Sustainable Cities of Northern Europe
Summer Quarter 2016

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Introduction and Class Description
This course is designed for anyone with interests in how cities can be planned, designed and managed to be more sustainable. The course will take an in-depth look at 8-9 northern European cities in four countries that have made a conscious and comprehensive effort to become more “sustainable” in a variety of ways. They range in size and scale from several million people to tiny rural villages.

- Stockholm and Gothenburg, Sweden (side trip to Malmo)
- Copenhagen, Denmark (side trip to Trekonner)
- Freiburg, Germany (side trip to the Black Forest and possibly Strasbourg)
- Lucerne, Switzerland

The course will address the general principles of sustainability and then examine in the field, how some of these principles have been put into practice. Students will not only gain an understanding of the planning, design and function of the European cities, but discuss and analyze how applicable these approaches and technologies might be for U.S. urban areas (especially applied to western U.S. cities). In other words, “what would it take” for communities in the U.S. to follow these models.

Sustainability in the urban environment implies a long-term, comprehensive strategy to address environmental quality, social equity and economic development in a holistic manner. A sustainable approach to city planning and design is one that tries to: (1) reduce consumption of natural resources through resource efficiency, building design (e.g. water, energy, soil, building materials, fossil fuels) and community planning, (2) improve health through access to healthy food, clean water, clean air and the promotion of active lifestyles, (3) increase reliance on alternative energy sources, creative land use patterns, architectural design (and landscape design), and innovative transportation strategies (transit, walking, biking, NEV’s) that are more ecologically beneficial, and (4) pursue innovations in natural area restoration, resource protection, and green space design. A sustainable approach also implies transparent collaboration amongst agencies, residents and stakeholders in addressing social and environmental justice and equity, as well as the economic consequences of different land use, development and engineering systems choices as they affect different portions of the urban population.

The course will involve lecture, particularly at the beginning to understand the basic definitions and principles of sustainable cities, how we can measure sustainable progress and how to quickly “read” an urban area and understand how it functions. A substantial amount of the lecture material delivered
on line before we get to Europe to reduce classroom time and maximize walking, seeing, and doing while abroad. This will give us more time in the field and to do projects and exercises. It is important that each of you pay attention to the on line modules and come to Europe prepared. The class will also involve considerable discussion about what students are seeing in these cities (and hearing from lectures), to what degree these innovations are sustainable (and why); and whether any of these ideas are transferable to the U.S. (and how they might “translate”). Part of that answer lies in a broad understanding of the differences in land use and resource laws, as well as culture differences, which we will discuss. The most significant part of the class will be a series of field trips in each of the cities, augmented with map analysis, and talks by local officials. Some of the field trips will be carefully structured and programmed and often led by local officials or experts. Other field trips will be less structured and rely on the students to explore the cities on foot and via transit and understand how the urban area functions.

**PROPOSED ROUGH SCHEDULE**

The following represents a draft calendar for the class showing weeks and general topics that we will cover. The schedule and topics may vary as we work through the class. Once we have assembled in Stockholm, the class will meet approximately 5 days per week; with lecture and discussion (and some work time) typically in the morning (9 am-noon) and field trips and analysis/interviews typically in the afternoons (1-4 pm). This will vary by location and opportunities for field visits. A detailed schedule will be developed once we have all the specific field trips and in-country experiences finalized.

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<tr>
<th>Week</th>
<th>Dates</th>
<th>Locations</th>
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<tr>
<td>0-1</td>
<td>7/2</td>
<td>Arrive in <strong>Stockholm, Sweden</strong> Course Introduction and Orientation</td>
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<tr>
<td>1</td>
<td>7/4-9/4</td>
<td><strong>Stockholm, Sweden and environs</strong> Definitions, Indices, life cycle concepts, Learn to Read and Document the City, Integrated Regional and Community Planning, Transportation and Land Use, field tours and exercises (eco-neighborhoods, energy use, urban design, solid waste/recycling, wastewater, transit)</td>
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<td>2</td>
<td>7/9-7/14</td>
<td><strong>Gothenburg and Malmo, Sweden and environs</strong> Waterfronts, redevelopment, urban design, wind energy, waste to energy, housing solutions, recreation, water wise urbanism/storm drainage; field tours and exercises</td>
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<td>2/3</td>
<td>7/16-7/22</td>
<td><strong>Copenhagen, Denmark and Environ</strong> Alternative transportation (transit, bike, ped, water), urban design, parks, plazas and open spaces, walk-able streets, alternative housing, wind energy, an intentional co-housing community, field tours and exercises</td>
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<td>4</td>
<td>7/23-7/28</td>
<td><strong>Freiburg, Germany</strong> Eco-neighborhoods, solar city, integrated transit and bike</td>
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use, walk-ability, streetscape and urban design, energy alternatives, eco-logically based neighborhoods, field tours and presentations

| 4  | 7/29-7/31 | Lucerne, Switzerland  
Eco-tourism, bike and ped design along waterfronts, transit use, nature preservation in an urban setting |

**READINGS**
The primary reading will be a new book by Timothy Beatley entitled *Green Cities of Europe: Global Lessons on Green Urbanism (Island Press, 2012).* This book will be offered as a PDF, or can be purchased directly. There will be other selected readings provided in a reader and via Smart Site or flash drive and some optional DVDs to watch.

**ASSIGNMENTS AND COURSE GRADING**
Class assignments will include the following:

1. Pre-trip lectures on line – absolutely required!
2. Team work – group projects completed throughout class
3. “Reading the City” visual projects and presentations – 3 of these will be assigned during the class: street audits, accessibility analysis, photo essay, public places/use survey, land use, height, bulk and density survey, transit survey, etc. (only 1 oral presentation in the quarter required); working in teams (a separate hand out will explain these more fully)
4. Two or three group design charettes during the class
5. Two Short Papers – on topics of the student’s choosing inspired by one or many of our cities or neighborhoods; 4-5 pages each, one on technology/policy and one place-based; one due half way through, one due at the end of class (a separate hand out will fully explain the papers)
6. Class participation – attendance, dialogue, exercises, tours, personal journals, and being prepared in class

Approximate percentage break-downs are as follows:

- Small Team Exercises and Design Charrettes: 20%
- Reading the City: 30%
- Papers: 40%
- Class Participation: 10%
- **Total**: 100%

For more information about logistics, travel, costs or registration, please contact the UC Davis Summer Abroad Office at 757-8308; or directly to Greg Gundersen, Program Coordinator and Advisor; Phone: 530.297.4640   Email: ggundersen@ucdavis.edu;   Homepage: http://studyabroad.ucdavis.edu