

## **Sustainable Communities**

*EM 525 – Summer 2009*

Sustainable communities are defined as places that meet the diverse needs of existing and future residents, are sensitive to their environment, and contribute to a high quality of life. This course examines the environmental, economic, and social dimensions of sustainability in communities – large and small, urban and rural. Sustainability principles, policies, and programs that encourage and guide community initiatives are analyzed. Case studies on a variety of topics from community energy, to green development, to sustainable business are studied and compared. Innovative strategies are researched for creating communities that are more environmentally sound, economically prosperous, and socially equitable. Some of the major themes explored in the context of sustainable communities are green buildings, urban sprawl, air quality, water efficiency, climate change, sustainable energy and transportation policies, security and disaster planning, and/or demographic trends.

The objectives of this course are to: (1) discuss the linkages between environmental quality, economic gain, and societal goals in order to understand and find solutions to sustainability issues at the local level; (2) present a real-world perspective on dealing with both technical and business information in the sustainability field; and (3) develop effective research and communication skills by collaborating on a group project.

Professor: Dr. James Butler  
Argonne National Laboratory  
630-252-9158  
butler@anl.gov

Class Meetings: Mondays, 6:00-9:15 PM at the Downtown Campus.  
(Attendance is mandatory!)

Text:

Worldwatch Institute, *State of the World 2007: Our Urban Future*. W. W. Norton & Co., New York, NY, 2007. [ISBN 0393329232]

Supplementary Reading: Additional handouts and articles from the literature will be assigned.

Homework:

Submit a short write-up (2-3 paragraphs) weekly on each chapter of the textbook – summary, key points, and/or interesting observations – to show that you have completed the assigned readings.

Grading:

25% Class participation  
25% Homework  
25% Oral presentation  
25% Final report

SCHEDULE OF CLASSES

CLASS #	TOPICS	READING
1	<p><b>Introduction</b></p> <ul style="list-style-type: none"> <li>-course objectives and requirements</li> <li>-outline of the subjects to be covered</li> <li>-introduction to the concept of sustainability and how it applies to communities</li> <li>-measuring sustainability (indicators)</li> </ul>	<i>State of the World 2007:</i> Chapter 1
2	<p><b>Sustainable Transportation Systems</b></p> <ul style="list-style-type: none"> <li>-trends in transportation use</li> <li>-future energy sources for transportation</li> <li>-innovative case studies</li> </ul>	<i>State of the World 2007:</i> Chapter 2
3	<p><b>Sustainable Redevelopment of Brownfields: Benefits to the Community</b></p> <p>Jim Van der Kloot, Land Revitalization Coordinator (tentative) U.S. EPA Region 5</p>	<i>State of the World 2007:</i> Chapter 3
4	<p><b>Sustainable Urban Design Policies</b></p> <p>Kathy Dickhut, Assistant Commissioner (tentative) Chicago Department of Planning and Development</p>	<i>State of the World 2007:</i> Chapter 4
5	<p><b>Global Sustainability: Three Cities, Three Futures</b></p> <p>JohnPaul Kusz, Center for Sustainable Enterprise (tentative) IIT Stuart Graduate School of Business</p>	<i>State of the World 2007:</i> Chapter 5
6	<p><b>Student Presentations</b></p> <ul style="list-style-type: none"> <li>-group projects</li> </ul>	<i>State of the World 2007:</i> Chapter 6
7	<p><b>Student Presentations</b></p> <ul style="list-style-type: none"> <li>-group projects</li> </ul>	<i>State of the World 2007:</i> Chapter 7
8	<p><b>Green Buildings and Sustainable Housing</b></p> <ul style="list-style-type: none"> <li>-Tour of the Chicago Center for Green Technology, 445 N. Sacramento</li> <li>-course wrap-up</li> </ul>	<i>State of the World 2007:</i> Chapters 8 and 9