

PLANT COMMUNITY ECOLOGY

PBIO-436.A01/536.A01

Call No. 05091/05196, 5cr, Fall 2006

INSTRUCTOR

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TEACHING ASST.

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SCHEDULING

Lectures: T, Th 08:30-10:00 Porter 417
Laboratory: T 13:30-17:30 Porter 417 & Field

SPECIAL SCHEDULING

All-day Field Trip: Saturday, 14-Oct-06, 08:00 to 17:00 est. (Dysart Woods)
Midterm Exam: Tuesday, 10-Oct-06, 13:30-17:30 (Porter 417)
Final Exam: Saturday, 18-Nov-06, 08:00-10:00 (Porter 417)

LOGISTICS

Lectures: Each week, lecture topics (see attached schedule) will be divided into two parts. The first lecture will deal with the major concepts and issues associated with a topic. The second lecture will emphasize a review and discussion of classic and/or landmark references related to that topic, or a presentation of advanced methods. Both will require regular reading of assigned materials and active participation. There is no text book for this course. All reading assignments will be distributed as online resources via the course website (www.plantbio.ohiou.edu/epb/instruct/commecology/index.htm). Please do NOT print these materials. Download them as PDFs, read, and take notes.

Laboratories: The first half of the course is designed to provide hands-on experience with collecting plant community data, measuring & quantifying abundance, and producing technical written reports summarizing that information. Thus, there will be four lab reports*. The second half of the lab course is designed to provide you with an opportunity to access the contemporary plant community ecology literature and prepare technical oral presentations (30 min. mini-lectures) to present to your colleagues. The topic and content material for these mini-lectures should be developed in consultation with the instructor.

*NOTE: *Lab reports are due at the beginning of lab class (13:30) on the day assigned.* There are NO exceptions to this rule. Any report submitted after 13:30 on the day due is considered late. A penalty of 10% will be assessed for each day late up to five days. All reports must be completed and turned in (even if more than 5 days late) for you to receive a grade (other than "I") in this course. Reports will generally be returned the following lab period.

Computers: The computer is the primary tool used by plant ecologists in the analysis and presentation of technical data and is considered an integral part of training in this discipline. All lab reports in this class are expected to be computer generated (see additional handouts on lab reports). You are expected to have a working knowledge of microcomputers and basic knowledge of general software apps (MS Word & Excel). All advanced uses and other software applications (MVSP, Resampling Stats) will be demonstrated in class. The departmental student computer lab (Porter 410) is available for your use. You may also work at any of the other student computer labs on campus or personal computers.

GRADING

Midterm Exam = 30%
Final Exam = 30%
Written Lab Reports (4) = 20%
Oral Presentation = 20%

ACADEMIC POLICIES

Attendance: Students are expected to attend all lectures and labs; formal attendance will not be taken.

Academic Integrity: The university policies regarding the student code of conduct and academic integrity are clearly and completely summarized at:

<http://www.cats.ohiou.edu/judiciaries/index.htm>. These policies will be strictly adhered to in this class. If you are unclear as to what these policies are, please consult the website.

MASTER SCHEDULE

Week	Topic(s)
1 Sept 5 & 7	LEC: Syllabus, Defining the Plant Community LAB: Writing Laboratory Reports
2 Sept 12 & 14	LEC: Basic Traits of Plant Communities LAB: Old-fields & Quadrat Sampling [REPORT due 9/19]
3 Sept 19 & 21	LEC: Species Diversity Concepts LAB: Wetland Delineation & Sampling [REPORT due 9/26]
4 Sept 26 & 28	LEC: Origin and Maintenance of Species Richness LAB: Forest Sampling and PCQ Method [REPORT due 10/03]
5 Oct 3 & 5	LEC: Ecological Assembly Rules LAB: Dendrochronological Methods [REPORT due 10/17]
6 Oct 10 & 12 Oct 14	LEC: Methods of Sampling the Plant Community LAB: Midterm Exam (Exam Material 9/5 – 10/5) FLD: Saturday Field Trip to Dysart Woods (old-growth forest ecology)
7 Oct 17 & 19	LEC: Classification and Ordination of Plant Communities LAB: Environmental Measurement, Old Man's Cave [NO REPORT]
8 Oct 24 & 26	LEC: Disturbance Ecology and Succession LAB: Contemporary Research [Presentations]
9 Oct 31 & Nov 2	LEC: Interspecific Interactions: Competition and Allelopathy LAB: Contemporary Research [Presentations]
10 Nov 7 & 9	LEC: Interspecific Interactions: Herbivory and Mutualism LAB: Contemporary Research [Presentations]
Nov 14 Nov 18	LEC: TBA Final Exam: 08:00-10:00, Porter-417 (Exam material 10/10-11/14)