UPP570 Environmental Planning and Policy

Instructor Ning Ai
Contact ain@uic.edu; CUPPA Hall 256
Class Time Tuesdays, 9:00AM – 11:50AM
Location ADH 2232
Office Hours Email for appointment.

Course Description

This course introduces students to the foundations of environmental planning and policy, major environmental legislations and programs, emerging issues, policy instruments, and analytical methods of environmental planning. It is designed to provide an overview of various environmental planning issues and explore the interactions among economic, social, ecological, and institutional systems that are crucial for urban sustainability. Class sessions will involve a mix of lectures, student presentations and discussions, guest lectures, videos, and a field trip.

Course Objectives

- Introduce students to the historical, social, economic, and legal context in which environmental planning has emerged and evolved;
- Enhance students' understanding of critical challenges for cities' sustainable development;
- Familiarize students with major environmental protection legislations and programs;
- Foster students' analytical and practical skills to minimize environmental risks.

Readings

Required text: Tom Daniels and Katherine Daniels. The Environmental Planning Handbook for Sustainable Communities and Regions. Chicago, IL: American Planning Association Planners Press (2003).

Suggested texts for in-depth topics with a specific focus:

Environmental science: Richard Wright and Dorothy Boorse, Environmental Science: Toward a Sustainable Future (11th Edition). Upper Saddle River, NJ: Prentice Hall (2010).

Policy and politics: Norman Vig and Michael Kraft, Environmental Policy: New Directions for the Twenty-First Century (7th Edition). Washington, DC: CQ Press (2009).

Law: James Salzman and Barton Thompson Jr., Environmental Law and Policy (3rd Edition). New York, NY: Foundation Press.

Design: Frederick Steiner and Kent Butler. Planning and Urban Design Standards. Hoboken, NJ: John Wiley & Sons (2006).

Methods : John Randolph. Environmental Land Use Planning and Management. Washington, DC: Island Press (2004). Note: New edition will be released in 2012.

Peter Morris and Riki Therivel (Editors). Methods of Environmental Impact Assessment (3rd Edition). New York City, NY: Routlege (2009).

Ecology: Richard Forman. Urban Regions: Ecology and Planning Beyond the City. Cambridge, UK: Cambridge University Press (2008)

Course Organization

Date	Topics, Readings, and Activities	Deadline
1/10	**Course Overview. Foundations of environmental planning (I): historical and ecological perspectives** Daniels & Daniels: Introduction and Chp 1 Theis and Tomkin (2011): Sustainability: A Comprehensive Foundation (Web book) Chp 1 & 2 [http://cnx.org/content/col11325/latest/]	
1/17	**Foundations of environmental planning (II): legal, economic, and ethical perspectives** Daniels & Daniels: Chp 2 *Case studies: [1] Final Environmental Impact Statement (FEIS) of Illinois High Speed Rail [2] CMAP GO TO 2040 Plan* *Documentary: The Unforeseen*	Schedule of student presentations
1/24	**Water: water supply, water quality, stormwater** Daniels & Daniels: Chp 3 & 4 Sahely, H. R., C. A. Kennedy, et al. (2005). "Developing sustainability criteria for urban infrastructure systems." Canadian Journal of Civil Engineering 32(1): 72-85. *Case studies: [1] Portland Stormwater Management [2] Water war* Guest speaker: Dr. Timothy T. Loftus, Principal, Water Resources, CMAP	
1/31	**Air** Daniels & Daniels: Chp 5 Ross, H. The Search for an Intelligible Principle: Setting Air Quality Standards under the Clean Air Act. RFF Issues Brief. Oct 2000. [http://www.rff.org/rff/Documents/RFF-IB-00-ross.pdf] *Case studies: [1] Non-attainment area implementation plan [2] EU Airline Carbon Tax* *Guest speaker:* Danielle Gallet, Infrastructure Strategist, Center for Neighborhood Technology	
2/7	**Land contamination, brownfield redevelopment, waste management** Daniels & Daniels: Chp 6 & 7 US EPA. PREPARED Workbook: Process For Risk Evaluation, Property Analysis and Reuse Decisions. [http://www.epa.gov/region1/brownfields/prepared/index.html] *Case studies: [1] Love Canal [2] Chicago Millennium Reserve* *Mini review of topics covered for the first month*	Reflection journal 1

