Urban Environmental Issues/concerns/problems

Course Description

In the last century, we witnessed dramatic increase in urbanization. Large number of the world population lives in the urban area. In the United States, urbanized land areas have almost quadrupled from 18.6 million acres to about 74 million acres between 1954 and 1997 (USEPA, 2003). Urbanization has both direct and indirect impact on the environment. These impacts includes but not limited to (1) habitat loss, (2) natural resource impacts (watersheds, wetlands), (3) loss of open space, (4) increase surface runoff like flooding, (5) poor water and air quality, (6) and brownfields and Environmental Justice.

Course Reader
A Course reader will be available. However, in some area, perhaps the majority of the readings will be from a handout, and web. I will provide hand out in class. The following reading materials will be available:
EPA Urban Environment Program Action Plan
EPA Chelsea Community Comparative Risk Assessment
Massachusetts Watershed Initiative Program Plan
Massachusetts Watershed Strategic Implementation Plan
Massachusetts Watershed Initiative Watershed Action Plan Guidelines
Massachusetts Watershed Initiative Outreach and Education Guidelines
Upper Mystic Communities Joint Powers Agreement
Upper Mystic Flood Hazard Mitigation Plan
The Massachusetts Nonpoint Source Management Plan
Tri-Community Project Plan
Mystic Open Space Plan
Alewife Master Plan
The Commonwealth of Massachusetts Environmental Justice Policy
The Federal Government Environmental Justice Policy
Environmental Protection EJ Action Plan
Mystic Designated Port Area Plan

This course will examine:
- Urban environmental problems/issues/concerns in the Greater Boston (Mystic communities, background and history).
- The role and function of government (federal, state, and local) at different levels in addressing the issues.
• The efforts of various non-profits organization collaboration in addressing the issues.
• And the efforts by various institutions.

Course Objectives:
• To begin to understand the problems/issues, and challenges of protecting, preserving, and restoring urban environments.
• To begin to understand the tools and techniques available for protecting urban environments.

Assessment
Students will be required to complete the required class readings before each class, and come to class ready to discuss the readings.

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attendance and participation</td>
<td>20%</td>
</tr>
<tr>
<td>Case Study Research Paper</td>
<td>20%</td>
</tr>
<tr>
<td>Team project and presentation</td>
<td>60%</td>
</tr>
</tbody>
</table>

Team project and presentation should be on (1) watersheds issues, (2) habitat problems, (3) Environmental history of the Mystic, (4) TeleCom City (Malden, Everett, and Medford), (5) Upper vs. Lower Mystic, (6) open space protection, (7) Government programs (Watershed Initiative, EPA’s Urban Environmental Program), and Environmental Justice.

Academic Policy Statement. I emphasize the importance of your knowledge of, and adherence to, the Boston University’s Metropolitan College Academic Conduct Code, especially those portions concerned with plagiarism and cheating. You can familiarize yourself with the details of academic conduct at www.bu.edu.

Field Study: (lectures in the field)

• Mystic Boat Trip (all day)
• Chelsea Creek (both sides of the river, along with Mill Creek) (all day)
• Alewife and Alewife Communities (all day)
• Environmental Justice Site to be selected.

Tentative Schedule

The lecture time will be 1:00 – 4:30 PM, 15 minutes for break, guest presenter, questions and discussion.

8/4 Introduction
Definition and scope of class
Research essay
Team Projects and presentation selection
Allocation of readings
History of the Mystic Community

8/5 1. Urban Environmental Issues/concerns/problems
Guest presenter EPA, Kristi Rae, Director Urban Environmental Program

Readings:
EPA Urban Environmental Program (Agents of Change: Making the Vision A Reality)
Chelsea Creek Comparative Risk Assessment
Mystic Watershed Action Plan Scope

8/6 2. Urban Watershed Issues (flooding, lack of open space, poor water quality).
Guest presenter, Dan Driscoll, Metropolitan District Commission

Readings:
Mystic Watershed Annual Workplan
Mystic Watershed Action Plan
Mystic Designated Port Area
Mystic Open Space Plan
Alewife Master Plan

8/7 Urban Watershed Management. What are the major challenges of urban watershed management? Examine the Massachusetts Watershed Initiative.
Guest presenter, Karl Honkonen, MWI Program Manager

Readings:
The Massachusetts Watershed Initiative Program Plan
The Massachusetts Watershed Initiative Watershed Action Plan Guidelines
The Massachusetts Watershed Initiative Outreach Guidelines
MWI Strategic Implementation Plan
Insert 8/8

8/9 Field Experience to Telecom City (Malden, Everett, and Medford)
Guest presenter, Virginia Lambardo, TeleCom City Coordinator

Reading:
Coastal Massachusetts Restoration Plan
TeleCom City Scope

8/11 Upper Mystic and Tri-Community Joint Powers Agreement. The process and the development of a Joint Powers Agreement
Guest presenter, Miriam Anderson, Department of Environmental Management.

Reading:
Tri-Community Project Plan
Upper Mystic Joint Powers Agreement
UMRW Flood Hazard Mitigation Plan

8/12  Field Experience to Chelsea
       Guest presenter, Roseanne Bongiovanni, Director Chelsea GreenSpace

Reading:
Chelsea Saltpile Case Study

6/13  Environmental Justice Policy. The State Policy vs. the Federal Policy
       Guest Lecturer, Veronica Eady, Former Director of Massachusetts EJ Program

Reading:
The Federal Environmental Justice Policy
The Commonwealth of Massachusetts Environmental Justice Policy
Environmental Protection EJ Action Plan

8/14  The Federal Environmental Justice Policy
       Guest Presenter, Ronnie Harrington, EPA

Reading:
The Federal EJ Policy
EPA EJ Action Plan

8/15  Field Trip to a selected location in Boston
       Guest presenter, Peh Lowe, Executive Director, ACE

Reading:
EJ Case Study

8/16  Field Experience to the Alewife Area (Cambridge, Arlington, and Belmont)
       Guest Presenter, Peter Alden, Urban Biologist

Reading:
The Commonwealth of Massachusetts Biodiversity Handbook.

8/16  Sunday Off

8/17  Team Project Presentations, and a Research Paper due.