SYLLABUS FOR BIO 265-004
ECOLOGY
Fall 2013
Loyola University Chicago
Lecture: Tuesday/Thursday 1:00 – 2:15
Discussion: Tuesday or Thursday 2:30 – 3:15

INSTRUCTOR: Dr. Joe Milanovich
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Office phone: (773) 508-3635
Office hours: Monday and Wednesday1:00 – 3:00 p.m., or by appointment.
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Text: Molles, M.C. 2013. *Ecology: Concepts and Applications*. 6th Edition. McGraw Hill, Boston , MA. 572 pp.

Response device: i>clicker.

All students are required to use Sakai for this course. http://LUC.edu/sakai. Course announcements will be posted on Sakai or sent to @luc.edu email addresses. Students are encouraged to check Sakai and @luc.edu email daily.

*Please note: This course syllabus is a general plan for the course; deviations announced to the class by the instructor may be necessary.

COURSE DESCRIPTION:

In this class you will:
a) Learn the conceptual framework of ecology.
b) Develop skills needed for scientific study.
c) Integrate topical ecological issues across disciplines in science, economics, and the humanities

Ecology is broadly defined as the study of relationships between living organisms and their biotic and abiotic environment. Scales of ecological inquiry range from genes, individuals, and populations to communities, ecosystems, and landscapes. Lectures stress the importance of ecological principles for guiding conservation of biodiversity and environmental quality, and draw heavily on empirical examples from temperate, tropical, and polar ecosystems and human-dominated landscapes throughout the world.

COURSE POLCIES:

1. Attendance and class participation is highly suggested. Each day the course may include quizzes, group projects, lectures, and discussions that will be graded. Prolonged absence may result in an Unofficial Withdraw (same as an academic standing as F). If you are absent please contact me with a valid reason.
2. Details of course assignments, projects, and group work will be provided on Sakai. However, you are expected to take notes during each class, as much of the material you will be tested on will be covered during lecture only.
3. All assignments must be typed unless noted otherwise.
4. Late assignments are accepted, but will be subject to a % per day late fee (determined by your class).
5. Any form of academic dishonesty will not be tolerated and may result in dismissal from the class and an F grade.
6. Please follow proper class etiquette: Be on time, don't leave early, no cellphones. Please inform me prior to class of any situation (i.e., emergency) that requires you to have access to your cell phone during class time.
7. Laptops may only be used within the context of the class
8. **Have fun this term!**

STUDENT EXPECTATIONS

Class sessions will generally follow a lecture format. However, video segments, discussions, and in-class demonstrations/activities may be included to facilitate learning of course material. Students can increase their own learning and success in the course by:

Attending class: Your participation is important to the success of this course. Students are expected to be mentally engaged during lecture, ask questions when uncertain, participate in group activities, and contribute to the discussion when appropriate. I expect you to attend every class and to arrive on time. The classroom is larger than the class, avoid sitting in the last several rows or on the extreme left or right. If you have trouble seeing or hearing and can't find a seat closer please let me know. Class discussion (via clickers; see below) of material may be held on any class period. Experience has shown that those people who miss many classes usually end up failing the class. It is up to you to make the effort to come to class and get notes from your classmates if you should miss a lecture.

Reading the text: The second step to success is to read the reading assignments in your textbook. The best strategy to making the most of your textbook is to read the assigned reading before the information is presented in class. Read through the material to get an overview of the given subject; do not spend a bunch of time worrying about parts that you do not immediately

understand. After the material is presented in lecture, go back and re-read the chapter. Highlight terms and information in the textbook that was presented in lecture. Look over the review materials at the end of the chapter and hunt for those questions that are directly related to the material you have just highlighted. If you have any questions on the material that was presented in class, make a note to yourself to ask me about them.

Studying for the exams: We will be covering a large amount of information in this class. Do not wait until the day before the exam to start studying! Be sure to set aside sufficient time for you to master all the material. Different people need different amounts of time to memorize terms and learn material. Use what you know about your own strengths and weaknesses to decide on the amount of time you need. Some strategies that I have seen work for many students is 1) find another student (or students) to study with; 2) make up flash cards with new terminology on one side and definitions on the other side; 3) find a quiet place without distractions of TV, family, friends, etc. and use this place to routinely do your studying.

Posting of Grades: Through the semester, your grades will be posted on Sakai. This is not the official gradebook for the class (that is kept separately by the instructor), but it is meant to allow you to see that grades have been assigned to you for the exams and other assignments. If you notice a missing grade or a wrong grade on Sakai, please talk to me about this. Grades will generally be posted after the assignments have been handed back in class (not before). Grades from the very end of the semester (e.g. Final Exam grades, etc.) will NOT be posted. If you want to know your grade on the Final Exam, please arrange to stop by and talk with me after the semester has ended.

