Course Introduction

Urban ecology is both a concept and a field of study. It focuses on interactions between humans, urban ecosystems, and the built environment. With over half of the world’s population now living in cities, cities have assumed a critical role in shaping local, regional, and global ecologies. In this course, we will examine the distinctiveness of the interconnected urban biophysical, socio-economic, and political processes. In order to disentangle the complexity of human-environment relations in cities, we will take an interdisciplinary approach and learn theories and concepts in natural science ecology, environmental studies, geography, urban planning, sociology, and public policies. We will use our campus and the Twin Cities as a “living laboratory” and apply these theories and concepts to laboratory exercises, field observation, case studies, and research on contemporary urban sustainability initiatives.

Learning Objectives

Upon the successful completion of this course, you should be able to:

- Comprehend basic ecological and environmental concepts and principles related to urban ecosystems;
- Understand major arguments in and the critical concerns of urban political ecology;
- Describe and appreciate the complex and diverse relationships between cities and ecology, and between humans and the built environment;
- Apply principles and concepts of urban ecosystems to analyze our surrounding urban habitats;
- Compare and contrast different visions and perspectives of urban ecological sustainability initiatives across world regions;
- Critically discuss contemporary socio-economic issues of urban ecology in different urban contexts;
- Make policy recommendations for a more sustainable urban future.
Attendance

Attendance is required. This course focuses on student-oriented learning. You will learn through lectures, in-class discussions, and various activities designed to help you understand major concepts of urban ecology and acquire basic research skills for studying urban eco-systems and urban political ecology. Handouts and supplement materials will be distributed from time to time in class.

I recognize that there are unavoidable circumstances that sometimes make it impossible for you to attend class. If you will not be in class for any reason, it is your responsibility to inform me in advance via email. It is also your responsibility to catch up with the course materials and make up the work you missed in your absence. The instructor is not responsible for providing handouts for students who have been absent from class. Students with special needs should discuss their accommodations with me early in the course to work out a plan that aligns with maintaining course expectations and learning goals.

Participation

Participation is distinct from attendance and is also an essential part of this course. In-class discussions and activities, responses to brief ungraded writing assignments, etc. will be factored into your participation grade. Engaging with various forms of classroom space and helping to create an environment where all of us can learn and think well about one another will also be factored into participation. Students with any concerns, questions, or need for consideration for flexibility should connect with me as soon as possible to determine an appropriate plan.

Producing a Positive Learning Environment

To give students the opportunity to think about urban ecology from new perspectives, we need to work together to create a positive learning environment. For this to happen, I expect your cooperation in at least three ways:

- Respect the rights of other students to learn.
- Acknowledge and respect the diversity of participants in this class. Discussion of controversial issues is encouraged. Even if you don’t agree with the points of view of others, as citizens of this class we all share a responsibility for respecting all individuals as fair-minded persons. Diversity is a strength in our society at large and here at Macalester College. In this class you will be asked to maintain an open mind to the differences around you, and place positive value on that diversity.
- Your regular attendance and participation.

In return, I promise to be on time, to address your questions and concerns, to give you feedback on your performance, and to return graded materials in a timely manner. You can expect me to reply to your emails within 48 hours. You are encouraged to meet with me to discuss your questions and concerns during office hours.

Students with special needs: All of us learn in different ways and with varying degrees of
success. If you know of any factors in your life that may hinder your abilities to learn up to your potential in this course, please notify me as soon as possible. You should also contact Disability Services (phone: 651-696-6874; email: disabilityservices@macalester.edu) or the MAX Center’s Disability Accommodations (phone: 651-696-6121, coordinator’s email: lucking@macalester.edu), who have more expertise than I do in determining what special steps need to be taken to enable you to participate fully.

_Mental health and wellbeing:_ All of us may feel anxious and stressed from time to time during the module. If you need support for mental health and wellbeing, visit the Laurie Hamre Center for Health and Wellness in the Leonard Center, or call 651-696-6275 to reach them by phone.

**Required Readings**

The lectures and activities will make the most sense if each week’s readings are completed _before_ the relevant lectures and activities.

There is one required text for this course:


And one supplement book:


Other required readings and supplement materials will be posted on the course Moodle site. You should print out and read each week’s readings in advance of their assigned date in the syllabus and bring them with you to class in order to facilitate your full class participation. Unless otherwise stated, audio or video clips used in class will also be available on the course Moodle site.

**Academic Honesty**

It is necessary to remind everyone that academic dishonesty in any form will not be tolerated. Honesty and integrity is expected at all times. Cases of academic dishonesty will be handled according to the College’s guidelines. You are responsible for learning about these policies (http://www.macalester.edu/academicprograms/academicpolicies/academicintegrity/) so that you can meet this responsibility. By participating in this course, _you agree to submit your assignments in digital form if requested_, enabling the instructor to ensure they are not plagiarized from other materials available on the Internet and elsewhere.

**Grading**

Students taking the course on an A-F basis will be graded as follows:

A – achievement that is outstanding relative to the level necessary to meet course requirements.
B – achievement that is significantly above the level necessary to meet course requirements.
C – achievement that meets the course requirements in every respect.
D – achievement that is worthy of credit even though it fails to meet fully the course requirements.
S – achievement that is satisfactory (equivalent to a letter grade of at least C-).
F – NC, signifies that the work was either (1) completed but at a level of achievement that is not worthy of credit, or (2) is incomplete, with no agreement between the instructor and the student that the student would be awarded an “I”.
I – Incomplete. A grade of incomplete may be awarded at the discretion of the instructor, if requested by the student, under the following conditions: (1) at least three-quarters of the required work for the course has been completed, (2) unforeseen circumstances beyond the student's control (usually restricted to illness or family emergency) preclude completion of the remaining work for the course by the semester deadline, (3) the student is not on strict academic probation. In fairness to other students, please note that poor planning or having a lot of work to complete at the end of the term are not considered circumstances beyond a student's control.

