

BIOLOGY 354, Ecology and the Environment Spring 2004 Syllabus

Professor: Dr. Kathy Williams Office: PS-151 Hours: MW 12-1 and by appt. Phone: 619-594-5491 E-mail: kwilliams@sciences.sdsu.edu	Dr. Lee McClenaghan PS 154 M-Th 12 - 1 and by appt. 619-594-3751 lmcclena@sciences.sdsu.edu
---	--

Each of us will hold our office hours during the weeks we present lectures. If the scheduled office hours are not convenient for you, please arrange an appointment. **The best way to reach us is by e-mail**, but feel free to talk with us after class or phone us at our offices. You may also leave messages for us in our mailboxes outside the Biology Office (LS 104). Please recognize that we have other responsibilities besides Biology 354 and that these responsibilities often take us out of our offices. If you are having problems in class, please see the instructors *as soon as possible*. We will do everything we can to help you improve your achievement, but don't wait until mid-semester or immediately before exams to contact us.

General Course Information

Prerequisites: Bio 201, Bio 215, and Math 122. You are required to have passed those courses before taking this course. Please see page 92 of the General Catalog (2003-2004) if you have questions about prerequisites and drop policies.

Lecture: MW 11:00-11:50, PS 130

Friday Discussion Sections and Teaching Assistants: Jessicsa Brasswell, Emily Floyd, Refugio Robles

Sec	Schedule #	Time	Room	TA
Sec 1	03931	0800 - 0850 F	LS 134	Jessica Brasswell
Sec 2	03942	0900 - 0950 F	PS 140	Emily Floyd
Sec 3	03953	1100 - 1150 F	PS 140	Emily Floyd
Sec 4	03964	1100 - 1150 F	LS 134	Refugio Robles
Sec 5	03975	1200 - 1250 F	LS 134	Refugio Robles

TA	Office	Phone	E-mail	Office Hours
Jessica Brasswell	PS 250	594-2885	jdbراسwell@ucdavis.edu	0800-1100 TTh
Emily Floyd	LS 201	594-3750	emfloyd@yahoo.com	2-3 Th; 12-1 F
Refugio Robles	PS 154	594-4356	rrobles@sciences.sdsu.edu	0900-1100 F

Course Materials

Blackboard (<http://blackboard.sdsu.edu/>) will be used for electronic posting of all course announcements, grades, and other materials (such as reading assignments for the Discussion Section) on the Web. A copy of this syllabus and the course schedule, can be found there.

Text Book (required)

Ricklefs, Robert E., 2001, *The Economy of Nature* 5th Ed., W. H. Freeman and Co. You need to have a copy of the text. We will use most parts of this book; the whole text will enhance your understanding of ecology. The publisher provides an on-line resource with this book called the E-Study Center (study aids, quizzes, activities) at <http://www.whfreeman.com/ricklefs>. We may make assignments that use this site.

Lectures

Lecture outlines normally will be posted on the Blackboard website before class so that you may use topical points and figures as a guide during lecture. **Note that these outlines are not lecture notes, but are provided as an aid for note-taking during lecture. The Power Point presentations during lecture will not be posted on the web because we believe note-taking skills are not fostered in this manner and because we encourage your attendance.**

Discussion Materials (required)

Articles for discussion and other course materials will be posted on the Blackboard website as Adobe pdf files. You can print these articles from the website or ask your teaching assistant for printed copies to borrow and copy.

Students will be able to view, read, print, download, and/or save the information posted on the course Blackboard web site. Given disk space limitations, class material older than 2 weeks may be removed from the web site, and cannot be provided on request. **Material made available on the web is not intended to be a synthesis of material required for the exams.**

Scantrons (required) -- available at the Aztec bookstore -- **you must have the correct forms** , or you will not get credit for the assignments

You'll need one scantron form (**#882-ES**) and #2 pencils for each exam (4 scantrons total). Small scantron forms #815 or #815E are required for in-class assessments. **The #815 forms come in packs of 15; please bring them to each class meeting.**

Because this course includes an extensive writing component (worksheets for discussion sections, project paper), an additional text we suggest you obtain is the Elements of Style by Strunk and White. This is one of the best books on English usage ever written, and should be one of the most important books you will buy and read as a student.

Note: If you want to access a web-based version of this text for free, go to <http://www.bartleby.com/141/index.html>.

Course Goals & Objectives

This class provides an introduction to the science of ecology and the physical and biological processes that affect our environment. A main objective of the course is for you to learn about the conceptual framework of ecology.

The Biology faculty at SDSU realize that to succeed in the educational, technical, and analytical jobs many of you will be or are doing, you need scientific knowledge and a variety of skills. Therefore, our goal is that at the end of this course you'll be able to demonstrate:

- 1) **knowledge of basic concepts in ecology/environmental biology, including the dynamic nature of ecological processes and the importance of variation in space and time.**
- 2) **an ability to make a scientific argument and support it with appropriate examples or scientific justification.**
- 3) **knowledge of and ability to apply the scientific process.**
- 4) **an ability to find, evaluate, and use published scientific information.**
- 5) **competence in scientific writing and oral communication.**
- 6) **an ability to work together in teams.**
- 7) **an ability to integrate concepts within and among disciplines of science.**
- 8) **understanding of the relevance of ecology to society.**

Discussion sections

This course involves extensive discussion of the primary ecological literature. Students will be discussing published papers relevant to the lecture topics. Critiquing and discussing papers objectively is fundamental to evaluating scientific studies. Worksheets outlining these papers will be required as a pre-cursor to discussion.

