**SPRING 2010**  
**GEOG 383.95/703.84 - The Impact of Urbanization on the Environment: From Local to Global**

**Course information**

Schedule: Mondays and Thursdays 5:35-6:50 pm  
Room: HN 1022  
Professor: Peter J. Marcotullio, Associate Professor  
Office: 1043 Hunter North  
Tel: 1 (212) 722 5264  
Office hours: TBA  
Email: peter.marcotullio@hunter.cuny.edu

**Course description**

This senior/graduate seminar explores the relationship between urbanization and the environment at multiple scales. The class is divided into seven sections. The introduction provides an overview of global urbanization and environmental trends. The second part of the course reviews concepts of urban ecology. The third, fourth and fifth sections review various urban environmental conditions by media type, including soils, biodiversity, hydrology and atmosphere (ambient air conditions) and climate. The sixth section reviews the literature on shifting patterns of environmental burdens associated with urban growth and development. The final section includes presentations by students.

The goals of the course are to survey the general trends in urban environmental conditions at the local, regional and global scale and to provide a general understanding of how these trends change with development.

**Course methods**

This class will be run like a seminar, meaning there is expectation of significant student participation. It will be given on Mondays and Thursdays from 5:35 – 6:50 pm in Hunter North 1022. Most class readings assignments are from the two texts required for the course. Some extra material may be provided as PDF files through Hunter Blackboard. Lectures are given as slideshows and materials will be posted on Hunter’s Blackboard.

At the end of the semester students will present their findings to the class as part of their grades. All sessions will include time for discussion.

**Assignments and grades**

Student evaluations are based upon:

1) Class attendance and participation. This is a seminar and participation in all class discussion is vital;
2) The completion of four short assignments related to the readings. These include:
   a. A paper on the conceptual foundation of urban ecology
   b. A paper on the impact of urbanization on some aspect of either soils or local or regional climate
   c. A paper on the impact of urbanization on some aspect of biodiversity
   d. A paper on whether urbanization, urban growth and human development
   e. A presentation summary of your work to the class

3) All papers should not be longer than 2,500 words, including references, tables, graphs and figures.

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<thead>
<tr>
<th>Assignment</th>
<th>Grade (%)</th>
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<tbody>
<tr>
<td>Assignment 1</td>
<td>20</td>
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<td>Assignment 2</td>
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<td>Assignment 3</td>
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<td>Assignment 4</td>
<td>20</td>
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<tr>
<td>Presentation</td>
<td>Completed or not</td>
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<tr>
<td>Class participation</td>
<td>20</td>
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**Academic integrity**

Hunter College regards acts of academic dishonesty (e.g., plagiarism, cheating on examinations, obtaining unfair advantage, and falsification of records and official documents) as serious offenses against the values of intellectual honesty. The College is committed to enforcing CUNY Policy on Academic Integrity and will pursue cases of academic dishonesty according to the Hunter College Academic Integrity Procedures. Plagiarism, dishonesty, or cheating in any portion of the work required for this course will be punished to the full extent allowed according to Hunter College regulations.

**Class policies**

I take attendance at the start of each class. There are no incompletes given for the course. The exception is with proof of a medical emergency. Late papers will be marked down.

**Reading materials**

There is one book required for the course. Other reading material will be provided as PDF files and provide through Hunter Blackboard

Preliminary outline of the semester

Section 1 – Introduction and overviews
Week 1  Introduction
Week 2  Urbanization and human domination of the earth

Section 2 – Conceptual foundations of urban ecology
Week 3  Conceptual foundations of urban ecology, part 1
Week 4  Conceptual foundations of urban ecology, part 2
        **First assignments due**

Section 3 – The atmosphere, hydrosphere and pedosphere
Week 5  The atmosphere, hydrosphere and pedosphere, part 1

Section 4 – The biosphere
Week 6  The biosphere, part 1
        **Second assignment due**
Week 7  The biosphere, part 2

Section 5- Human dimensions
Week 8  Human dimensions, part 1
Week 9  Human dimensions, part 2
        **Third assignment due**

Section 6 – Urbanization, development and environmental burdens
Week 10 Urban environmental theory and its variations
Week 11 Low-income cities and environmental burdens
            Middle-income cities and environmental burdens
            Affluent cities and environmental burdens
Fourth assignment due

Section 7 – Student presentation
Week 13-14  Student presentations