11.436 - Studio Course: “GreenHouse” Residential Neighborhood Plan

Class Time: Tues, Thurs, 9:30-12:30
Meeting Place: Room 9-451

Instructors:
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Summary
This studio course explores ways to improve housing quality and affordability, achieve energy savings, and increase transportation access at a neighborhood scale in the form of a local “GreenHouse” plan for neighborhood sustainability. A “GreenHouse” plan is one which applies global concerns about climate change, sustainability, and equity at a local level; it seeks to cultivate a fertile environment for healthy, equitable community growth. In cooperation with a local client, course participants will define the terms of sustainability for a specific neighborhood in Dorchester (Boston), and then design an appropriate framework for action for the target area focusing on existing and future housing needs, community services, transit connections, and energy policy. While emphasizing the local perspective, coursework will incorporate opportunities to draw on and inform federal, state, and private urban development policies. The course will provide the potential to develop skills in housing finance and policy, neighborhood planning, urban design, energy use, and transit-oriented development.

Description
Environmental problems at a global scale are leading to demands for better community planning aimed at lowering emissions of greenhouse gases (GHG) as well as improving the quality of life in both urban and suburban neighborhoods. The importance of this challenge was highlighted in 2009, when leaders of the Department of Transportation (DOT), the Department of Housing and Urban Development (HUD), and the Department of Energy (DOE) began a conversation about collaborative policies that would lower reduce America’s contribution to climate change problems while contributing to safer and healthier communities. The resulting proposal for a DOT-HUD-EPA Interagency Partnership for Sustainable Communities offers the opportunity to develop new tools that allow residential neighborhoods to offer greater choice for all residents – choice of housing type, schools, mode of transit, employment opportunity – and to reduce consumption of non-renewable and GHG-producing energy sources.

Building on the previous two years of studio work in Boston, the Spring 2012 session will again target a low-income, minority neighborhood in Dorchester. The studio will be centered in the Field’s Corner district and work with Viet Aid, a community development organization active with the Vietnamese immigrant community but committed to housing
and economic development improvements all residents of the area. Studio participants will work with the client to understand neighborhood needs within a broad context of sustainability and will help the client develop and apply these sustainability criteria for specific development proposals.

Through their work with the client and their own research and analyses, students will develop the final studio product: a “GreenHouse” plan that maps out a set of goals to address local housing, transportation, and energy issues with a series of policies that can be implemented to achieve those goals. The framework for developing this plan will be the new federal Sustainable Communities Initiative developed jointly by HUD, EPA, and DOT. In the fall of 2010, the federal government awarded a $4 million Sustainable Communities planning grant to Boston’s regional planning agency, the Metropolitan Area Planning Council (MAPC), to help implement sustainability measures as part of MAPC’s MetroFuture regional plan. Studio participants will work under the guidelines of the Sustainable Communities program and MAPC’s application to this program to plan and map out strategies to implement policies and programs that are environmentally sustainable and promote economic and social equity.

To see previous GreenHouse studio reports, go to: http://web.mit.edu/dusp/dusp_extension_unsec/reports/buckley_greenhouse_S2010.pdf

Readings
Students’ work in the field will be supplemented with a series of readings on housing, neighborhood planning, transit-oriented development, and energy policy that is intended to provide a foundation for policy development in these areas. Three key texts will serve as centerpieces for discussion of sustainability and planning for low-income neighborhoods:

- Peter Medoff and Holly Sklar, Streets of Hope: The Fall and Rise of an Urban Neighborhood (South End Press, 1994)
- David Owen, Green Metropolis (New York: Riverhead Books, 2009)

Learning Objectives
This course is designed to help students develop skills and experience in a variety of areas, including:

1. Gain experience in understanding and responding to planning issues at a neighborhood scale in a diverse, lower-income community
2. Explore the interaction of multidisciplinary policy issues, including housing, transit, and energy
3. Increase awareness of the opportunities and limitations of community development organizations in lower-income communities
4. Develop facility in researching, synthesizing, and presenting a coherent planning document using typical tools such as census data, mapping, and visual imagery

Requirements and Grading
1. Attendance and participation in discussion: 20%
2. Individual Activities: 40%
3. Contribution to Group Activity: 40%

Disabilities
If you have a documented disability, or any other issue you think may affect your ability to perform in class, please see me early in the semester so that arrangements may be made to accommodate you.

Academic Misconduct
Plagiarism and cheating are both academic crimes. Never (1) turn in an assignment that you did not write yourself, (2) turn in an assignment for this class that you previously turned in for another class, or (3) cheat on an exam. If you do so, it may result in a failing grade for the class, and possibly even suspension from the college. Please see me if you have any questions about what constitutes plagiarism. Anyone caught cheating will be reported to the provost in line with recognized university procedures.
– COURSE SCHEDULE –

PART I: INTRODUCTION TO THE NEIGHBORHOOD (Feb 7 to Feb 23)

Specific Activities
• Baseline Data Collection
• Neighborhood History

General Topics
• Tools for Neighborhood Planning
• Policy Context/Planning Models
• Neighborhood Dynamics

Product: Scope of Work and Schedule

PART II: DATA COLLECTION AND ANALYSIS (Feb 28 to Mar 29)

Specific Activities
• Research on Existing and New Policy Measures
• Neighborhood Characteristics

General Topics
• Housing Types and Services
  o Green Rehab/New Construction
• Residential Energy Conservation/Community Greening
• Transit Enhancements
  o Existing commute patterns; Housing plus transportation costs

Product: Mid-Term Presentation

PART III: DEVELOPING THE PLAN (Apr 3 to May 17)

Specific Activities
• Plan Format and Final Content
• Development of Goals and Policies