Setting your priorities and managing your time: My assumption in teaching this course is that your classes are your Number 1 priority while you are a student pursuing a degree at Loyola University Chicago. Doing well in any class requires a time commitment on your part, and this is especially true for science courses. The general "Formula for Academic Success" for a college class is that: "For every hour in class, plan on working and studying 2-3 hours outside of class". Each week you will be spending about 3 hours in class. You should plan on spending at least 6 hours working on this class each week, outside of class.

Special circumstances: Students requiring special considerations including student-athletes, those with special needs for test or note-taking, or individuals with religious obligations must see me to make arrangements prior to expected absences or exams. Please feel free to see me during office hours or before/after class to discuss your situation. I am happy to work with you and will hold your information confidential, however, I urge you to be proactive in communicating your individual circumstances.

Communication: Full contact information for the instructor is above. Please use your @luc.edu email account to send and receive messages. You can expect timely email responses during regular business hours. If you require a quick response please time your inquiry appropriately. As a professional-in-training, polite email format is strongly encouraged. These include a succinct subject line (e.g., Question: BIO 265 Ecology exam), a short address (e.g., Hi Prof Milanovich), and your name at the end. Disciplined adherence to simple rules of professional email communication will be to your advantage throughout your career!

Clickers and clicker scores: Register your clicker on Sakai for this course (see pdf link below). To do so, log on to Sakai and select this class, "BIO 265 004" (Ecology lecture). Select " i>clicker" from the menu on the left and enter your Remote ID. Enter the 8 digit/letter combination just below the bar code on the back of the clicker (link to instructions below). There will be clicker questions on most lectures so students should bring their clicker to every class.
http://www.luc.edu/media/lucedu/itrs/pdfs/sakai/clickers/Register%20clicker%20remotes.pdf

Discussion sections: Discussion sections are an opportunity for students to review any material from the course. I will prepare items for us to discuss with a special emphasis on data interpretation of figures, tables, and diagrams. Students are also expected to use the opportunity to address specific questions and uncertainties. Discussion sections will be used to review graded exams. Discussion material will not be posted on Sakai.

Academic Integrity**:** Assignments and examinations should reflect each individual's understanding and achievement. Written submissions must be in your own words. If you use another person's words or ideas, the source(s) must be cited. Academic dishonesty will incur serious penalties and may result in referral to the Dean of Students and could adversely affect your grade. For further policy regarding academic integrity, including penalties that may be incurred for academic dishonesty, please refer to the LUC website: http://luc.edu/academics/catalog/undergrad/reg_academicintegrity.shtml or http://www.luc.edu/cas/pdfs/CAS_Academic_Integrity_Statement_December_07.pdf. Also check the English Department's description: www.luc.edu/english/writing.shtml#source

ASSIGNMENTS AND TEST:

Ecology In The News (EIN) Write Up (3 @ 25 pts. each) – Each student will be asked to complete three Ecology In The News Write Ups. These write ups will be completed by gathering information on current news worthy events that deal with anything regarding a topic we covered in class to that point. The topics chosen are left up to your discretion, but must be less than 5 months old. You will hand in (1) a one paragraph (4 -10 sentence) typed summary of the news article, (2) one paragraph detailing your reaction to the article, and (3) a complete reference (including the date of publication, author, resource, and article title) of where the information was obtained. Once complete, you will present your "news story" to a small group

within the class. This assignment is meant to fulfill the main objectives of this course by helping you understand how the general course content is interweaved in everyday life.

Annotated Bibliographies (1 @ 50 pts.) - The purpose these two annotated bibliographies is to assist you to become familiar with the primary sources of literature in the field of ecology, and to develop a skill for summarizing information. You will pick a topic relating to a topic we discussed in class (at the point the assignments are due) and locate **Five** peer-reviewed research articles (e.g., articles found in scientific journals such as Nature, Science, Ecology, Journal of Animal Ecology). For each article you will provide a citation, a brief summary of the article (6-10 lines), and a brief summary how the article relates to the course, or how you felt the study could be either improved or built upon. Web of Science is a great database you can use, much like a Google search, to find peer-reviewed articles. Find the link to this Web of Science (among others) database at the LUC library here: http://libraries.luc.edu/databases/all/. Google Scholar (www.scholar.google.com) is also a great resource. Simply type in your interest and begin. Science is built upon the foundation of others, so it is important to not only understand a broad range of work, but be able to find the importance and critique the work. These exercises will also help you hone your literature searching skills, which are useful for any profession (especially medicine, ecology, or environmental science).

Examinations: Examinations will focus on the material presented in each section of the course. Exams are not cumulative. The nature of the material is such that it builds upon itself, however, so a working knowledge of the previous topics is usually required as we move into new ones. All exams are closed-book. The format will be some combination of multiple choice, short answer, and matching.

*The final exam must be taken at the time and location determined by the LUC administration. This is College policy and there are very few permissible exceptions. Please see me straightaway if you anticipate a conflict. The official academic calendar can be found here: www.luc.edu/academics/schedules.