Date	Topics, Readings, and Activities	Deadline
2/14	**Habitat protection, landscape ecology, biodiversity** Daniels & Daniels: Chp 8, 9, & 10 Scarlett, L. & J. Boyd. Ecosystem Services: Quantification, Policy Applications, and Current Federal Capabilities. RFF Discussion Paper. March 2011. [http://www.rff.org/documents/RFF-DP-11-13.pdf] *Case studies: [1] Chicago Nature and Wildlife Plan [2] Atlanta's Tree Protection Ordinance* Guest Speaker: Professor Moshen Wolf, UPP	
2/21	**Resilience planning for natural hazards and disasters, coastal zone management** Daniels & Daniels: Chp 11 & 12 NOAA Coastal Service Center. Hazard and Resiliency Planning: Perceived Benefits and Barriers among Land Use Planners. April 26, 2010 [http://www.csc.noaa.gov/publications/Hazard-and-Resiliency-Planning.pdf] *Case studies: [1] Resilience planning in New Orleans [2] Illinois Coastal Management Program* *Documentary: Gasland (TBD)*	
2/28	**Built environment, transportation planning, public health** Daniels & Daniels: Chp 16, 18, & 19 Howard Frumkin. Urban Sprawl and Public Health. Public Health Reports. May-June 2002. 17: 201-217. *Case studies: [1] Atlanta Beltline [2] Randal O'Toole* Guest Speaker: Professor Curt Winkle, UPP	
3/6	**Environmental impact assessment (process and methods)** Randolph: Chp 18 (Integration Methods for Environmental Land Analysis) Theis and Tomkin's web book Chp 9: Problem-Solving, Metrics, and Tools for Sustainability *Case studies: [1] Environmental Impacts of Keystone Pipeline Project [2] Ecological footprint of mega events* Guest speaker: Dr. Cynthia Klein-Banai, UIC Associate Chancellor for Sustainability; Director, Office of Sustainability	Reflection journal 2
3/13	**Energy planning and green infrastructure** Daniels & Daniels: Chp 17 EIA Annual Energy Outlook 2011 *Case studies: [1] Chicago Climate Action Plan [2] CAFE standards* Guest Speaker: Professor Marty Jaffe, UPP	Final paper proposal

Date	Topics, Readings, and Activities	Deadline
3/20	*Spring Break. No class.*	
3/27	Field trip: Chicago Center for Green Technology	
4/3	**Trans-boundary issues: air pollution, trade and environment, climate change** IPCC Fourth Assessment Report: Climate Change 2007 Synthesis Report [http://www.ipcc.ch/publications_and_data/ar4/syr/en/main.html] Salzman and Thompson: Chp 9 (Trade) *Case studies: [1] E-Waste Management* *[2] Kyoto Protocol/*United Nations Framework Convention on Climate Change *Documentary: Who Killed the Electric Car?*	Reflection journal 3
4/10	**Public and private partnership in environmental programs. Emerging Issues. Course wrap-up**. Koppenjan, J. F. M. and B. Enserink (2009). "Public–Private Partnerships in Urban Infrastructures: Reconciling Private Sector Participation and Sustainability." Public Administration Review 69(2): 284-296. *Case studies: [1] Chicago waste-to-profit network [2] ISO 14000* Guest speaker: Emily Tapia-Lopez, Senior Account Executive, Resolute Consulting	
4/17	**Student presentations.**	
4/24	**Student presentations. Course review.**	Reflection journal 4; Final paper

Note: Additional readings, which include journal articles, reports, chapters from other books, and news articles, will be posted on Blackboard. The order of the topics is subject to minor changes due to guest speakers' availability.

Grade Distributions

In-class participation and attendance: 10%
Reflection journals: 20%
Quizzes: 20%
In-class presentation and report: 20%
Final paper and presentation 30%

Class Attendance and Participation (10%)

Students who attend each class on time and actively participate in class discussions will receive ten points towards the final grade. A sign-up sheet will be available at the beginning of each class. One absence is allowed to accommodate possible health or family related difficulties, if the instructor is informed of the situation in advance. Beyond that, one point will be deducted for one additional class missed. Students who miss three or more classes will lose all ten points of class participation.

