, etc.) will be posted on the course web page (<http://www.zoology.siu.edu/sears/evecol.html>). In the near future, I will be transferring all materials to a Blackboard page. Please check the course web page regularly as that's where changes to this and other documents will be found.

GRADING

Your course grade will be comprised of two midterm exams, a final examination, problem sets, critical paper reviews, paper discussions and class participation, and an oral presentation. The point breakdown is as follows:

Exam 1	100
Exam 2	100
Final Exam	150
Problem sets (3 x 25)	75
Paper reviews (3 x 50)	150
Presentation topic	25
Paper discussion & participation	100
Final presentation	<u>100</u>
Total	800

Grades will be assigned on a typical 10 point scale (i.e., 90% = A, 80% = B, etc). Two additional grading policies will be enforced. First, attendance is required. You will have two unexcused absences without penalty. After second absence, 10 points will be deducted from your final grade for every *unexcused*

absence. Also, if at the end of the semester you have a 'B' or better, you have the option of not taking the final exam and taking the grade that you have earned up to that point.

TIPS FOR SUCCESS IN THIS COURSE:

1. Always bring a calculator...there will in class excercises for which you will need to perform calculations that you can't perform with 10 fingers and 10 toes.
2. Read the lecture materials before class.
3. Ask questions (both in class or during office hours).
4. Think critically (and creatively).
5. Form a study group.
6. Review your notes regularly.

Disclaimer: This syllabus is a living document and is subject to change. If changed, you will be given adequate notice of any date changes for assignments, papers, or exams. Again, check the web!