GREEN CITIES FOR THE 21ST CENTURY

Freshman Seminar
Global Leadership Initiative Project

- Fall 2012 -
Class Meets: MWF 12:10-1:00 pm; Location: Stone Hall 217

Professor Ulrich Kamp, Ph.D.
Department of Geography
Stone Hall, Room 205
Tel.: 243-6469, Fax: 243-4840
ulrich.kamp@umontana.edu
http://www.cas.umt.edu/geography/people/facultydetails.cfm?id=609
Office Hours: TBA; and by appointment

Course Description
Today, more than 50% of the World’s population lives in urban environments and this urbanization comes at high environmental costs: a typical city covers only 1% of its ecological footprint, i.e. 99% of its ecological footprint is beyond its city borders. Many cities around the world understood this dilemma and are part of a “green cities” movement that aims to make cities more livable and sustainable.

The course is a discussion of “green” initiative efforts in cities around the world and follows a multidisciplinary approach by integrating urban-focused concepts from history, sociology, ecology, geography, and architecture and planning. Topics include, for example, the history of cities, occidental and oriental cities, air pollution and climate change, urban sprawl and smart growth, alternative energy, public transportation, waste management, water management, green architecture, environmental and social (in)justice, cultural diversity, and urban forestry and agriculture. We will discuss how “green” cities of today are, and how serious they take the concept of urban sustainability. We will cover examples such as Amsterdam, Auckland, Beijing, Berlin, Chicago, Copenhagen, Curitiba, Portland, San Francisco, Seattle, Singapore, Toronto, Vienna, and Zurich. We will also discuss experiments of sustainable urban design such as Arcosanti, Masdar, and New Urbanism. We will learn that many of the success stories of “greening” the city were actually initiated by grassroots, non-profit, and non-governmental organizations, and by individuals who took the function of responsible citizenship seriously.

Facing the problems of current urban environments, we have to find answers to the questions:
• Are cities “livable” places?
• What are the World’s “greenest” and most livable cities?
• How can a city become “green”?
• How does the character of the civil society influence the “greening” of a city?
• What are the communitarian foundations for “greening” a city?
• What is the future of our cities?

Goals
The overall course goal is to increase students’ knowledge of the special environmental and socioeconomic problems that cities in around the globe face, and to develop solution strategies. Critical thinking is important for an objective assessment of past, present, and future developments. Students will learn that only an urban society that is based on communitarian principles is successful in becoming “green” and sustainable. To achieve this, individuals have to take on a responsible citizenship that aims to improve urban live for all.

By the end of this course, you should be able to:
1. Identify and discuss topics related to “green” cities around the world.
2. Identify and discuss existing sustainability programs in cities around the world, and evaluate to what degree these cities are serious about their sustainability initiatives.
3. Evaluate multiple perspectives about urban live and urban sustainability by integrating a diverse key of disciplines.
4. Access and evaluate primary literature, identify a study question, collect and analyze data to address the question, and summarize findings in standard formats (written text and oral presentations).
5. Evaluate the work or class peers in a constructive and respectful manner.

**Learning Outcomes**
1. Demonstrate an understanding of the way how cities can become more livable and sustainable places.
2. Demonstrate an understanding of the way that responsible citizenship makes for a communitarian society, and a communitarian society makes for a more sustainable society.
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**Class Attendance and On-time Appearance**
Attendance will be noted. Attendance during the lectures is essential to your general success in class. Excessive lateness disturbs everyone else – please appear on time. You should have your lunch before or after class.

**Readings**
We do not use a textbook. Reading material dealing with diverse aspects of “green” cities and sustainability will be made available on Moodle. The scheduled topics will be discussed in class, so please read the assigned text before class in order to be prepared.

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**Additional Course Material**
All additional course material will be made available online through Moodle after the lectures in class. Download and use these resources for your studies in preparation for assignments and exams.

**Open Door & Discussion**
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**Accommodations**
Students with disabilities who need assistance should contact the instructor immediately so that necessary forms and procedures can be completed. Please review the university’s website if there are any questions: http://www.umt.edu/dss/default.htm.

