

LAND 6310- Landscape Ecology

Creating Sustainable Landscapes and Cities: Principles from Landscape and Urban Ecology

COURSE SYLLABUS

Scheduled class meeting time: Tues and Thurs. 11- 12:15pm
Room 307 Tanner Hall

Course Credit: 03 credit hours

Prerequisites: Graduate Standing

Instructor: Carol A. Couch, Ph.D.
207 Tanner Hall
(706) 542-9886
cacouch@uga.edu

Office Hours: By appointment

COURSE DESCRIPTION: Landscape ecology is the science and art of studying and improving the relationship between spatial pattern and ecological processes, providing theory and practical guidelines for designing, planning, developing and maintaining sustainable landscapes. The course will focus on characterizing landscape patterns and how they develop, understanding the relationship between landscape structure and the ecological functions of landscapes, and the implications of landscape patterns for landscape architecture, planning and design professionals. Special emphasis will be made on the ecology of cities and landscape influences on water resources.

COURSE STRUCTURE: The class will be taught in a lecture and discussion format. Class periods will normally include a lecture followed by discussion of assigned readings. **ASSIGNED READINGS**—Students will be responsible for reading assigned materials prior to the scheduled class period. Assigned materials will be available on the class site at the elearning Commons and/or on reserve in the Owens Library. Additional readings may be assigned during the semester as needed. There is no required textbook.

GRADING

Student performance will be evaluated based on the University grading system with percentages as follows:

90-100 %	A	Excellent
89 %	A-	
88 %	B+	

80-87 %	B	Good work
79 %	B-	
78 %	C+	
70-77 %	C	Average work
69 %	C-	
68 %	D+	
60-67 %	D	Poor work
59% or less	F	Failure

Plus and minus may be added to case studies, exams and the final grade to more accurately reflect the student's grade range (ie. high B, low C, etc.)

The final grade for the course will be determined based on the performance of the student in the following areas:

- 70% Exams-- 3 scheduled exams
- 20% Written and presented case study
- 10% Discussion participation

ATTENDANCE

Attendance is mandatory. Students are expected to be in class and actively engaged in the lecture and discussion. Make-up exams will be administered only in the case of unavoidable and well documented excused absences. Please make every effort to be in attendance for the three scheduled exams. If an exam must be missed, please contact the instructor PRIOR TO the exam or IMMEDIATELY after for a make-up date.

ACADEMIC HONESTY

University expectations for conduct and academic honesty are clearly outlined in the UGA Bulletin and the Academic Honesty Handbook and summarized in the UGA Student Honor Code. Specific College of Environment and Design policies are listed in the CED Student Handbook. Please be familiar with these important documents.

All students are responsible for maintaining the highest standards of honest and integrity in every phase of their academic career. The penalties for academic dishonesty are severe. Ignorance of what constitutes dishonesty is not an acceptable defense.

CHANGE

Change is constant and natural in any dynamic system. The course syllabi, lecture schedule and topic outline are subject to change due to unforeseen circumstances.

DISABILITIES

Students with special needs due to learning or physical disabilities should contact the Office of Disability Services, Clark Howell Hall, Phone 706-542-8719

LECTURE TOPICS

August 17 Class Introduction. The future is not just what lies ahead; it is what we create.

August 19 Are we a part of or apart from nature? Creating a common vocabulary.

Defining sustainability, landscape, ecology. What is landscape ecology?

August 24—Nature's organization: Hierarchy and ecosystems

August 26—Landscape structure—patch, corridor and matrix

August 31 Landscape function and dynamics: Water as the essential ingredient of sustainable landscapes—how water flows through the landscape

September 2—Wetland functions in the landscape. Combining natural and built infrastructure.

September 7—Landscape function continued: energy and material flows

September 9—Watersheds and water quality

September 14—Guest lecture: Dr. Liz Kramer, Wetland protection and restoration in Georgia

September 16—Atlanta Futures Forum—Megaregions, exam prep

September 21 EXAM

September 23—Urban ecology and urbanization trends

September 30 Guest lecture—Dr. Liz Kramer, Trends in Georgia's landscape

October 5—Urban ecology—urban heat islands and landscape design

October 7—Urban ecology—air quality, transportation and spatial patterns

October 12—Urban ecology—water resources

October 14—Guest lecture—to be determined

October 19—Regional planning case studies discussion

October 2—Regional planning case studies discussion, exam prep

October 26—EXAM

October 28—Population and community ecology

November 2—Landscape ecology and habitat conservation

November 4—Green network design

November 9—Landscape ecology of park planning

November 11—Landscape ecology of working landscapes

November 16—Landscape ecology of working landscapes

November 18—Professional ethics in regional design

November 30—Case study presentations

December 2—Case study presentations

December 7—Case study presentations

Final EXAM—to be determined