General Topics
• Residential Neighborhood Services (incl. crime, schools, etc.)
• Land Use: Acceptable Densities
• Interaction of Sustainable Planning Elements
• Equity and Diversity in Neighborhood Planning
• The Politics of Planning and Implementation (Local Gov’t and Community Orgs)

Product: Final Presentation and Report
PART I: INTRODUCTION TO THE NEIGHBORHOOD

Week 1

Feb 7 (Tues) - INTRODUCTION

  Medoff and Sklar, *Streets of Hope*: Introduction, Chapter 1 “Remembering”
  Fitzgerald, Chapter 1, “Sustainability as Economic Development”
  David Owen, *Green Metropolis*, Chapter 1: “More Like Manhattan”

Feb 9 (Thurs) – SUSTAINABILITY AND EQUITY


Studio Materials (on Stellar)
Viet Aid
Madrid Studio Brief

MAPC Sustainable Communities Grant Application

Additional Reading
Feb 11 – SITE VISIT

Week 2

Feb 14 (Tues) – NEIGHBORHOOD HISTORY AND DYNAMICS

*INITIAL SKYPE MEETING W/ MADRID STUDIO*

Medoff and Sklar, Streets of Hope, Chapter 2 “Creating the Dudley St. Neighborhood Initiative”


Additional Reading

Feb 16 (Thurs) – TOOLS FOR NEIGHBORHOOD PLANNING

Additional Reading


Justin Massa. “Equity 2.0: The Missing Pieces,” Shelterforce (Spring 2009)

**Week 3**

Feb 21 (Tues) – **NO CLASS** (Monday Classes Meet)

Feb 23 (Thurs) – **NEIGHBORHOOD PLANNING MODELS**

*Medoff and Sklar, Streets of Hope, Chapter 4: Planning an Urban Village*


Wiliam H. Rohe. “From Local to Global: One Hundred Years of Neighborhood Planning,” *Journal of the American Planning Association*, 75:2 (Spring 2009)

Sophie C. Martin. “Old standbys, new standards: evaluating LEED-ND through existing models of green urbanism” (Master’s Thesis, MIT DUSP, 2008) – skim document and read Chapter 7: Synthesis and Discussion

**Additional Reading**

Joan Capelin. “Sustainable Development at the Graduate Level,” *Urban Land* (August 2009)


**PART II: HOUSING, ENERGY, AND TRANSIT ACCESS**

**Week 4**

Feb 28 (Tues) – **HOUSING TYPES AND HOUSING FINANCE**


Mar 1 (Thurs) – **WEATHERIZATION, REHAB, AND ENERGY IMPROVEMENTS**

Joan Fitzgerald, *Emerald Cities* – Chapter 3: “Renewable Cities” and Chapter 4: “Building the Energy Efficient City”
Sammy Zahran, et. al. “Greening Local Energy,” *Journal of the American Planning Association*; Autumn 2008; 74, 4
LISC. “Getting Started with Green Preservation” (2009)

Additional Reading
Melissa McEwen, Kelly Meade, and Ron Hubert, “Winning Battles But Losing the War,” *Urban Land* (September 2009) – on local green codes

Week 5

Mar 6 (Tues) – MODAL CHOICE AND TOD

Joan Fitzgerald, *Emerald Cities* - Chapter 6: Creating a Green Transportation Economy

David Owen, *Green Metropolis*, Chapter 3: “There and Back”


**Additional Reading**


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Mar 8 (Thurs) – GENERAL SESSION

Week 6

Mar 13 (Tues) – PRESENTATION

**2nd SKYPE MEETING W/ MADRID STUDIO**

Mar 15 (Thurs) – GENERAL SESSION

Possible evening Viet-Aid Board meeting?

Week 7

Mar 20 (Tues) – GENERAL SESSION

Mar 22 (Thurs) – PRESENTATION

**50% PRESENTATION**

Week 8

Mar 27, Mar 29: NO CLASS (Spring Break)
PART III: DEVELOPING THE PLAN

Week 9

Apr 3 (Tues) – HEALTH AND SAFETY

David Owen, Green Metropolis, Chapter 4: “The Great Outdoors”
Medoff and Sklar, Streets of Hope, Chapter 7: “Holistic Development”

Apr 5 (Thurs) – GENERAL SESSION

Week 10

Apr 10 (Tues) – PRESENTATION

**3rd SKYPE MEETING W/ MADRID STUDIO**

Apr 12 (Thurs) – FAMILY PLANNING (WOMEN AND CHILDREN FIRST!)

Medoff and Sklar, Streets of Hope, Chapter 5 “Controlling the Land” and Chapter 6 “Land and Housing”

Week 11

Apr 17 (Tues) – NO CLASS (Patriot’s Day)

Apr 19 (Thurs) – GENERAL SESSION
Week 12

Apr 24 (Tues) – IMPLEMENTATION – POLITICS OF THE PLAN
Medoff and Sklar, *Streets of Hope*: Chapter 9 “Pathfinders”

Apr 26 (Thurs) – IMPLEMENTATION – FUNDING THE PLAN
Michael Iacono, David Levinson, Zhirong (Jerry) Zhao, and Adeel Lari. “Value Capture for Transportation Finance” (Center for Transportation Studies, Univ. of Minnesota, 2009)

Week 13

May 1 (Tues) – GENERAL SESSION

May 3 (Thurs) – PRESENTATION

**INTERNAL PRESENTATION**

Week 14

May 8 (Tues) – GENERAL SESSION

May 11 (Thurs) – PRESENTATION

**FINAL SKYPE MEETING W/ MADRID STUDIO**
Week 15

May 15 (Tues) – Wrap-up/Evaluation

May 17 (Thurs) – PRESENTATION

**OUTSIDE PRESENTATION (Final)**

N.B. *The schedule is subject to change to accommodate availability of client personnel and guests.*