

EST 426: Community Planning and Sustainability

Fall 2009

MWF 8:25-9:20 Marshall 110

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Weekly office hours: MWF 9:30 to 11AM

Learning Outcomes:

At the end of this class students should be able to:

- Describe the relationship between ecological and economic perspectives with regard to the environment and development;
- Apply and integrate concepts of ecological planning and development in order to understand the relationship between economy and the environment;
- Use planning tools and models in addressing the problem of sustaining economic and human development; and
- Describe how individuals can apply principles and concepts of ecological planning and development in their work and personal lives.

Rationale and Overview of the Course:

Climate change, use of the earth's resources, pollution and our ever-increasing world population converge to create a "wicked" problem for current and future global residents. How do we live sustainably within resource and ecological limits? Although sustainable development has been critiqued as an oxymoron – we still have to confront and solve the basic challenges posed in the first sentence. Designing and reconstructing sustainable neighborhoods and communities is the focus of this course. We will cover global phenomena, especially climate change and energy usage, but the focus will be regional and community scale problem solving. The reason for this is it is a scale that citizens can best implement local sustainable solutions.

A systems perspective is utilized within the course - drawing from many disciplines and perspectives. Feedback and adjustment or what is called "adaptive management" is at the heart of the sustainable development challenge. So in order to understand the ecological, social and economic linkages and feedbacks – we will need management science, chemistry, biology, hydrology, engineering, economics, communication, group dynamics and social sciences.

Sustainable Definitions?

The term "sustainable development" has been used many different ways. It grows from the International Development experiences with efforts to reduce poverty in the "underdeveloped world", mostly the former colonies of the European powers – many of whom won independence after WWII. The term gained international recognition through work of the World Commission on Environment and Development (also known as the

Bruntland Commission) and through its report "*Our Common Future*" released in 1983. Within this report sustainable development was defined as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs". The International Union of the Conservation of Nature (IUCN) introduced the term earlier in its World Conservation Strategy in 1980. Stating "Development and conservation operate in the same global context, and the underlying problems that must be overcome if either is to be successful are identical".

Course Requirements:

This will be a participatory course in that each week you will be asked to be prepared to respond to questions emailed to you the week before. These questions will most likely relate to the readings and lecture material to be covered each week. You will also be asked to respond to the same question sets in writing (between 1 and 2 pages) to be emailed to me before the next class week. I will be looking for meaningful reflection and engagement with the questions, not necessarily the "right answer". Poor preparation will be noted and will affect participation grade.

All student are required to write a profile of either an individual or organization contributing to advancing sustainable development solutions or knowledge base. You should submit a profile proposal by the end of September to be reviewed by the instructor. Guidelines for categories will be handed out in class. There will also be an individual project on sustainable development solutions due at the last week of class. Guidelines will be handed out for the project as well. There will be a take home mid-term and final exam.

Class Expectations:

I expect that you will:

- Be at every class session (unless excused in advance)
- Be active listeners for whoever is speaking
- Complete assignments prior to class
- Complete and turn in writing assignments on time
- Treat each other and the instructor with courtesy and respect

You should expect me:

- To serve as a facilitator of learning for you collectively and individually
- To come to class prepared
- To be accessible to students outside the class time
- And serve as a consultant for the learning process
- To assist you in finding additional resources when needed to reach the expected learning outcomes

Textbooks

The textbooks will be available at Follet's Orange Bookstore in Marshall Square Mall. A reader will also be available at the college print shop.

Mazmanian, D. A. and M.E. Kraft. 2009. **Toward Sustainable Communities: Transition and Transformation in Environmental Policy**, 2nd ed. MIT Press, Cambridge, MA

Schor, J.B. and B. Taylor, 2002. **Sustainable Planet; Solutions for the Twenty-first Century**. Beacon Press Boston.

Grading

- ✓ Final grades will be calculated as follows:
- ✓ Term profile 20%
- ✓ Final project presentation 20%
- ✓ Mid-term exam 25%
- ✓ Final exam 25%
- ✓ Participation including attendance plus discussion participation 10%

Course schedule:

Date	Topic	Readings
Aug 31 st	Introduction Course overview	Introductions and review of syllabus
Sept, 2 nd	Sustainable Development	<i>Our Common Future</i> , Chapter 2 Rees: <i>Globalization & Sustainability</i> Mazmanian & Kraft, Chapter 1 in <i>Toward Sustainable Communities</i>
Sept. 4 th	Critique of Sustainable Development	Korten, pp. 159-189; Kates: <i>What is Sustainable Development?</i>
Sept. 7 th	Systems Theory & Sustainability	J. Peet: <i>Systems Thinking & Common Ground</i> ; Hall et al: <i>Need to Reintegrate Natural Sciences & Economics</i> ; Loucks: <i>Sustainability in Urban Ecosystems</i> ; <i>Beyond an Object of Study</i>
Sept. 9 th	Sustainability Concepts & Challenges	Hempel: Chapter 2 in <i>Toward Sustainable Communities</i> ; Pezzoli, <i>Sustainable Development: A Transdisciplinary Overview</i>
Sept. 11 th	Sustainability & Competitiveness	Hollender; <i>Changing the Nature...</i> ; McDonough & Braugart, <i>The Extravagant Gesture</i> ; Daly, <i>Five Policy Recommendations</i> all in Schor and Taylor: <i>Sustainable Planet</i>
Sept. 14 th	Systematic Challenges; global Economy & fossil Fuels	Hall et al: <i>Hydrocarbons & its Evolution of Human Culture</i> ; Lovins et al, <i>A Road Map for Natural Capitalism</i>

