FLORIDA ATLANTIC UNIVERSITY™

Graduate Programs—NEW COURSE PROPOSAL

UGPC APPROVAL _____
UFS APPROVAL _____
SCNS SUBMITTAL _____
CONFIRMED _____
BANNER POSTED _____
ONLINE _____
MISC _____

DEPARTMENT NAME: BIOLOGICAL SCIENCES

COLLEGE OF: CESCOS

RECOMMENDED COURSE IDENTIFICATION:

PREFIX __BSC_____ **COURSE NUMBER** __6937___ **LAB CODE** (L or C) _____

(*TO OBTAIN A COURSE NUMBER, CONTACT ERUDOLPH@FAU.EDU*)

COMPLETE COURSE TITLE

ECOLOGY RESEARCH SEMINAR

EFFECTIVE DATE

(first term course will be offered)

SPRING 2010

CREDITS: 1

TEXTBOOK INFORMATION: NO TEXT

GRADING (*SELECT ONLY ONE GRADING OPTION*): **REGULAR** _____ **PASS/FAIL** _____ **SATISFACTORY/UNSATISFACTORY** __X____

COURSE DESCRIPTION, NO MORE THAN 3 LINES: THIS IS A SEMINAR COURSE IN WHICH STUDENTS PICK PAPERS FROM THE ECOLOGICAL LITERATURE AND FACILITATE DISCUSSIONS WITH OTHER STUDENTS AND PROFESSORS. COURSE GRADING IS DEPENDENT UPON PARTICIPATION IN THE CLASS DISCUSSIONS AND ALL STUDENTS WILL LEAD AT LEAST ONE PAPER DISCUSSION.

PREREQUISITES W/MINIMUM GRADE:*

NONE

COREQUISITES: NONE

OTHER REGISTRATION CONTROLS (MAJOR, COLLEGE, LEVEL):

GRADUATE STATUS IN BIOLOGY, GEOSCIENCES, OR ENV SCIENCES PROGRAM

OTHER: ONLY WITH PERMISSION OF INSTRUCTOR

PREREQUISITES, COREQUISITES & REGISTRATION CONTROLS SHOWN ABOVE WILL BE ENFORCED FOR ALL COURSE SECTIONS.

*****DEFAULT MINIMUM GRADE IS D-.***

MINIMUM QUALIFICATIONS NEEDED TO TEACH THIS COURSE: PHD IN BIOLOGICAL SCIENCES WITH EMPHASIS IN ECOLOGY.

Other departments, colleges that might be affected by the new course must be consulted. List entities that have been consulted and attach written comments from each.

None should be affected.

Erik Noonburg, enoonbur@fau.edu, 954-236-1303_____
Faculty Contact, Email, Complete Phone Number

SIGNATURES

Approved by:	***Date:***
Department Chair: _____	_____
College Curriculum Chair: _____	_____
College Dean: _____	_____
UGPC Chair: _____	_____
Dean of the Graduate College: _____	_____

SUPPORTING MATERIALS

Syllabus—must include all details as shown in the UGPC Guidelines.

Written Consent—required from all departments affected.

Go to: *http://graduate.fau.edu/gpc/* to download this form and guidelines to fill out the form.

Email this form and syllabus to *sfulks@fau.edu* and *eqirjo@fau.edu* one week ***before*** the University Graduate Programs Committee meeting so that materials may be viewed on the UGPC website by committee members prior to the meeting.

Syllabus: BSC 6937 Ecology Research Seminar, 1 credit.

Department of Biological Sciences
Charles E. Schmidt College of Science
Florida Atlantic University

Fall, 2009. Wed. 12:00-12:50.
Rooms: MC 209 (HBOI), FL 404 (Boca), LA 148 (Davie).

Instructors:
N. Dorn (Davie), ndorn1@fau.edu
E. Noonburg (Davie), enoonbur@fau.edu
C. Proffitt (HBOI), cproffit@fau.edu

Office hours. Contact individual instructors.

Course Description: The Ecology Research Seminar will meet weekly to discuss recent ecology research articles (<10 years old) in the scientific literature. If you have not taken this class before then the following journals would be a good place to start when looking for a general ecology paper: Ecology, Ecological Applications, Oikos, Oecologia, Journal of Ecology, Journal of Animal Ecology, Ecology Letters, etc.

Course Objectives: Students will select and read a broad selection of articles from the ecological literature, which will help prepare them for conducting independent research and writing and thinking broadly within the field of ecology. Specific goals of the course are to
1) Maintain a working knowledge of current research in ecology.
2) Expose students to a broad variety of ecological sub-disciplines, general theories, study systems, experimental techniques, and research questions.
3) Sharpen students' critical skills in analyzing and interpreting published research.

