

BIOLOGICAL SCIENCES 599 SPECIAL TOPICS IN BIOLOGICAL SCIENCE: URBAN ECOLOGY

Spring Semester 2006

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Office Hours: By appointment

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Lecture Schedule: Monday & Wednesday 2:00 – 3:15 Lapham Hall 257

Required Text: There are no required textbooks for the course. All reading and supplemental material will be provided on the Desire 2 Learn (D2L) site for the course and/or by the instructor. Readings will be an assortment of primary literature (i.e., journal articles), book chapters, and popular press material.

READ THIS INFORMATION CAREFULLY. YOU ARE RESPONSIBLE FOR ALL INFORMATION, INSTRUCTIONS, AND TEST DATES IN THIS HANDOUT

Course Description:

Humans are the epitome of an organism that modifies the environment for its own use. The outcomes of our modifications include the creation of cities and their associated infrastructure, impoundments, utilities, etc. In fact there is virtually no where on Earth that humans have not touched. Thus, the central focus of this course is to understand how humans are components of ecosystems and understanding urban ecosystems.

Course Objectives:

By the end of the course the successful student will be able to:

1. Understand and discuss why humans are components of ecosystems.
2. Differentiate urban and non-urban areas and systems.
3. Understand how plants and animals exist and interact with humans.
4. Understand cities, urbanization, and human-dominated landscapes
5. Read, interpret, and synthesize primary literature on urban ecology.
6. Make scientifically informed decisions about societal issues related to urban areas and urbanization.

Evaluation:

Grading Standards:

A	= 93-100%
A-	= 90-93%
B+	= 87- 89%
B	= 83-86%
B-	= 80-82%
C+	= 77- 79%
C	= 73- 76%
C-	= 70-72%
D+	= 67- 69%
D	= 63-66%
D-	= 60- 65%
F	= <60%

All grades follow the grading standard and no curve will be used for this course. The final course grade will be based on a total of 500 points, with different point values for graduate and undergraduate students. Please note that undergraduate and graduate students will have different sets of material due.

Assignments

Assignments	Points/Assignment	Total Points
Three exams	100	300
Three problem sets--undergraduates	50	150
Review of urban ecology topic--graduates	100	100
Presentation of urban ecology topic-graduates	50	50
Class participation	25	25
Discretionary points	25	25

Exams

A total of three exams will be given during the semester, including a non-cumulative one during finals. The exams will be a combination of short answers, problems, and essay questions. Questions will be based upon material in the lectures and readings. So be warned, you will need to read the material in this course to receive the best possible grade. Exams are designed to be completed in the 75 minutes allotted for lecture.

Problem Sets—Undergraduate Students Only

The problem sets will range from a series of short problems to tackle based on interpretation of lecture and reading material all the way to attending planning, zoning, or regulatory meetings. These assignments are meant to enhance your learning and you will have a minimum of one week to complete the work.

Review of Urban Ecology Topic—Graduate Students Only

One of the most important ways scientists advance knowledge is through a thorough literature review of a topic. Although the field of urban ecology has gained increased attention in recent years, it is still a fairly disparate field of study. The objective of this assignment is to choose an urban ecology topic of interest to you and conduct a complete literature review. The topic can relate to your thesis or dissertation research, or be completely new. The final goal of the review is for you to submit it to an academic journal or popular press scientific magazine. Not only will this help advance your own career, but it is an essential skill to hone and master. Dr. Lepczyk will help provide guidance on this assignment and help you to decide on a topic, target outlet, and time lines.

Presentation of Urban Ecology Topic—Graduate Students Only

At the end of the semester the graduate students will give a short (~15 minutes) talk on their literature review. The presentation is meant to be in the format of a scientific talk and can be given with either PowerPoint or traditional slides. It is meant to complement the review paper in the same way a talk complements your research.

Class Participation

A regular part of the class will be discussing papers, topics, and interacting with guest lecturers. Because this is a small upper level class it is meant to be interactive and your involvement will be important.

Discretionary points

These are exactly what they mean, points at the discretion of Dr. Lepczyk. If you regularly attend, participate, and demonstrate improvement over the course of the semester, then they will be easy to obtain. If, however, you choose not to be overly invested in the course then these points will be elusive.

University of Wisconsin-Milwaukee Policies

- **Drop Policies/Withdrawal/Repeat**

UWM Academic and Administrative Policy S-19 details the Drop-Withdrawal-Repeat policies. A student may drop a course(s) through the end of the eighth week of classes. February 17 is the LAST DAY to drop full-term classes with partial refund or withdraw without notation of "W" on academic record (withdrawal fee assessed). March 17 is the LAST DAY to drop or withdraw from full-term classes. A notation of "W" will appear on your academic record for all classes

- **Students Called to Military Service**

To accommodate students who must temporarily interrupt their studies when called to active duty military service please see the university guidelines at: <http://www3.uwm.edu/des/web/registration/militarycallup.cfm>

- **Academic Misconduct**

The university guidelines for misconduct can be found at: http://www.uwm.edu/Dept/Acad_Aff/policy/academicmisconduct.html

- **Religious Observances**

From time to time, students who are observing religious holidays or other days of special religious significance will find it necessary to be absent on a class day. While it is undoubtedly impossible to avoid the scheduling of tests and other major activities on all days corresponding to religious observances, Wisconsin law (Chapter 36.43) and UWM Faculty Policy (Document 1918) require that we provide "reasonable accommodation of a student's sincerely held religious beliefs with regard to all examinations and other academic requirements." Please make every effort to accommodate students who face conflicts between their academic responsibilities and religious commitments. A copy of the policy is located on the web at http://www.uwm.edu/Dept/SecU/acad+admin_policies/S1.5.htm. In addition, links to the current religious calendar can be found at http://www.uwm.edu/Dept/Acad_Aff/policy/.

