

Biology 306, Ecological Methods Fall 2012

Instructor: Dr. Chris Hartleb

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Office hours: Wednesday 11 am - 12 & Friday 1 - 2 pm; or by appointment

Course Objectives: To learn procedures and applications of various ecological methods. To familiarize one-self with the process of designing, conducting, analyzing and publishing an ecological study.

Texts: Understanding Research Methods (An Overview of the Essentials), M.L. Patten; **AND** Excel 2007 Data Analysis, D. Etheridge. Bring textbooks, calculator & ruler to all indoor classes.

Course Content:

	Class Day	Topic	Chapters*
Week 1	9/6	Introduction; Experimental design	Part A + C
Week 2	9/13	Invertebrate diversity & aquatic sampling prep.	Part E
Week 3	9/20	Aquatic sampling field trip	
Week 4	9/27	Literature searches / scientific reports	Part B
Week 5	10/4	Data analysis / biostatistics	Part F
Week 6	10/11	Plant community diversity & Lyme disease correlation prep	Handout
Week 7	10/18	Plant community diversity field trip	
Week 8	10/25	Plant community diversity data analysis	
Week 9	11/1	Plant community diversity data analysis con't	
Week 10	11/8	Food webs	Handout
Week 11	11/15	Maps, topography & orienteering	Handout
Week 12	11/22	Thanksgiving Break!	
Week 13	11/29	Population ecology experiment	Handout
Week 14	12/6	Population ecology experiment con't	
Week 15	12/13	Reports Due	

*Chapters are from M.L. Patten; D.Etheridge should be used as a reference.

Grades will be determined by the following:

Invertebrate diversity, Plant community diversity,
Food webs*, Maps, & Population ecology (5)

Total

(*Group project)

= 20 pts each
= 100 pts.

Grade Distribution:

A = ≥ 94	C = 74-76
A- = 90-93	C- = 70-73
B+ = 87-89	D+ = 67-69
B = 84-86	D = 60-66
B- = 80-83	F = ≤ 59
C+ = 77-79	

Lab Exercises: You will be required to complete 5 lab exercises. Data collection will be accomplished in class. Data analysis, literature reviews and reports should be completed during and after class. **All lab exercises are due one week after the exercise is complete.** Credit can be earned with exercise accuracy, proper calculations, thorough analysis, explanations, and neatness. Two points (-2) will be deducted each day for late submission.

Field Trips: Are indicated in the course schedule. Field trips are never cancelled so be prepared for any type of weather. If you have an excused absence from a field trip it is **YOUR** responsibility to obtain the data and any instructions from other students in the course.

Academic Misconduct: You are responsible for the honest completion & representation of your work & for the respect of others' academic endeavors. Any act of cheating, plagiarism, or academic misconduct is subject to the penalties outlined in UWS Chapter 14 & the UWSP Rights & Responsibilities booklet posted at:

<http://www.uwsp.edu/admin/stuaffairs/rights/rightsChap14.pdf>

Discretionary Points: Points may be added or subtracted from your report & final course scores based on effort, improvement, participation (attendance), alacrity, and attitude.

Students with Special Needs: First see Student Disability Services and complete the necessary paperwork. Then, contact me so that arrangements for note-taking, testing and report completion can be made.

If you are having difficulty, see me as soon as possible; talk to me after class, stop by during office hours, call, or email.