Sustainable Cohousing

We can envision new ways to live more harmoniously with nature and other people. Living lightly on the land requires working together, looking at how an individual can be part of sustainable systems at the scale of the unit, block, neighborhood and city. As we will consider new possibilities for bringing people together productively, the studio will emphasize group design and contributing to a learning community.

LEARNING OBJECTIVES:

To understand

- how environments can flexibly support different kinds of community along with privacy.
- how to build sustainably in the Pacific Northwest region
- how design media can support the idea development

DESIGN APPROACH: A PROCESS TO FOSTER DISCOVERY

We will begin by exploring aspects of community and how environments facilitate social interaction. We will look at how Americans have adopted foreign and alternative group structures by visiting co-housing communities and studying about life in communes and eco-villages. Together we will gather site information and analyze the site. From personal conceptual creative responses, students will generate site designs in small groups. Students will consider the project at different scales to understand how urban-level decisions affect the immediate spatial experience.

After working with partners to establishing an urban massing, students will each take part of the scheme to develop. Some students will concentrate on indoor & outdoor common areas, looking at how shared spaces can support different circles of community. Others will consider alternatives for flexible unit configurations that could accommodate a wide range of people, such as unrelated adults and single parent families, in comfortable yet compact quarters. Each student or group will select one sustainable measure to integrate into the design and create a large-scale study. After a careful study of the component, students will apply lessons learned to the unify the larger complex.

GROUPWORK BY SITE

An important aspect of the class will be learning how to productively contribute to a group effort, a skill crucial to all building enterprises. Much of the work will be done in teams. Students can choose from

1) 485-505 River Road, part of the Rasor Park Mixed Use Center, whose owners want to develop as an ecological co-housing community.

2) Friendly Street and 27th, which is being developed into a mixed-use commercial rental plus townhouses.

3) a Portland site to be determined

MEDIA & DESIGN PROCESS

The class will use design media strategically, starting with sketching and sketch modeling and moving towards digital refinement. Push yourself to draw as much as possible to develop quick visualization skills and to embed the habit of looking deeply. Assignments will encourage experimentation with media, such as hand-computer hybrids and quick generation of options.

EVALUATION

This class is a joint effort that depends on participation of all members: enthusiasm is greatly appreciated. Students will be evaluated on design thinking, process and media with consideration of effort and previous training. Students are expected to prepare material for each class and attend each class. The instructor has a bias for quantity: lots of quick and dirty alternatives that inform design decisions. Students who miss a review or more than 3 classes during the quarter will be in danger of not passing. Major deliverables:

A. Precedent case-study & Program brief (week 2)

B. Site Response: (week 4)
- define constraints & opportunities, generate rationale or conceptual basis
- identify sustainable strategies to explore
- design urban massing, program organization

C. Architectural Design: (individual components of group design) (week 7)
- exterior community & semi-public space, site ameneties
- interior common spaces
- housing units

D. Detail sustainable building technique or system (week 10)
- Explain key principles through relevant examples
- Apply principles in detail design of housing unit or common space

Principles of Co-housing

(McCamant interpreted by Torres)

1. **Participatory process—cohousing** communities are formed, planned and developed with the active participation of prospective residents;
2. **Intentional neighborhood design**—based on the principles identified as social contact design in this dissertation, the physical environment of cohousing encourages connectedness within the community;
3. **Extensive common facilities**—the common house and other collectively-owned facilities supplement the individual dwellings for practical and social purposes;
4. **Complete resident management**—residents are responsible for community management and maintenance.
5. **Non-hierarchical structure**—residents take on leadership roles in different tasks but leave major action and policy decisions to the community;
6. **Separate income resources**—residents have independent means of income that are not tied to community finances.

Students will need to become familiar with co-housing and sustainable building practices through required readings and independent research.

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UW Urban Planning Links – Cohousing. Sustainable Development
http://www.lib.washington.edu/Aup/websitesUrban.html#topics

EcoBuilding References

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Roaf, Susan (2003) *Ecohouse 2*, Oxford : Architectural Press. TH4812 .R633 2003

Sustainable Communities Network – Green Buildings DOE
http://www.sustainable.doe.gov/buildings/gbintro.shtml
Annotated links to Community Issues (cohousing), Affordable Housing, Success Stories

Case Study Examples from Penn State
http://www.hamercenter.psu.edu/resources/sustainable.html

Instructor

Nancy Yen-wen Cheng, AIA. Email: nywc@uoregon.edu
http://www.uoregon.edu/~nywc
541-346-3674 eugene office phone, 541-556-4590 mobile phone for emergencies

Office hours: Tues 2:15-4:00pm in 204 Pacific

Class Website will be created on a collaborative wiki: http://rrcoho.pbwiki.com
Resources are online at: http://blackboard.uoregon.edu