Sept. 16 th	Diet Matters	Berry: <i>Conservation is Good Work</i> Mckibben, <i>The Year of Eating Locally</i> Richie, <i>Be a Local Hero</i> in Sustainable Planet
Sept. 18 th	Environmental Justice & Sustainability	Velazquez, <i>In Search of Justice</i> ; Schor, <i>Cleaning the Closet</i> in Sustainable Planet
Sept. 23 rd	Consumerism, Sufficiency & New economics	Gowdy & Erickson; <i>The Approach of Ecological Economics</i> ; Manno: Chapter 4 in Privileged Goods Robin, <i>What's Money Got to Do With it?</i> In Sustainable Planet
Sept 25 th	Environmental Governance	Fiorino, Chapter 3 in Toward Sustainable Communities ; Holden, <i>Science and Technology For Sustainable Well –Being</i>
Sept. 30 th	Sustainable Planning scorecard Topics for profiles due	Smardon, <i>A Comparison of Local Agenda 21</i>
Oct. 2 nd	Property ownership & Common Pool Resources	Parthascrathi, <i>Toward Property as Share</i> ; Anderson & Cananagh, <i>Another World is Possible</i> ; Menezes, <i>Fishing in Mozambique</i>
Oct. 5 th	Transitional Approaches-Air Quality	Mazmanian, Chapter 4 in Toward Sustainable Communities ; HBRF, <i>Acid Rain Revisited</i>
Oct. 7 th	Transitional Approaches - Water quality	Kraft, Chapter 5 in Toward Sustainable Communities
Oct. 9 th	Open Space & Green Infrastructure	Press & Nakagawa, Chapter 6 in Toward Sustainable Communities ; Smardon Chapter 1 Sustaining the World's Wetlands
Oct. 12 th	Midterm due (no class)	
Oct. 14 th	Toward Sustainable Planning Process	Barbour & Teitz, Chapter 7 in Toward Sustainable Communities
Oct. 16 th	Climate Change & Planning process	Slide presentation on AB 32 and climate change planning implementation in Calif.

Oct. 19 th	Climate Change & Governance	Betsill & Rabe, Chapter 8 in <i>Toward Sustainable Communities: Portland Climate Change Action Plan</i>
Oct. 21 st	Global Warming: The Signs of Science video shown in class	
Oct. 23 rd	CNY & Climate Action planning	Syracuse NY Times article: Wilbanks & Kates; <i>Global Change in Local Places</i> Panel discussion: O. Clubb +P. Thompson
	Choose projects	
Oct. 26 th	Sustainable Cities & Communities	Portney, Chapter 9 in <i>Toward Sustainable Communities</i> ; Pipher, <i>In Praise of Hometowns</i> in <i>Sustainable Planet</i> ; reread Smardon, <i>A Comparison of Local Agenda 21</i>
Oct. 28 th	Sustainable Tompkins County	Guest lecturer; Joy Nicholson from "Sustainable Tompkins"
Oct. 30 th	Profile presentations	
Nov. 2 nd	Profile presentations	
Nov. 4 th	Transportation & Smart Growth	Ditmer in <i>Sustainable Planet</i> ; Smart growth USEPA website: Sheridan Expressway case Study applied to I-81
Nov. 6 th	Forum on depressing I-81 in Syracuse	Guest Panel TBA
Nov. 9 th	Collaborative Planning for Watersheds	Lubell et al, Chapter 10 in <i>Toward Sustainable Communities</i>
Nov. 11 th	Open Space & Green Infrastructure	PowerPoint on Open Space Planning for CNY (Smardon)
Nov. 13 th	Onondaga Creek Planning process	Chapter 4 from <i>Creek Conceptual Plan</i> panel with Michelenko, Perreault, and Sage
Nov. 16 th	Regional Sustainability Planning	Rabe & Gabon, Chapter 11 in <i>Toward Sustainable Communities</i>
Nov. 18 th	Great lakes Water quality Agreement	Guest lecture by Jack Manno; Manno & Krantzberg, <i>Rediscovering & Revitalizing The Great Lakes</i>
Nov. 20 th	Great Lakes	Great Lakes Compact white papers

	Compact	for water supply management
Nov. 23 rd	Waste Recycling & Minimization	OCRRA handouts and guest lecture by Andrew Radin
Nov. 25 th	no class	
Nov. 30 th	calculating GHG Agency footprint	OCRRA GHG Committee Report
Dec, 2 nd	SD & Quality of Life Issues + Will To Change Behavior	Rechtschaffen; & Forbes in <i>Sustainable Planet</i>
Dec. 4 th	How do we get there?	Chapter 12 in <i>Toward Sustainable Communities</i> ; Taylor in <i>Sustainable Planet</i> ; Clark & Dickson, <i>Sustainability Science: The Emerging Research Program</i>
Dec. 7 th	Final project presentations in class	
Dec. 9 th	Final project presentations in class	
Dec. 11 th	Final project presentations/review session	
Dec. 14 th	Final class- evaluations and hand out	take home exam