Class Assignments (70% in total)

There are three class assignments: (1) monthly reflection journals (four in total); (2) one in-class presentation and five-page summary report; and (3) one final paper and presentation. Assignments should be submitted via Blackboard in electronic copies.

a. Monthly Reflection Journals (20%)

Every month through the spring semester, you are required to submit a reflection journal. The reflection journal can be your summary of class topics covered in the past month, related questions that you have had beyond class discussions, and additional materials that you have explored and found interesting. You are also encouraged to include a reflection on the learning experiences and any concerns that you would like to discuss with the instructor. The reflection journals should be typed in font 11 or 12, equivalent to two single-space pages. In total, four reflection journals are expected through the semester. They are due on 2/7, 3/6, 4/3, and 4/24. Submission of each journal that fulfills the above requirements will guarantee five points towards your final grade. Late submission of the reflection journal will receive zero point.

b. In-Class Presentation and Summary Report (20%)

In each lecture class, two or three students will make presentations on case study topics that are specified in the syllabus, or additional topics that are relevant to the lecture topic and agreeable to the instructor. The presentation should be approximately ten minutes each. Grading criteria will be explained in class. Peer evaluation will count towards 20% of the grade for the in-class presentation. In addition to the oral presentation, each student will prepare a five-page double spaced report on the presentation topic. Both presentation slides and summary report are due at 9am on the Monday before the presentation date. Late submission of the presentation slides and summary report will receive 20% grade deduction; failure to present on the scheduled date will result in zero grade for this assignment. Case study presentations and summary reports are individual work; no group project is allowed.

c. Final Paper and Presentation (30%)

As an extension of class discussions, students will look into a specific environmental planning issue of interest, develop a 15-page double spaced paper, and summarize it in a 15-minute presentation. An integrated view of planning sub-fields and connecting planning theories with practice are encouraged in discussions. Students have the option of conducting the study independently, or

pairing with another student in this class. The deliverable from a group work is expected to be of higher quality, presenting more depth in discussion, as well as of greater length of the written report. Specific grading criteria of written and oral presentations will be explained in class. Students are urged to start thinking about the final paper topic early. A one-page proposal of the paper topic and work plan is due before the spring break (3/13). A group proposal should indicate a detailed plan of task split.

Quizzes (20%)

There will be three to five quizzes randomly arranged through the semester. Each quiz will be weighted equally in the final grade. The quizzes will be a combination of true-or-false, multiple-choice, and other short-answer questions that cover the basic knowledge in readings and lecture notes. A typical quiz will take no more than ten minutes. You are expected to answer the questions without referring to books and notes. No make-up quizzes will be given if you were absent at the quiz time without the instructor's approval.

Grading Scale

A = 100-90.0; B = 89.9-80.0; C = 79.9-70.0; D = 69.9-60.0; F = 59.9 and below

Academic Integrity

Academic integrity is regarded very seriously for this course. Academic misconduct, which includes but is not limited to the following behaviors, will result in zero grade for the corresponding assignment, failure of the course, or dismissal from the program.

- Partial or entire use of documents created or published by others, without proper citations of authorship
- False claims of work (in the group project) or attendance (on the class sign-up sheet)
- Asking help from other students during quizzes or exams

Students are expected to learn more specifics of the UIC Student Disciplinary Policy and strategies to avoid plagiarism at: http://www.uic.edu/depts/dos/studentconduct.html Students who have any questions or concerns about academic misconduct are encouraged to discuss with the instructor.

Classroom Rules of Conduct

All personal communication and multimedia devices must be powered off during class time including but not limited to cell phones, laptops, iPads, and PDAs. Be respectful in class discussions and considerate about others' learning experiences.

Disability Accommodations

Students with a learning disability should work with the UIC's Disability Resource Center (DRC) [http://drc.uic.edu] to arrange for appropriate accommodations and meet the instructor with the accommodation letter.