## **Biology 306: Ecological Methods**

Instructor:Dr. Brian C. BarringerEmail:bbarring@uwsp.eduPhone:715-346-2452Office:TNR 337Office Hours:Wed 1-3 PM and Fri 9-11 AM

**Course Objectives:** To study and apply a variety of methods used to conduct ecological studies of populations, communities, and ecosystems.

Required Texts: Brower et al. (4th edition) Field & Lab Methods for General Ecology

**Other requirements:** Please bring a calculator to every meeting. Also, we will be hiking around and/or working outside during several of our meetings (see table below); please dress accordingly (appropriate shoes and something to keep you both dry and warm).

**Course Schedule:** This course includes a variety of topics/activities, outlined (along with the point values, if any, for associated assignments) in the table below. Quizzes (3-5 total) are unannounced and can be given at any time. Dates with asterisks refer to meetings involving (at least some) time spent outside. Note that I reserve the right to change this schedule and/or these activities as we progress through the semester.

Date	Activity/Assignment	Points			
1/22 *	Introduction/experimental	0			
	design/gathering ecological data I				
1/29 *	Gathering ecological data	10			
	II/descriptive statistics				
2/5 2/12	Inferential statistics	10			
2/12	Estimating population	10			
	sizes/capture-mark-recapture I				
2/19	demography/life tables	10			
2/26 *	Spatial patterns in nature	10			
3/5	Literature review and essay	10			
3/12	Population growth/competition I	0			
3/19	Population growth/competition II	10			
3/26	Spring break				
4/2	Species diversity	10			
4/9	Succession	10			
4/16 *	Herbivory I	0			
4/23 *	Herbivory II	10			
4/30 *	Pollination ecology I	0			
5/7 *	Pollination ecology II	10			
	Quizzes (3-5 total)	10 each (lowest score			
		dropped)			
	Participation	30			

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

**Grading:** Your final grade in this course will be based on the percentage of all possible points that you earn throughout the semester. To determine your final grade the following metric will be used:

**Attendance:** Attendance is mandatory. You will drop one entire course grade for each unexcused absence. Excused absences are restricted to documented, verifiable extraordinary situations (e.g., extreme illness or other emergent medical situations, deaths in the family, etc.). Late arrivals (i.e., arriving after I take attendance near the start of class) will result in one point being deducted from your participation score for each 5-minute block of time. I reserve the right to consider significantly late arrivals (i.e., more than 15 minutes late) as absences.

**Participation:** You are expected to be an active participant in all of our meetings and activities. This means that I expect you to take notes, engage in discussions, ask questions, share thoughts and opinions, and volunteer to help each other out when appropriate. The course will be more enjoyable (for everyone) if you do your best to engage with me, each other, and course material to the maximum extent possible. A finite number of points are allocated to participation. You must earn these points! Students who are always quiet, unengaged, and/or generally appear uninterested in our activities will not fare well in this regard, and a low participation score has the potential to negatively impact your final grade.

**Late Policy and Make-ups:** Assignments lose one point for each day they are late. Missed quizzes cannot be made-up (whether your absence was excused or not), though I will drop your lowest quiz score before determining your final grade. If you miss a class it is your responsibility to obtain missed information and/or data from one of your classmates.

**Cell/Smart Phones, Laptops, ipads, ipods, etc.:** Please note that using cell phones, smart phones, laptops, ipads, ipods, etc. is absolutely not allowed (unless explicitly told otherwise) during our meetings. Out of respect for your fellow students and me please turn these items off. If I observe that you are using these items during class I will (1) deduct two points from your participation score and (2) ask you to leave. Please do not force me to do that; it's not fun for either of us.

**Students with Disabilities:** I am happy to help you if you need special accommodations to succeed in this course. Please see Student Disability Services to complete the paperwork required to document your needs and then contact me so that appropriate arrangements can be made. More information can be found here: <u>http://www.uwsp.edu/disability/Pages/default.aspx</u>

**Academic Integrity:** It is your responsibility to be aware of your rights and responsibilities as a UWSP student. Please take the time to read and understand the information found here (and let me know of any questions): <u>http://www.uwsp.edu/stuaffairs/Documents/RightsRespons/SRR-2010/rightsChap14.pdf</u>