Course procedure. Students will take turns selecting articles (in close consultation with instructors) and facilitating the discussion in weekly meetings. Readings will be posted on blackboard, and the articles may be obtained from the FAU Library's electronic journal collection. A list of the articles will also be posted at http://biology.fau.edu/~noonburg/GradEcoSem.html, which can be accessed without a password. Please send your paper to one of the three professors once you have chosen it and, unless we see a problem with the scope of the paper, we will disseminate it to the class.

Attendance. Because the course is based on discussion, attendance is required. Exceptions may be made after contacting an instructor. No more than 2 classes can be missed for a satisfactory grade.

In compliance with the Americans with Disabilities Act (ADA), students who require special accommodations due to a disability to properly execute coursework must register

with the Office for Students with Disabilities (OSD) located in Boca Raton - SU 133 (561-297-3880), in Davie - MOD I (954-236-1222), in Jupiter - SR 117 (561-799-8585), or at the Treasure Coast - CO 128 (772-873-3305), and follow all OSD procedures.

Grading: Satisfactory/Unsatisfactory. Facilitation of at least one week's discussion and regular participation in weekly discussions is required for a satisfactory grade.

Students at Florida Atlantic University are expected to maintain the highest ethical standards. Academic dishonesty, including cheating and plagiarism, is considered a serious breach of these ethical standards, because it interferes with the University mission to provide a high quality education in which no student enjoys an unfair advantage over any other. Academic dishonesty is also destructive of the University community, which is grounded in a system of mutual trust and places high value on personal integrity and individual responsibility. Harsh penalties are associated with academic dishonesty. For more information, see *http://www.fau.edu/regulations/chapter4/4.001_Honor_Code.pdf.*

Suggestions for successful facilitation of discussions

Although free and open discussion of article contents and context is encouraged, the following points provide a rough guide to structuring the session for which you are responsible.

1. First, consider the general ecological question(s) that the authors address in their research. Ideally, the research questions are presented in the introduction and are followed by hypotheses and predictions for the study system.
- What is the "big question"?
- Are there clear null/alternative hypotheses?
- Do the predictions follow from the questions/hypotheses?
- Is the study system appropriate for the research question?

2. Assess the research methods, experimental design, and statistical analyses.
- Is the experiment appropriate to answer the question?
- Are the analyses "correct"?

3. Finally, evaluate the outcome of the research.
- Did the authors answer their questions, were predictions supported/falsified by the study?
- Did the results support the authors stated conclusions? Why or why not?
- What are the implications of the research for general ecological theory?
- Do the results suggest further experiments?

Additional suggestions for the leader:

The leader can give a “brief” recap of the paper (main problem/question, approach, results, conclusions), but should assume that classmates read the paper so they don’t need to give a lengthy or detailed review.

Most people will have questions about some aspects of the study, so the leader should probably open it up to questions or comments about one of the 3 major sections.

Finally, if no one has any questions or comments the leader should prepare a few questions of his/her own that could lead to discussion.

BSC 6937, Ecology Research Seminar
Bibliography

Bruno et al. 2009. Assessing evidence of phase shifts from coral to macroalgal dominance on coral reefs. Ecology, 90: 1478-1484.

Mobaek et al. 2009. Density dependent and temporal variability in habitat selection by a large herbivore; en experimental approach. Oikos, 118: 209-218.

Barbour et al. 2009. A geographic mosaic of genetic variation within a foundation tree species and its community-level consequences. Ecology, 90: 1762-1772.

Montoya et al. 2009. Press perturbations and indirect effects in real food webs. Ecology, 90: 2426-2433.

Kimbro & Grosholz. 2006. Disturbance influences oyster community richness and eveness, but not diversity. Ecology, 87: 2378-2388.

Hughes & Stachowicz. 2009. Ecological impacts of genotypic diversity in the clonal seagrass *Zostera marina*. Ecology, 90: 1412-1419.

Zajitschek et al. 2009. Sex effects on life span and senescence in the wild when dates of birth and death are unknown. Ecology, 90: 1698-1707.

Kubis et al. 2009. Growth rates of juvenile green turtles Chelonia mydas from three ecologically distinct foraging habitats along the east central coast of Florida, USA. Marine Ecology Progress Series, 389: 257-269.

Cooley et al. 2009. Does hunting regulate cougar populations? A test of the compensatory mortality hypothesis. Ecology, 90: 2913-2921.

Marzinelli et al. 2009. Do modified habitats have direct or indirect effects on epifauna? Ecology, 90: 2948-2955.

Eeva et al. 2005. Pollution-related changes in diets of two insectivorous passerines. Oecologia, 145: 629-639.

Mumby et al. 2007. Trophic cascade facilitates coral recruitment in a marine reserve. PNAS, 104: 8362-8367.

Mosser et al. 2009. Serengeti real estate: density vs. fitness-based indicators of lion habitat quality. Ecology Letters, 12: 1050-1060.