

Graduate Urban Design Studio 970:511:01:66726 Spring 2010

9:50-12:30 Mondays CSB 369

Adjunct Professors: Jim Constantine and Gonzalo Echeverria

Contact information for the instructors to be provided first day of class.

Overview

Quality urban design is one of the keys to improving the quality of community life and human health, optimizing mobility for all modes of movement, utilizing today's infrastructure and resources with concern for the future, and creating enduring value. Urban design synthesizes the form of land use, circulation and preservation applied to the design of regions, landscapes and human settlements that take the form of exurbs, villages, towns, cities and suburbs. In comparison to the practice of planning in general, urban design is focused on the vision for how people will experience space at a variety of scales and settings. This ranges from spaces set in landscapes, community spaces framed by buildings and street space utilized for circulation by all modes of movement. Urban design should be informed by the unique historical/cultural evolution of each place and the regional and local design traditions that contribute to sense of place. The process of urban design should engage decision makers, stakeholders and/or the public to gain input, feedback and help build enduring support for the vision.

This three credit Graduate Urban Design Studio will focus on Transit Oriented Development, Sustainability and Form-Based Codes. The Studio is designed for students who have either taken **the Introduction to Urban Design and Site Planning** course, the **Fundamentals of Urban Design Studio** or have some previous experience in Urban Design. This course will prepare the student to better understand visualize, conceptualize and implement quality places that meet the evolving practice of Smart Growth, New Urbanism, Transit Oriented Development (TOD), Traditional Neighborhood Development (TND), LEED for Neighborhood Development and Form-Based Codes.

Course Structure

The course has been designed as an urban design discourse and studio. During the first half of the semester (classes 1-7), students will be taught a series of basic urban design skills through a range of lectures, studio exercises, research, readings, assignments and field trips. These fundamental urban design skills will provide the tools for the studio to split into small teams and undertake the Major Project for the semester focused on an actual site (classes 8-14). The Major Project will result in a Concept Plan and Form-Based Code for a Transit Oriented Development. During the semester, several outside presenters will be invited to help enhance the sense of "real world" practice. Outside reviewers will be brought in to assist in the review of the final Concept Plan and Form-Based Code for the Major Project.

The studio will be 50% lecture and discussion and 50% percent "hands-on" design. Most sessions will have an In-class Exercise and take home Assignment. You should expect to spend, at a minimum, an equal amount of time out of class as the time in class.

Grading

The final grade will consist of 50% based on individual work consisting of Exercises and Assignments in basic urban design skills. The other 50% will be based on both individual contribution and combined team work on the Major Project.

For the Exercises, Assignments and Major Project, we will be looking for an understanding of the principles, proper design intent and the ability to communicate in oral, written and graphic form. Each exercise, assignment and project will be graded up to 100 points:

- 50 points for design and functional mastery of principles
- 30 points for graphic quality
- 20 points for oral and/or written content

Assignments that receive low marks can be re-worked and re-submitted for higher grades up to April 26, provided that they were not late initially. All assignments are due as posted. Late assignments will be reduced 50% if one to seven days late and 75% if eight or more days late.

This class will adhere to the Rutgers University policy on academic integrity which can be found at: <http://academicintegrity.rutgers.edu/>

Reading Materials

There is only one book assigned to the course (available at the Rutgers Bookstore):

Visions for a New American Dream: Process, Principles and Ordinance to Plan and Design Small Communities by Anton Nelessen

There are the following additional readings which you should download, print and bind:

Charter of the New Urbanism

http://www.cnu.org/sites/files/charter_english.pdf

Form-based Code Institute (resources: definition, checklist and advantages)

<http://www.formbasedcodes.org/definition.html>

<http://www.formbasedcodes.org/checklist.html>

<http://www.formbasedcodes.org/advantages.html>

LEED 2009 for Neighborhood Development Rating System

<http://www.usgbc.org/DisplayPage.aspx?CMSPageID=148>

Re-Connecting America (two TOD reports)

http://reconnectingamerica.org/public/display_asset/jtlugoodtoddesign2008?docid=376

http://reconnectingamerica.org/public/display_asset/floridatodguide041409?docid=377

Smart Code – Version 9.2

http://smartcodecentral.org/smartfilesv9_2.html

On Common Ground - Spring 2009 issue
(to be provided by the instructors)

The following periodicals are recommended: *New Urban News* and *Places*

Other reading materials may be assigned during the semester.

Graphic Equipment Required

- 6 Number Two pencils plus hand sharpener
- 6 Sharpie felt tip pens (both narrow and wide tips)
- Engineering scale
- Sketch book with a grid
- 6 to 12 inch rolling ruler/straight edge
- 30/60 plastic drawing triangle
- 18 to 24-inch roll of white tracing paper
- Roll of Scotch removable tape (blue rim)
- Soft eraser
- Basic colored markers

Most of this equipment can be purchased at the Rutgers University Bookstore or Douglas Campus, Pearl Art Supply or Triangle Graphic Supply are good sources for supplies and paper. In addition you will need access to a digital camera.