Grades for the course will be assigned based on the following scale:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>93-100%</td>
</tr>
<tr>
<td>A-</td>
<td>90-92.9%</td>
</tr>
<tr>
<td>B+</td>
<td>87-89.9%</td>
</tr>
<tr>
<td>B</td>
<td>83-86.9%</td>
</tr>
<tr>
<td>B-</td>
<td>80-82.9%</td>
</tr>
<tr>
<td>C+</td>
<td>77-79.9%</td>
</tr>
<tr>
<td>C</td>
<td>73-76.9%</td>
</tr>
<tr>
<td>C-</td>
<td>70-72.9%</td>
</tr>
<tr>
<td>D+</td>
<td>67-69.9%</td>
</tr>
<tr>
<td>D</td>
<td>60-66.9%</td>
</tr>
<tr>
<td>F</td>
<td>0-59%</td>
</tr>
</tbody>
</table>

Assignments

In this course, you will be expected to submit four written assignments. Detailed instructions for the assignments will be handed out and discussed in class. All written assignments must be printed out and turned in during class or a meeting. It is your responsibility to ensure that all of the assignments are submitted on time.

Grade Allocation and Deadlines

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Percentage</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation and attendance</td>
<td>15%</td>
<td></td>
</tr>
<tr>
<td>Soil lab report</td>
<td>5%</td>
<td>10/05</td>
</tr>
<tr>
<td>Mid-term exam</td>
<td>20%</td>
<td>10/24</td>
</tr>
<tr>
<td>Field trip report</td>
<td>15%</td>
<td>11/21</td>
</tr>
<tr>
<td>Urban habitat observation project</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Presentation</td>
<td>5%</td>
<td>11/30</td>
</tr>
<tr>
<td>Description and analysis</td>
<td>10%</td>
<td>11/30</td>
</tr>
<tr>
<td>Sustainability policy research</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outline</td>
<td>5%</td>
<td>11/16 or 21</td>
</tr>
<tr>
<td>Presentation</td>
<td>5%</td>
<td>12/05 or 07</td>
</tr>
<tr>
<td>Paper</td>
<td>20%</td>
<td>12/12</td>
</tr>
</tbody>
</table>

These dates and deadlines are non-negotiable with the exception of extraordinary circumstances such as a personal or family medical emergency (in which case official documentation to the
effect must be provided). Should you have any concerns regarding academic disputes, scholastic misconduct, or sexual harassment, you may contact the Office of Student Affairs located at 119 Weyerhaeuser Hall (phone: 651-696-6220; email: studentaffairs@macalester.edu), and the Academic Programs Office at 215 Weyerhaeuser Hall (phone: 651-696-6036). The Office of Student Affairs and the Academic Programs Office websites, with the College’s policies on these issues, are at
https://www.macalester.edu/studentaffairs/
http://www.macalester.edu/academicprograms/academicpolicies/.

See next page for course schedule.
Course Outline and Readings

Any suggestions that will enhance learning are welcome. Please note that the class schedule and readings may be subject to change. It is your responsibility to keep up with any changes.

09/05: Course overview
   No assigned reading.

Topic 1: The Basics of Urban Ecosystems

09/07, 09/12: Relationship between cities and ecology
   Cityscape observation

09/14, 09/19, 09/21: The physical environment
   Soil lab

09/26, 09/28, 10/03, 10/05: Urban habitats
   [Supplement] Beisner, B., Messier, C. and Giraldeau, L. 2013. Nature All Around Us, University of Chicago Press. (chapter 10, 18, 21 with textbook chapter 8; chapter 2, 3, 5, 4, 17, 25 with textbook chapter 9; chapter 6, 7, 8, 9, 11, 12, 13, 14, 15, 19, 20, 23, 24 with textbook chapter 10)
   Introducing urban habitat observation project
   Campus urban sustainability trip I
   Soil lab due on 10/05

10/10, 10/12, 10/17: Planning for urban sustainability
   Campus urban sustainability trip II or documentary

10/19 Guest lecture
   Dr. Sami Nichols on urban ornithology
   Readings TBD
10/24: Midterm exam

10/26: Fall break: no class

Topic 2: Urban political ecology

10/31: What is urban political ecology?
*Introducing sustainability policy research project*

11/02: Rethink urban metabolism

11/07: Eco-cities

11/09: Ecology and social inequality
*Introducing field trip options 1 & 2: St. Paul Eco-District & Mill City Museum and Minneapolis downtown riverfront development*

11/14: Consumption and ecology

11/16 & 11/21: Fieldtrip and research week, not meeting in class
Group meetings with Catherine for policy research project with paper outline due at the time of meeting.
*Field trip report due in Catherine’s mailbox on 11/21*

11/23: Thanksgiving

11/28: Not meeting in class
Research progress meetings with Catherine

11/30: Urban habitat observation report: presentations and peer feedback
*Urban habitat observation report due in class*

12/05, 12/07: Sustainability policy research: presentations and peer feedback

12/12: Concluding the course: putting knowledge into practice
*Sustainability research paper due in class*