**Research Paper and Presentation**
You will write a research paper on a specialized topic that matches the main topics of the course (see “Tentative Schedule”). The main body (text) of this research paper is approximately 8-10 pages long (double-spaced, Times Roman 12, including cover page, table of content, and references) plus appendix including figures and tables. **This must be submitted by the due date.** If you decide to work with one or two peers, the paper length increases accordingly to the team size. You (and your peer/s) will develop your paper in steps by submitting five “Preparation” assignments: 1 – Reference List 1; 2 – Table of Content; 3 – Reference List 2; 4 – Abstract; 5 – Draft.

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Examinations
All three exams will take place in the classroom. They are subjective, not comprehensive; this means that the exam will encompass only the material that is covered in lectures and discussions between exams. In general, each examination will be a combination of multiple choice or, if the class size is small enough, essay questions may be included. The rules for the examinations are as follows:
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Work Evaluation and Final Grading

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<thead>
<tr>
<th>Three exams (50 points each)</th>
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Total Points 500 points

Grading Scheme

<table>
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<tr>
<th>Points</th>
<th>A+</th>
<th>B+</th>
<th>C+</th>
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<th>F</th>
</tr>
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<tbody>
<tr>
<td>97-100</td>
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<tr>
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<td>63-66</td>
<td>D</td>
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<tr>
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<td>80-82</td>
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Missed Classes

<table>
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<tr>
<td>0-3 A</td>
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## Tentative Schedule

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| WEEK 1    | Introduction to the Course  
Sustainability Concepts  
Measuring Sustainability | Syllabus                  |                            |
| WEEK 2    | Global Urbanization  
The History of Cities  
Cities in Developing Countries |                           | Submit Paper Topic         |
| WEEK 3    | Sprawl and Smart Growth  
Movie: Understanding Urban Sprawl (47 min)  
Case Studies: Portland (USA), Vancouver (Canada), Toronto (Canada) |                           |                            |
| WEEK 4    | Transportation  
Movie: The Suzuki Diaries – Copenhagen (Denmark), Madrid (Spain)  
Guest Lecture: Bob Giordano (Sustainable Transportation Missoula) | Submit Reference List 1   |                            |
| WEEK 5    | Case Studies: Amsterdam (Netherlands), Curitiba (Brazil)  
Noise and Visual Pollution  
Environmental and Social (In)justice; Case Study: Chicago (USA) |                           |                            |
| WEEK 6    | Energy Needs  
Water Needs and Water Pollution  
Movie: Thirsty Planet, Water for the Cities (27 min) | Submit Table of Content   |                            |
| WEEK 7    | Guest Lecture: David Shively (Water and Cities in Montana)  
Case Studies: Chicago (USA), Las Vegas (USA)  
Climate and Air Pollution |                           |                            |
| WEEK 8    | Case Studies: Beijing (China)  
Waste Management  
Case Studies: Berlin (Germany), Chicago (USA) | Submit Reference List 2   |                            |
| WEEK 9    | Biodiversity, Forestry and Recreation  
Case Studies: Green Belts (UK), Chicago (USA)  
Sustainable Urban Design and Development |                           |                            |
| WEEK 10   | Case Studies: Brasilia, Arcosanti, New Urbanism  
Movie: The Eco House (34 min)  
Why Cities are the Answer | Submit Abstract           |                            |
| WEEK 11   | Green City Index – US and Canada  
Green City Index – Europe  
Green City Index – Germany |                           |                            |
| WEEK 12   | Green City Index – Africa  
Green City Index – Asia  
Green City Index – Latin America |                           |                            |
| WEEK 13   | Future Cities  
Case Studies: Masdar (UAE), World Islands (UAE), Tianjin (China)  
Course Review |                           | Submit Draft               |
| WEEK 14   | Student Presentations (1-3)  
Student Presentations (4-6)  
Student Presentations (7-9) |                           |                            |
| WEEK 15   | Student Presentations (10-12)  
Student Presentations (13-15)  
Student Presentations (16-18) | Submit Paper & PPT        |                            |
| WEEK 16   | Final Exam |                           |                            |
Potential Readings

(Only excerpts will be assigned rather than entire books).


