

The Ohio State University
1-week course offering at Stone Laboratory
Summer 2006
June 11 – June 17

EEOB 513: Field Ecology

Quarter Credit Hours – 3 under/grad

Prerequisites:

At least junior standing by the summer of enrollment, minimum GPA of 2.5, and completion of 15 hours of biology including introductory ecology OR permission of instructor.

Description: This course is an intensive one-week introduction to field ecology for teachers, upper-level undergraduates, and graduate students. This course will be a broad, field-based introduction to the distribution and abundance of animals and plants (both macroscopic and microscopic), aquatic and terrestrial habitats, and techniques for the collection and identification of these organisms, as well as analyzing their environments. Pond, lake, river, marsh, beach, field, and woodland habitats will be investigated. Basic statistical and data analysis techniques will also be covered.

Grading:

4 Quizzes (25 points each)-	100
Field Notebook-	50
Statistics Assignment-	75
Data Analysis Assignments-	75
Lab Practical-	100
<u>Written Exam-</u>	<u>100</u>
Total	500

Texts: Various texts will be available for use in class. No text is required for purchase.

Materials for Student Purchase: Field notebook (Write-In-the-Rain)

Equipment Used For Class (provided by the Lab): Seines, dip-nets, aerial nets, plankton nets, Secchi disks, DO meter, SONDE, light meter, preservatives, drying racks, DBH tape, jars, microscopes

continued

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Field Ecology
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Douglas D. Kane
Page 2 of 2

Schedule:

- Sunday** Afternoon: Introduction to course
Evening: What is ecology? General ecological principles. Introductory statistics.
- Monday** Morning: Lecture: Plant succession and geology of Lake Erie Islands
Afternoon: Terrestrial Fieldtrip- South Bass Island (Fields)
Goal: Observe stage of succession.
Evening: Quiz. Work on statistics assignments.
- Tuesday** Morning/Afternoon: Terrestrial Fieldtrip- Kelleys' Island (Quarries).
Goal: Examine fossil organisms and terrestrial habitats.
Terrestrial Fieldtrip- Kelleys' Island (Woods)
Goal: Observe stage of succession and collect organisms.
Terrestrial /Aquatic Fieldtrip- Carp Pond (Beach/Marsh)
Goal: Examine transitional zones between aquatic and terrestrial habitats.
Evening: Quiz. Lecture: River ecosystems
- Wednesday** Morning: Aquatic Fieldtrip- Old Woman Creek (Lake, Lacustrary, Upstream Reaches)
Goal: compare various habitats in the same river and the organisms living in these habitats.
Afternoon: Aquatic Fieldtrip- Huron River
Goal: Compare organisms with Old Woman Creek.
Evening: Quiz. Lecture: Lake ecosystems
- Thursday** Morning: Aquatic Fieldtrip- Lake Erie (near Rattlesnake Island)
Goal: Collect fish, zooplankton, phytoplankton, and benthos and take physical measurements.
Afternoon: Laboratory: Identification of fish, zooplankton, phytoplankton, and benthos.
Evening: Quiz. Lecture: Pond ecosystems, wetlands, and aquatic macrophytes
Guest Lecture: TBA
- Friday** Morning: Aquatic Fieldtrip- Terwilliger's Pond, Hatchery Bay and Alligator Bar
Goal: Collect aquatic macroinvertebrates and aquatic macrophytes.
Laboratory: Identification of macroinvertebrates and aquatic macrophytes.
Afternoon: Review for written test and laboratory practical. Course evaluations.
Evening: Field notebooks due. Study for lab practical and written exam.
- Saturday** Morning: Laboratory Practical Exam- (1 hour-stations, 1 hour-quantitative),
Written Exam- (1 hour).

Note: Morning sessions will last from 8AM until noon, afternoon sessions will last from 1PM until 4PM, and evening sessions will last from approximately 7PM until 9PM.