In addition, you will work in groups to develop a project that addresses an ecological issue or environmental problem. Because human activities continue to affect the natural environment, these issues or problems, and their ecological relevance have become focal areas of study. **This exercise will involve your working in teams on a study of your choosing, with guidance from your instructors.** You will identify an ecological issue or problem, provide a history of its impacts, relevance, and potential solutions.

Participation in discussion: Since this is a *discussion section*, the greatest benefits will be achieved when all students thoroughly read the assigned papers. In addition, if students aren't present for the discussion or for working on the group project, then the whole class suffers. Therefore, after one unexcused absence, 6 pts will be deducted from your total course points for each subsequent unexcused absence, in addition to missing any graded activities. For an excused absence, your TA will require written

justification from a doctor or other official providing verification of your necessary absence at the date and time of your discussion section.

Grading Policy and Exams

- The four exams will be worth 100 points each, worth 55% of your final grade.
- You may earn up to 70 points from in-class assessments. Numerous short assignments and quizzes will be given in class (5-10 pt each), and we will drop some of your lowest scores to calculate your total out of 70 pts.
- Your performance in the discussion section of the course will account for about 35% of your final grade and a breakdown of your grade in discussion will be provided in your discussion sections on the first Friday.
- The final score and grade will be based on your total accumulated points in class and discussion (705 pts. maximum). Final grades will be based on percentages of points achieved from the standardized total points offered in the course based on the percentages of the categories above: A = 90-100%, B=80-89%, C=70-79%, D=60-69%, F=less than 60%.

We may adjust scores and percentages based on the class average and our judgment regarding class performance (i.e., we may curve the grade distribution, or not). To ensure that you receive a particular grade, apply the above percentile ranges. Please remember that long-standing University policy considers a grade of A to represent exemplary performance, indicative of "outstanding achievement; available only for the highest accomplishment," while a grade of B indicates a "praiseworthy performance; definitely above average." We hope you will all strive to demonstrate exemplary performance.

Grading schedule		
Midterm Exams (4 @ 100 pts)	400	55%
In-Class Quizzes	70	10%
Discussion activities	100	15%
Project	100	15%
Discussion Participation*	35	5%
TOTAL	705	100%

* Discussion participation is evaluated based on attendance & in class contributions.

Policies for Missing Exams and Graded In-class Activities

Grades will be based on exams (the last exam is the Final), periodical in-class activities, homework, and discussion section activities. If you have to miss an exam, you must let the instructor know before the end of the day of the exam. You should let the instructor know immediately (by the next class day after your absence from lecture or discussion), if you miss any other graded activity. To document an excusable absence, you must provide evidence that your absence was the result of a serious, unavoidable problem. In those cases, arrangements will be made so that you are not penalized for missing the graded activity.

Exams: Exam questions will come from lecture material, textbook readings, discussion articles, and homework. Exams will be 50 min. long (100 pts each), and take place in the lecture room (PS 130). Each exam will cover material presented since the previous exam, recognizing that your knowledge will build over the semester. The final exam will only cover material since the last midterm exam (100 pts). It is your responsibility to be on time for tests and to contact the professor if there is a problem. Exams may include matching, multiple choice, fill-in, and short answer questions. **Make-up exams (upon verified excused absence) will consist of essay questions or be oral, and will be given for the first 3 exams only.** If illness or other serious problem beyond your control prevents you from taking an exam, you are expected to provide some kind of verification of the reason, such as a note from student health services. Missing an exam because your employer wants you to work is not an adequate justification. **You must contact the appropriate instructor by the end of the day of the exam with a valid excuse to be accorded the privilege of taking a make-up. Please be certain that the professor has received your communication.**

Exam Dates:

Exam #1: Monday, Feb. 2

Exam #2: Monday, Mar. 1

Exam #3: Monday, Apr. 5

Final Exam: Wednesday, May 5 (NOTE: This exam is from 10:30 to 12:30)

In-class quizzes typically will include 3-5 questions, take no longer than 5 minutes, and take place at any time during the class period. No make-ups will be given for quizzes, but your lowest quiz scores will be dropped (in-class assignments and quizzes will total 70 pts max). Thus, it will be to your advantage to do well on all of them to try to earn the maximum number of points. Because these quizzes will involve what is going on with course material (context specific), **it will be important for you to be in class each day.**

Tips for excelling in BIOL. 354:

- **Attend class and take notes**
- **Ask Questions!**
- **Use a binder or course folder** to keep your notes, lecture handouts, and other information together all in one place. Bring it to class.
- **Be prepared.** Read the appropriate assignments **before** class
- **Be an active learner.** Answer study questions in the text, take notes on the book, use the textbook publishers' Web site for self-quizzing.
- **Collaborate with your classmates.** Form study groups. Work together on the group project.

Other Information:

Cheating

Cheating has rarely been a problem in Biol. 354, and warning you about the consequences may seem unnecessary. Nevertheless, to avoid any possibility of you not recognizing what the consequences are, this is our policy: **If you are caught cheating (or participating in any form of academic dishonesty) in an exam or on an assignment, you will receive a zero on the exam or assignment. In addition, the event will be reported to campus judicial authorities and may lead additional actions from the University. Incidents of plagiarism are particularly grievous, and they will be treated as very serious acts of academic dishonesty. Remember, your responses must be your own words. We strongly recommend that you review the site below to obtain a clear explanation of plagiarism, cheating, and similar inappropriate conduct. If you are unsure of what constitutes plagiarism, see your instructor or T.A.**

<http://science.widener.edu/svb/essay/plagiar.html>

Dropping

The last day to drop is February 2. If you must withdraw from the university after that date you must petition the Office of the Registrar (see <http://arweb.sdsu.edu/sic/>) for information). Unfortunately, the last day to drop without the risk of penalty comes very early in the semester. If you are unsure what to do, please feel free to talk with one of the course instructors about your concerns.