Lepczyk's Laws (or Dr. Lepczyk's Policies)

- **Attendance**

Attendance is expected, but not required. Remember, college is expensive and each class you miss is like throwing away \$27 if you're from Wisconsin or \$90 if you're from out of state (that's a lot of donuts, dvds, or just money in the bank!). But, more importantly, evidence indicates that students who frequently miss class do poorly in courses such as this one. Obtaining lecture notes or handouts missed due to absence is your responsibility. **ATTENDANCE FOR EXAMS IS REQUIRED.** If you have a valid reason for absence, it is possible to take a make-up. Valid reasons for absence are 1) severe illness (preferably documented by a physician), 2) personal or family emergency, or 3) official UWM excuses. Extra-curricular, social, sporting, and work events do not constitute legitimate excuses. You must discuss a valid absence with the instructor before the missed exam or in an emergency, within 48 hours of the exam/quiz you have missed or a zero grade will be recorded. You may contact me in person, e-mail, or leave a message in my mailbox. Documentation of valid excuses is required. Exams must be made-up within ONE week of scheduled date.

- **Cheating and Plagiarism**

Cheating and plagiarizing will not be tolerated. This includes "wandering eyes," use of cellular phones or other text messaging devices during exams, extremely similar wording on written assignments, etc. Students caught cheating or plagiarizing will be given 0 points for the given assignment and will not be allowed to make-up the work. In addition the appropriate officials in the university will be notified.

My Teaching Philosophy

My teaching philosophy is based upon four basic principles of what it means to be an outstanding teacher.

- First, any subject, no matter how complex, can be learned by any student if the professor is a good teacher.
- Second, an excellent teacher is creative, enthusiastic, interactive, and takes time to understand his/her students.
- Third, excellent teachers push students to their full potential through communication of high expectations.
- Fourth, an excellent teacher strives to continue his/her own education in order to give students the newest and broadest base of knowledge and the best integration between disciplines.

When a teacher embodies this philosophy, then the sky is the limit for *any* student.

Six guidelines on how you can succeed in Dr. Lepczyk's General Ecology course

1. Attend class regularly.
2. Read all assigned papers and chapters.
3. Ask questions.
4. Keep your notes and course related material in an organized system. I suggest a three-ring binder.
5. Plan on spending two to three hours working on the course outside of the classroom for every contact hour that is spent in the classroom (i.e., 6 to 9 hours per week outside of lecture time)
6. Come to office hours or talk with instructor.

Typical Weekly Schedule

Each week we will typically spend about three quarters of the class time on lecture, leaving 15-20 minutes for discussions each class. This will vary by week, but we will be discussing the readings on a regular basis. Approximately three to six times over the semester we will be having guest lectures from scientists engaged in different facets of urban ecology. These will include agency, non-governmental, and academic people that have unique perspectives to offer.

**Biological Sciences 599—Special Topics in Biological Sciences: Urban Ecology
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Lecture Schedule**

Week	Dates	Topics	Assignment
1	January 23 & 25	Introduction to urban ecology and urban areas; urban geography	
2	January 30 & 1	How are urban ecosystems delineated; urban geography; cities	
3	February 6 & 8	Humans as components of ecosystems; socioeconomics and demography	Hand-out problem set 1
4	February 13 & 15	Human dimensions and their measurement; social surveys	Problem set 1 due
5	February 20 & 22	Urban aquatic systems; watersheds	Exam 1 (Feb 22)
6	February 27 & 1	Urban aquatics	
7	March 6 & 8	Urban plant ecology; urban forestry	Hand-out problem set 2
8	March 13 & 15	Urban plant ecology and urban forestry	Problem set 2 due
9	March 20 & 22	Spring Break	
10	March 27 & 29	Urban wildlife	
11	April 3 & 5	Urban wildlife	Exam 2 (April 5)
12	April 10 & 12	Patterns of urbanization on biota, biotic homogenization	
13	April 17 & 19	Parks, natural areas, and conservation in urban areas	
14	April 24 & 26	Urban planning and land management	Hand-out problem set 3
15	May 1 & 3	Global patterns of urbanization, scale	Problem set 3 due
16	May 8 & 10	Presentations and make-up day	Literature review due; Presentations
	May 17	Final Exam 12:00-2:30	Exam 3

Please note that all topics are tentative and may change slightly in terms of when presented. This decision is based upon guest lecturers' availability and to ensure complete coverage of the major topics over the semester.