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

Regular attendance at lectures is required. The midterm exam, final exam, and assignments will test you not only on the assigned course readings but also on lecture materials that will often be supplementary to the readings. In-class activities are also essential to enhancing your capacity for applying what you learn in lectures and readings to real life situations. Slides used in the lectures will be posted on our Moodle site; they will not be circulated via email. If you miss a class, it is your responsibility to catch up with the course materials. Handouts will be distributed from time to time in class. The instructor is not responsible for providing handouts for students who are absent from class.

Required Readings

The lectures and activities will make the most sense if each week’s readings are completed before the relevant lectures and activities. You are responsible for everything covered in the lectures, activities, and readings. It will be almost impossible to cover and understand the required readings if you leave them to the last minute right before exams. This makes it strongly advisable that you not only attend all lectures but also stay on top of each week’s readings, making it easier to follow lectures and ask questions on an ongoing basis, rather than succumbing to last-minute anxiety.


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.

Producing a Positive Learning Environment

To give students the opportunity to think about urban (political) ecology in new ways, 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. You are expected to be present at the beginning of class and stay until the end, and to fully participate in class discussions and activities. You are asked to turn off your cell phone before entering the classroom and not to use electronic devices for activities unrelated to the course. Your course attendance and participation will affect your grade.

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 the TA and me to reply to your emails within 48 hours. You are encouraged to meet with the TA and 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: disabilitieservices@macalester.edu) or the MAX Center’s Disability Accomodations (phone: 651-696-6121, coordinator’s email: lucking@macalester.edu), both located on the first floor of Kagin Commons, 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 semester. 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.

**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 Range</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(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation and attendance</td>
<td>10%</td>
<td></td>
</tr>
<tr>
<td>Soil lab report</td>
<td>2%</td>
<td>10/03</td>
</tr>
<tr>
<td>Mid-term exam</td>
<td>20%</td>
<td>10/22</td>
</tr>
<tr>
<td>Field trip report</td>
<td>10%</td>
<td>11/19</td>
</tr>
<tr>
<td>Urban habitat observation project</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Presentation</td>
<td>5%</td>
<td>11/21</td>
</tr>
<tr>
<td>Description and analysis</td>
<td>10%</td>
<td>11/21</td>
</tr>
<tr>
<td>Sustainability policy research</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outline</td>
<td>3%</td>
<td>11/12 or 14</td>
</tr>
<tr>
<td>Presentation</td>
<td>5%</td>
<td>12/03 or 05</td>
</tr>
<tr>
<td>Paper</td>
<td>15%</td>
<td>12/17</td>
</tr>
<tr>
<td>Final exam</td>
<td>20%</td>
<td>12/17</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.

09/03: Course overview
   No assigned reading.

Topic 1: The Basics of Urban Ecosystems

09/05 & 09/10: Relationship between cities and ecology
   Cityscape observation

09/12, 09/17 & 09/19: The physical environment
   Soil lab

09/24, 09/26, 10/01 & 10/03: 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 10/03

10/08: Guest lecture on invasive species
   Dr. Katherine E. Wyman-Grothem, U.S. Fish and Wildlife Service

10/10 & 10/15: Planning for urban sustainability
   Campus urban sustainability trip II
10/17 Guest lecture
Readings TBD.

10/22: Midterm exam

10/24: Fall break: no class
Use the break wisely for readings in the coming week!

Topic 2: Urban political ecology

10/29: What is urban political ecology?
Introducing sustainability policy research project

10/31: Rethink urban metabolism

11/05: Eco-cities

11/07: Ecology and social inequality
Introducing field trip options 1 & 2: St. Paul Eco-District & Mill City Museum and Minneapolis downtown riverfront development
11/12 & 11/14: 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.

11/19: Consumption and ecology
*Field trip report due in class*

11/21: Urban habitat observation report: presentations and peer feedback
*Urban habitat observation report due in class*

11/26: Not meeting in class
Progress meeting with TA

11/28: Thanksgiving

12/03 & 12/05: Sustainability policy research: presentations and peer feedback

12/10: Concluding the course: putting knowledge into practice
*Sustainability research paper due in class*

12/17: Final exam
Tuesday, 1:30-3:30pm