

## CLASS SYLLABUS

BIOL 5300 ECOLOGY fall 2011

CLASS TIME: Lecture: MWF 11:00-11:50 a.m.  
Lab: Section A: R – 9:30 a.m. – 12:20 p.m. or  
Section B: R- 1:00 – 3:50 p.m.

INSTRUCTOR: Dr. Colleen McDonough  
OFFICE HOURS: M: 9:30-10:30 a.m.; M: 1:30 – 2:30 p.m. or by appt.  
OFFICE: 2086 Bailey Science Center  
PHONE: 333-5759 (main office), 333-5764 (my office)  
EMAIL: [cmcdonou@valdosta.edu](mailto:cmcdonou@valdosta.edu)

TEXT: “Ecology”, 6<sup>th</sup> Edition, by Charles J. Krebs

COURSE OBJECTIVES: The objectives of the course are to

- examine biological principles at the organismal, population, community, and ecosystem levels of organization.
- cover evolutionary and physiological processes that affect abundance and distribution of organisms
- examine intraspecific and interspecific relationships such as competition and predation.
- properties of communities and ecosystems such as energy flow and nutrient cycles.

Throughout the course

- quantitative models are used to identify important variables and
- principles of conservation are incorporated throughout

### Standards

VSU General Education Outcomes on webpage:

(<http://www.valdosta.edu/academic/VSUGeneralEducationOutcomes.shtml>) This course meets outcomes 3., 4., 5. and 7.

Department of Biology Educational Outcomes: acquiring breadth of knowledge in organismal biology and evolution and ecology, a knowledge base to develop research questions, and the ability to properly analyze and resolve research questions through use of scientific method.

**PREREQUISITES:** Admission into the Biology Master’s Program or consent of instructor

**ATTENDANCE POLICY:** You must attend all the laboratories of this course or not receive points from those labs. Science is action; it is about “doing”. Therefore, you must be involved in the act of doing ecology. If you miss a lab, it is equivalent to missing an entire week of class. You **may** be able to make up labs in the other section the same week with permission. Labs are held Thursday only, so you need to take care. If sick, you need a doctors excuse and see me **as soon as possible** after the missed lab. Contact me by Monday at the latest. **DO NOT WAIT TO TALK TO ME IN LAB ABOUT MISSING LAB CLASS LAST WEEK.**

I strongly recommend that you make all the lectures however I have no strict attendance policy for lecture. If you miss, you need to get the notes from someone who attended class (excluding myself). Everyone has experienced reading someone else’s notes (including me) and knows they are a poor

substitute for sitting in class yourself. Reading notes is not be equivalent to hearing and writing the material yourself.

**GRADING POLICY:** Your grade will be based on a total of 600 points; 400 will come from lecture tests, 100 from lab assignments, 50 from a formal lab report, 50 from a term paper or equivalent (see below).

Course grade: Your course grade will be based on your total number of points from lecture, lab and the lab report. Grades will be distributed according to the following percentages:

A - 90%, B - 80%, C - 70%, D - 60%, F < 60%

Lecture tests: There will be 4 lecture tests and a final. I will average your 4 HIGHEST scores, get a percentage and multiply by 400. Example – if you have an 80% after 4 tests and do not take the final, your lecture score will be 320 ( $400 \times .80 = 320$ ). If you are happy with your lecture score after the 4 tests, you do not have to take the final. If you do worse on the final than the regular tests, the final test grade will not count. Students who have missed a grade for any reason must take the final. **STUDENTS WHO BOMB A TEST AND THEN HAVE TO MISS ANOTHER TEST FOR WHATEVER REASON WILL NOT BE ABLE TO TAKE A MAKE-UP TEST.** If you study hard for every test, this circumstance will not come up. The exams and the final will have short answer and essay questions. I usually give 1-2 primary papers on a topic to read prior to the exam and provide questions that might require more thought. Any issues, problems or complaints about grading must be made within one week of receiving an assignment/test back. No grade changes will be made after that time.

Laboratory: Lab attendance is required. Roll will be taken within 5 minutes of the start of lab and any unexcused absences will be recorded and you will not receive credit for that laboratory exercise. You need to be on time especially for field labs when we will leave immediately at the start of lab. Not finding parking is not an acceptable excuse. Suitable field clothes are required for off-campus field labs and some labs we do around campus.

**Acceptable clothes include pants (no shorts), socks, and closed shoes (no sandals).**

**You may wish to bring a hat, insect repellent, and water.** Individuals not wearing appropriate field clothes will not be allowed on the field trips and will not receive credit for that laboratory exercise. (This policy is designed to protect you from getting poison ivy or being bitten by ticks or red bugs). Some weeks during the semester I may lecture during part of the lab. Any material covered in lab at any time should be studied for the lecture tests. You will be either having written assignments or quizzes to assess your understanding of the laboratories conducted. These assessments will count for the 100 points of the lab portion of the course.

Lab Report: A comprehensive formal lab report will be worth 50 points. A general handout explaining what information is required for a formal laboratory report will be given out during lab.

Term Paper: Students will pick a ecological topic of interest and write a comprehensive review paper that summarizes the current state of the literature. It is advisable to choose a topic that relates in some way to their thesis topic. Paper will be due toward the end of the semester – due date will be flexible depending on the demands on time of the student.

Late Assignment Policy: For every day an assignment is late, points equaling one full grade will be subtracted from the points received. For example, if a lab report is late one day, I will grade it and then subtract 5.0 points (10% of 50) from the total. Two days late

will have 10 points subtracted, etc.