*Make-up exams are by advance permission only. If you cannot make an examination at the scheduled time due to illness or some emergency, you must make all reasonable efforts to inform me prior to the beginning of the exam period. Make-up exams must be taken as soon as possible following the missed date. If the exam is not completed within 7 days following the test (barring extreme situations), I reserve the right to assign a zero.

Class Preparation and In-class assignments - A variety of small assignments and iclicker questions will be presented throughout the semester. These will generally be worth 2-5 points each. If you miss an assignment that is presented and turned in during a single class period it cannot be made up. Some points will come from in-class work, others from preparation work

before class. In total throughout the semester, these assignments will be worth 50 points. These assignments have two purposes: (1) They help synthesize course material and give you all a break from straight lectures, and (2) They award students who attend class! I understand there may be some classes that are unavoidable to miss. In such cases you can be exempt from any graded in-class work if you contact me prior to class, or have a valid reason for being absent.

GRADING BREAKDOWN

Exam #1	= 100 pts.
Exam #2	= 100 pts.
Final Examination	= 100 pts.
Ecology In The News Write Ups (X 3)	= 75 pts.
Annotated Bibliography	= 50 pts.
In-class assignments	= 50 pts
TOTAL POINTS	**= 475 pts.**

***~40% of your grade does not include exams!**
So make sure to complete all assignments and come to class!

Grading Scale:

- A 93-100
- A- 90-92.99
- B+ 87-89.99
- B 83-86.99
- B- 80-82.99
- C+ 77-79.99
- C 73-76.99
- C- 70-72.99
- D+ 67-69.99
- D 60-66.99
- **F** **< 60**

Student Resources

Writing Center: Located within Information Commons (Rm. 221) the center is open for appointments and can be a great resource for students. It never hurts to have another set of eyes! Visit: http://www.luc.edu/writing/

Free Tutoring Services:
Take advantage of my office hours. If you still need help beyond this, then FREE tutoring is available through LUC Center for Tutoring and Academic Excellence located within the Sullivan Center for Student Services. Visit: http://www.luc.edu/tutoring/

Services for Students with Disabilities: http://www.luc.edu/sswd/

Library: http://libraries.luc.edu/

Course schedule

Week	Dates	Topic	Reading	Assignments Due
1	27 Aug	Introduction/Syllabus	Chapter 1	
	29 Aug	Biogeography - Terrestrial	Chapter 2	
2	3 Sep	Biogeography - Aquatic	Chapter 3	
	5 Sep	Island Biogeography	Chapter 21, 22	
3	10 Sep	Evolution	Chapter 4	
	12 Sep	Behavioral ecology	Chapter 8	
4	17 Sep	Class exercise		EIN Write Up #1
	19 Sep	**Exam 1 – Over chapters 1, 2, 3, 4, 8, parts of 21 and 22**		
5	24 Sep	Pop'n Ecol. – Distrib'n	Chapter 9	
	26 Sep	Pop'n Ecol.- Human	Chapter 10,11	
6	1 Oct	Life history	Chapter 12	
	3 Oct	Species Int'n – Competition	Chapter 13	
7	*8 Oct*	*No classes – Fall Br. 7-8*		
	10 Oct	Species Int'n – Predation	Chapter 14	
8	15 Oct	Species Int'n – Mutual.	Chapter 15	
	17 Oct	Class exercise		EIN Write Up #2
9	22 Oct	**Exam 2 - Over chapters 9, 10, 11, 12, 13, 14, and 15**		
	24 Oct	Abundance and diversity	Chapter 16	
10	29 Oct	Community structure	Chapter 17, 20	
	31 Oct	Energy and nutrients	Chapter 7	
11	5 Nov	Primary production	Chapter 18	
	7 Nov	Decomposition	Chapter 19	
12	12 Nov	Nitrogen cycle	Chapter 19	
	14 Nov	Carbon cycle	Chapter 19	
13	19 Nov	Ecosystem/Global ecology	Chapter 23	Ann. Bibliography
	21 Nov	Ecosystem/Global ecology	Chapter 23	
14	26 Nov	*Class exercise*		EIN Write Up #3
	28 Nov	*Thanksgiv. Br. 27-30*	*No class*	
15	3 Dec	Invasive species	*Not in book (material on final exam)*	
	5 Dec	Global climate change	*Not in book (material on final exam)*	
16	12 Dec	**Final Exam (1-3 pm)** - Over chapters 7, 16 ,17, 18, 19, 20, 23		

Note: The pace of lecture material presented in the course will likely vary somewhat from the schedule presented here. Students should follow along with course readings and consult the instructor about any changes to the schedule of topics. Due dates for writing assignments and exams will not change. Students will be alerted to exactly which chapters are included in an exam at least 1 week prior to the time it is given.