Ecosystem Ecology - BIO 3250K Spring 2013

Instructor: Dr. Matthew Weand

Office: E-107

E-mail: mweand@spsu.edu Telephone: 678 915 3175

Course Time and Location

Class MWF 9-10 AM Lab Tuesdays 2:30-5:30 PM

Office Hours

MWF 10-11

TR 1:30-2:30 or by appointment

No Required Text

Handouts will be provided as text

supplements. Information in handouts will be included on quizzes and exams. Handouts and papers will be made available on line or in class.

Class Objectives:

- 1. To gain knowledge of fundamental concepts in ecosystem ecology including influences of climate, geology, soils, and water.
- 2. To understand the flow of matter, energy, and nutrients in ecosystems.
- 3. To understand ecosystem spatial and temporal dynamics and the importance of ecosystem ecology to ecosystem stewardship

Lecture Notes:

PDF files of lectures will be available on-line under the **SPSU Desire2Learn** webpages: https://spsu2.view.usg.edu

Grading policy - The following are the standards (%) for assigning grades:

Letter Grade	Percent Score
A	90 - 100.0%
В	80 - 89.9%
С	70 – 79.9%
D	60 - 69.9%
F	Below 60.0%

Exams - Questions on exams can cover any of the lectures, labs, and any class handouts. Exams may also include questions that cover material from reading assignments. Exam dates are listed in the lecture schedule. The time and place of the final exam will be announced. If you have to miss an exam, you must **submit a signed note from a Doctor, Department Head, Coach or Supervisor**. Please see me immediately to schedule a time to make up an exam. If you do not make up an exam **within a week** after it was originally scheduled, you



will receive a grade of zero for the exam. If you have an unexcused absence from an exam, you will receive a grade of zero for the exam.

<u>Quizzes</u> –Dates of quizzes will be announced in class during the semester. **Quizzes cannot** be made up, and you will receive a grade of zero for each quiz that is missed.

<u>Homework</u> Homework will be used to supplement topics covered in class. Homework due dates will be assigned. If you have an excused absence (sports, doctor's notes, etc.) you will have one week to make up the assignment upon your return to class, after which your grade for the assignment will be zero. **Otherwise homework cannot be made up**

<u>Class activities, participation and project</u> – In class you will be asked to complete activities and are expected to contribute to class discussion when appropriate. Class activities cannot be made up.

<u>Paper discussions:</u> 2-3 times during the semester you will lead a discussion of an assigned paper. You role will be to present the paper and engage the rest of the class in discussion. More details will be described in class.

Grades

Grades will be determined in the following manner:

Class activities,	
Labs &	
Participation	25%
Quizzes	5%
Paper	
discussions	10%
Homework	10%
Exams	25%
Final Exam	25%

Attendance policy – Attendance to class is essential for success in this course. Unexcused absence from MORE THAN 3 lectures will result in that student receiving an F for the class. Only SERIOUS medical conditions, job interviews, academic conferences, and games for SPSU sports teams will be considered an "excused" absence. A physician MUST provide written confirmation of any illness, and must include a contact telephone number. All documentation must be submitted WITHIN 1 WEEK of the absence in question. Documentation is also required for sports-related absences, and is required 1 week in advance.

- •I reserve the right to reward diligent students with perfect attendance (i.e., no absences of ANY kind) by increasing their final grade by 2%.
- •I will consider chronically tardy students absent for the purposes of attendance (i.e., 3 tardies = 1 absence). If a student is more than 25 minutes late, they will be counted as absent. NOTE: If you must be late, enter the class and sit down quietly.

You are responsible for any and all announcements made in lecture (including changes to the syllabus).

<u>Withdrawal Policy</u> – The last day to withdraw from this class with a **W** is **February 26**, **2013**. Thereafter, I **will not** issue any withdrawals from the course, and you will receive an official grade.

<u>Academic dishonesty</u> – Students found cheating on exams, homework assignments, quizzes, or laboratory assignments will receive an **F** for the entire course. No exceptions are made in this case, so please work independently. Be sure to read the relevant section and know and understand the potential penalties in the University Academic Regulations in the current undergraduate catalog or on the campus web site. SPSU has an Honor Code and a new procedure relating to when academic misconduct is alleged. All students should be aware of them. Information about the Honor Code and the misconduct procedure may be found at http://spsu.edu/honorcode/.

*Students who feel they may need an accommodation based on the impact of a disability should make an appointment with the ATTIC (678.915.7361) to coordinate reasonable accommodations. The students are also welcome to contact the instructor privately to discuss one's specific needs.

<u>USE OF CELL PHONES (INCLUDING TEXTING) IS NOT PERMITTED IN THIS</u> CLASS!

Tentative Schedule

Week	Date	Topic	Lab
1	Jan 7	Ecosystem Concepts	
2	Jan 14	Climate	
3	Jan 21	Geology & Soils	Soils
	Y 2 0		
4	Jan 28	Energy & Water	Cont.
_		Exam 1 - FRIDAY	
5	Feb 4		Biomass & Allometry
6	Feb 11	Carbon Input	Cont.
7	Feb 18	Ecosystem Production	Dendrochronology.
/	1,60 19	Ecosystem Froduction	Cont.
	7.1.07		
8	Feb 25		Cont.
	3.5.4	Exam 2 - FRIDAY	
9	Mar 4	CDDW/C DDE (V)	
1.0	3.5.44	SPRING BREAK	
10	Mar 11	Decomposition	Soil Respiration
11	N 10		
11	Mar 18	Plant Nutrient Uptake	Cont.
10	16 25	N C I:	D
12	Mar 25	Nutrient Cycling	Decomposer
		Exam 3 - FRIDAY	Community
13	Apr 1	Exam 3 - FRIDA I	Cont.
13	Apri		Cont.
14	Apr 11	Species and Community	Sun and Shade Leaves
17	7 1 pi 11	Effects	Sun and Shade Leaves
15	Apr 8	Temporal Variation	NPP
	1	1	
16		Exam 4 -	
		WEDNESDAY	
	Apr 15	Ecosystem	
_		Sustainability	
17	Apr 22		

Last Day of Spring	
Classes –Apr 29	
FINAL EXAM- TBA	