**STUDENTS WITH DISABILITIES:** Students requiring classroom accommodations or modifications to testing, such as more time, need to be documented with the Access Office for Students with Disabilities. These students should discuss needs with me at the beginning of the semester. Students not registered must contact the Access Office, Farber Hall, Phone; 245-2498. Website: <http://www.valdosta.edu/access/>

**FEDERAL PRIVACY ACT:** It is illegal to release personal information about an individual to others. Therefore, I cannot give out your grades to anyone but yourself. I cannot give them out over phone or through email unless with written permission.

**CLASS BEHAVIOR:** Any student engaging in disruptive behavior will be asked to leave lecture or lab. They will forfeit the chance to hand in the work resulting from that laboratory.

**CELL PHONE USE:** Cell phones must be turned OFF during class and lab. If there is an emergency you may leave the class and answer the phone. Because exiting and entering the classroom may be disruptive, if it becomes a problem it will not be allowed. **TEXTING IS DISRUPTIVE TO ME.** How shall we handle this problem?

**PLAGARISM AND OTHER FORMS OF STEALING:** Adhere to the policy listed on the Biology Department's website (<http://www.valdosta.edu/biology/>). See list of items under "FOR STUDENTS"). Take note of the following sentence within that document,

**"Therefore, it is extremely important that any written work submitted represents a student's personal synthesis displayed in sentences completely constructed by the student."**

If caught cheating a student will be given a zero for the assignment or test and be reported to the dean of students. If caught a second time, they will fail the course. Note the paragraph stating that plagiarism will not be tolerated and the serious consequences. This is an issue of honesty and ethics. If you are so time stressed that you can't individually do the work required in this course, consider withdrawing rather than face the repercussions and failing the course.

If you use someone else's work to write up yours, then you are plagiarizing. **If you allow someone to write up your work, then you are plagiarizing and cheating and also will be punished.** If you rewrite another person's work, then you are plagiarizing even though it is not word for word. **IT IS NOT ACCEPTABLE TO WRITE UP LAB REPORTS OR ASSIGNMENTS TOGETHER BECAUSE YOU ARE LAB PARTNERS. YOU ARE PLAGIARIZING. THIS GOES FOR GRAPHS AND TABLES AS WELL AS FOR TEXT. Being someone's lab partner is not an excuse for similarity in style.**

You may discuss the laboratories with your partners or others but you may not write together. Go home or to the library and write up your assignments on your own. **Do not let others look at your assignments.** Do not let others pressure you into showing them

your assignments before class when due. Put them on my desk when entering the classroom. If I write on your paper that your work is too close in content to Joe-Blow's work, then consider this a warning and the next time it happens both papers/assignments will get a zero. If a student copies from another student's test or uses extra "test aids" during a test, he/she has cheated. If a student allows someone to copy from his/her test, he/she has cheated and will be punished. If a student paraphrases another author's work without citing the source, then you are plagiarizing (i.e., stealing). Everyone has an individual writing style. It is almost like a fingerprint. Therefore, it is very easy to pick out similarities in writing and thus, potential plagiarism. This is the same for graphic depictions of data and tables. I will not tolerate the communal sharing of work. This goes for work done in previous semesters. I have copies of previous work and will compare your work with past student's work.

### **DATES TO REMEMBER**

Labor Day: Sept 5 – **NO CLASS**

Mid-Term: Oct 6<sup>th</sup> Thursday, Last day to drop with a Withdrawal Pass

Fall Break: Oct 24 – 25<sup>th</sup>, **NO CLASS**

Thanksgiving: Nov 23-25<sup>th</sup> **NO CLASS**

Final Exam: – Dec 9<sup>th</sup>, FRIDAY- 12:30 – 2:30 p.m.

### **WEEKLY LECTURE SCHEDULE - Tentative**

Week	Topics	Chapters
1	Introduction, evolutionary ecology	1, 2
2	evolutionary ecology, physiological ecology	2, 3, 4
3	factors affecting distribution	5, 6, 7
4	populations and catching up	9,
5	demographics, growth	10, 11
6	species interactions, competition	12
7	predation, parasitism	13, 15
8	population regulation, conservation	16, 17, 19
9	catch up lecturing	
10	community ecology	20
11	Succession, biodiversity	21, 22
12	trophic levels	23
13	Disturbance, ecosystems	24, 25
14	Production	26
15	Nutrient cycling	27

### **TESTS**

**Test 1: September 9th**

**Test 2: October 3rd**

**Test 3: November 4th**

**Test 4: December 2<sup>nd</sup> or 5th**

**Final: December 9<sup>th</sup> – 12:30 – 2:30 p.m. same room**

LABORATORY SCHEDULE- Due to the unpredictability of living things, this schedule always changes.

Date

Aug 18	Lab meeting, start statistics and graphics – on campus
Aug 25	Statistics and Graphics – finish – on campus
Sep 1	Natural selection/Genetic Drift simulation (outside on campus)
Sep 8	Population Density and Distribution ** Field Lab,
Sep 15	Finish and Set –up Population Growth
Sep 22	Habitat Utilization ** Field Lab
Sep 29	Finish Habitat Utilization
Oct 6	Phenotypic Plasticity Lab (on campus)
Oct 13	Life History Strategies, survivorship curves
Oct 20	TBA
Oct 27	Population growth – set up earlier
Nov 3	Intermediate Disturbance Lab ** Field Lab
Nov 10	Measuring Succession **Field Lab
Nov 17	Finish up
Nov 24	Thanksgiving – no class
Dec 1	Catch up or lecture

A formal lab report will be due on one of the laboratories performed. There will be a handout given to explain what is required.