

COURSE OUTLINE (detailed syllabus to be posted)

Course Objectives.

The environmental field has evolved from a popular movement to a profession demanding complex analytical and decision-making skills that are being brought to specific cases. These skills pertain to assessing impacts of human activity on the natural environment and the ability to design policies and plans for best management practices. Scientific, legal, administrative and political factors converge in shaping policies that are critical components to plan and manage the environment of urban areas. This course provides students with approaches to evaluate and use environmental information and experiences as a basis for planning, policy and management choices about the use and protection of environmental resources in urban areas and their natural environmental contexts. Environmental analysis and planning techniques are combined with unique cases that balance environmental conditions with societal needs and priorities. These approaches are applied to air and water quality, water supply, environmentally sensitive natural resources, solid wastes, and hazardous wastes. Global and trans-national problems, such as global warming, ozone depletion and acid rain, and cross-cutting themes, such as energy use are key areas of emphasis. Implications of sustainability and security for city and regional land usage are overarching and cross-cutting themes in the course.

Topics

1. Introduction to Environmental Planning and Policy: The Science in a Social Context
2. Foundation for Environmental Quality: Population Dynamics and Human Settlement Patterns
3. Understanding and Resolving Human and Ecological Conflicts: Case Example - Easter Island
4. Water Resources/Water Quality: Case Example – The Dilemma of Nitrogen Contamination
5. Water Supply Safety and Security: Case Example – Arsenic in Bangladesh Drinking Water
6. Residuals Management: Achieving Recycling Targets; Brownfield Redevelopment
7. Air Quality and Human Health: Case Example – Post-9/11 Air Quality in Lower Manhattan
8. Global Warming: Case Example – Global Warming Initiated “Boom and Bust” Phenomena
9. Global Environmental Problems: Ozone Depletion and Acid Rain
10. Pollution Control Strategies and Technologies for Air Quality Management: Case Example
– Resolving Car Wars and Other Struggles for Alternative Energy
11. Citizen Participation: Case Example – Environmental Justice in Public Service Delivery
12. Environmental Economics: Benefit/Cost Analysis; Valuing Human and Natural Resources
13. Legislative and Institutional Innovations to Initiate Change in Environmental Policy
14. Synopsis: Linking Urban Environments to Environmental Goals

Selected Required Texts and Readings

- R.T. Wright. Environmental Science, 10th edition (Pearson Prentice Hall 2008)
A.Goudie. The Human Impact on the Natural Environment, 6th edition (Blackwell 2006)
P.H.Gleick. The World’s Water, 2006-2007 (Island Press 2006)
Yale and Columbia Universities. Environmental Performance Index 2008
Recommended: W. Rosenbaum. Environmental Politics and Policy, 7th edition (CQ Press, 2008)
Additional readings from selected journal articles, book chapters, and reports.