

European Approach to Sustainable Design

Fall 2016

ARC 6934 T 7-9

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Course Description:

This course will explore the European approach to sustainable design and will examine ideas and design strategies that are being used in Europe that might be considered for the United States. Photo voltaic cells, solar energy, green roofs, wind power, cogeneration, and even as simple a concept as operable windows are much more prevalent in Europe than in the U.S. There are several countries in Europe that are leaders in this field and the exploration will concentrate on those countries. Germany, Holland, England, France, and Finland have well established sustainable design programs and will be the basis for this study.



Velodrome,

Hopkins Architects

London 2011

An important premise of this study is that the sustainable design effort cannot exist alone without architectural excellence. As James Wines states in his book, *Green Architecture*, no matter how many green technologies a project may have if it does not also have art and connect on other levels the people will not cherish the building and will not want to keep it around. Jacqueline Cramer commenting in the Dutch book, *Duurzaam Huisvesten (Buildings that Last)* states that while there has been success in the energy side of sustainability to the point of designing and building zero energy housing developments there also has to be social sustainability and quality of the living environment to make people want to stay there. Without this quality and architectural excellence the sustainable efforts will fail. Within this study we will look for design strategies that balance all these issues and produce buildings that will truly last the test of time as this is the most sustainable of all considerations.

The course will consider specific European architects including work by Thomas Herzog, Petzinka, Pink and Partner, Benisch, Benisch and Partner, Ingenhoven Overdiek und Partner, Meyer and Van Schooten, Michael Hopkins, Norman Foster, Richard Rogers, Bill Dunster, and West 8. The class will also explore sustainable development and urban planning issues in Ecolonia, Vikki, Vauban, and Bedzed.

Course Objectives:

- Discuss the status of the environment
- Become familiar with European environmental assessment methods
- Develop a conceptual understanding of sustainable design principles with an emphasis on innovative design projects
- Test these sustainable design concepts with several design charrettes
- Explore the relationship between sustainability and esthetics

Required Text:

Chakrobarati, Vishaan. *A Country of Cities: A Manifesto for an Urban America*, Metrolois Books: New York.

Beatly, Timothy. *Green Cities of Europe*, Island Press: Washington, 2012.

Beatly, Timothy. *Learning from European Cities*, Island Press: Washington, 2000.

Recommended Reading:

Abbey, Ian, and James Heartfield, eds. *Sustaining Architecture in the Anti-Machine Age*. Chichester, England: Wiley-Academic, 2001

Class Topics

Sustainable Urban Planning
 Status of the environment
 Environmental Assessment methods
 European case studies:
 High rise office
 Low rise office
 Housing
 Sustainable Village
 Institutional / University
 Sustainable Design Technologies
 Material and product selection
 Green Roof
 Renewable energy – Photo voltaic, Wind, Co-generation
 Day-lighting sun control

Class Grades

Status of The Environment	10
Environmental Assessment Research	10
Charrette 1	15
Charrette 2	15
Class participation	15
Building Case study	25
Quizes	10
<hr/> Total	<hr/> 100

UF Grading Policy

Information on UF's grading policy can be found at the following location:
<https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>

Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, www.dso.ufl.edu/drc/) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester.

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Health and Wellness

If you or a friend is in distress, please contact umatter@ufl.edu or 352 392-1575 so that a team member can reach out to the student.

Counseling and Wellness Center: <http://www.counseling.ufl.edu/cwc/Default.aspx>, 392-1575; and the University Police Department: 392-1111 or 9-1-1 for emergencies.

Sexual Assault Recovery Services (SARS)

Student Health Care Center, 392-1161.

University Police Department, 392-1111 (or 9-1-1 for emergencies).

<http://www.police.ufl.edu/>

Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations at <https://evaluations.ufl.edu>. Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students at <https://evaluations.ufl.edu/results/>.