Schedule at a Glance

Basic Urban Design Skills

Week One (January 25):	Introduction and Overview
Week Two (February 1):	Drawing and Graphics Workshop
Week Three (February 8):	Street, Block and Public Space Typologies
Week Four (February 15):	Field Trip to Forrest Hills Gardens, NY
Week Five (February 22):	Building and Architectural Typologies
Week Six (March 1):	Form-Based Codes
Week Seven (March 8):	New Jersey's Transit Village Program

Major Project

Week Eight (March 22):	Site Analysis
Week Nine (March 29):	Concept Plan Alternatives
Week Ten (April 5):	Preferred Concept Plan
Week Eleven (April 12):	Refined Concept Plan and LEED ND Rating
Week Twelve (April 19):	Test Form-Based Code
Week Thirteen (April 26):	Major Project Review/Workshop
Week Fourteen (May 3):	Final Presentation

Schedule

Basic Urban Design Skills - Classes 1-7

Class One - Introduction and Overview (January 25)

In-class Exercise: Introductions and Background Briefs (*see hand out attached to syllabus*)

Lecture: Transit-Oriented Development: Typologies and Case Studies

Assignment: “Make the Case for the Benefits of TOD”

Write a brief “top of the conscious” essay that makes the case for Transit Oriented Development based on its benefits. This essay should be maximum of 500 words and be written without any research or reading. Due: Email the essay by Friday January 29

Reading Assignment: *Visions for a New American Dream* - Chapters One-Six

Bring graphic equipment to class next week

Class Two - Drawing and Graphics Workshop (February 1)

Bring graphic equipment to class

Lecture: Drawing and Graphics for Urban Design

In-class Exercise: Basic site plan for a single lot, street section, and graphic techniques

Assignment: Draw plan views of streets, blocks and public spaces

Due: Bring to class February 8

Discussion of Readings

Reading Assignment: *Charter of the New Urbanism*

Class Three - Street, Block and Public Space Typologies (February 8):

Lecture: Street, Block and Public Space Typologies

In-class Exercise: Three-dimensional model of an urban block

Assignment: Draw axonometric view of an urban block

Due: Email by February 12

Discussion of Readings

Reading Assignment: *Visions for a New American Dream* – Chapter Seven

Class Four - Field Trip to Forrest Hills Gardens, NY (February 15):

In-field Exercise: Measuring and documenting existing conditions of streets, blocks, public spaces, buildings, streetscapes and landscapes

Assignment: Urban design analysis of Forrest Hills Gardens

Students will be assigned different streets, blocks, public spaces and building types from which to document and draw existing conditions and prepare an urban design analysis. This analysis should draw upon the Ten Design Principles discussed in Chapter Seven of *Visions for a New American Dream*.

Due: Bring to class February 22

Reading Assignment: *Visions for a New American Dream* – Chapters Eight and Nine

Class Five - Building and Architectural Typologies (February 22)

Lecture: Building and Architectural Typologies

In-class Review: Urban design analysis of Forrest Hills Gardens

In-class Exercise: Begin coding the three-dimensional model of an urban block

Assignment: Prepare Form-Based Code for the three-dimensional model of an urban block

Due: Bring to class March 1

Reading Assignment: *Form-Based Code Institute resources* and *Smart Code*

Class Six - Form-Based Codes (March 1)

Lecture: Form-Based Codes

In-class Review: Form-Based Code for the three-dimensional model of an urban block

Assignment: Review and analyze an adopted *Form-Based Code* (specific codes to be assigned in class). Prepare a site plan to “test” the code and provide an analysis of the code in terms of effectiveness, user-friendliness, etc.

Due: Bring to class March 8

Discussion of Readings

Class Seven - New Jersey’s Transit Village Program (March 8)

Lecture: New Jersey’s Transit Village Program (guest presenters invited)

Assignment: Transit station/stop analysis

Each student will be assigned to visit a transit station or stop to be analyzed. Conduct background research and use maps, aerial photographs and ground level photography to document existing conditions within the station area (1/2-mile radius). Provide a basic urban design analysis of the station area. Create a “big idea” framework diagram and action items for transforming the station area to make it more “transit-friendly”.

Due: Bring to class March 15

Reading Assignment: *On Common Ground* and two TOD reports from *Re-Connecting America*

Major Project sites will be assigned to teams of students at this class.

Assignment: Visit Major Project site and commence data collection

Major Project - Classes 8-14

Class Eight - Site Analysis (March 22)

In-class Review: Transit station/stop analysis

In-class Review/Exercise: Review background data and site analysis of Major Project and conceptualize “big idea” framework diagrams for concept alternatives

Assignment: Prepare preliminary concept alternatives for Major Project
Due: Bring to class March 29

Reading Assignment: *LEED 2009 for Neighborhood Development Rating System*

Class Nine - Concept Plan Alternatives (March 29)

Lecture: LEED for Neighborhood Development

Discussion of Readings

In-class Review/Exercise: Pin-up review of preliminary Concept Plan alternatives

Assignment: Visit site again to field test and revise Concept Plan alternatives
Due: Bring to class April 5

Class Ten - Preferred Concept Plan (April 5)

In-class Review/Exercise: Pin-up review and selection of preferred Concept Plan

Assignment: Refine preferred Concept Plan and prepare LEED ND rating
Due: Bring to class April 12

Class Eleven - Refined Concept Plan and LEED ND Rating (April 12)

In-class Review/Exercise: Refined Concept Plan and LEED ND rating

Assignment: Prepare draft Form-Based Code for Major Project

Due: Bring to class April 19

Class Twelve - Test Form-Based Code (April 19)

In-class Exercise: Teams will “test” each other’s draft Form-Based Code

Assignment: Refine Form-based Code

Due: Bring to class April 26

Week Thirteen - Major Project Review/Workshop (April 26)

In-class Review/Workshop: Pin-up review of graphics and deliverables (reports and presentations) for Concept Plan and Form-Based Code

Week Fourteen - Final Presentation (May 3)

Final Presentations of Concept Plan and Form-based Code for Major Project

All final reports and CD’s with Power Point presentations to be submitted by May 7.

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Introduction and Background Brief: *(please bring filled-out to first class on January 25)*

Name and Degree Status?

E mail:

Telephone:

Are you a full time or part time student?

Desired professional occupation five years after graduation?

Do you have a job as well as getting your masters?

If so, where do you work and how many hours a week do you work outside your university assignments?

Do you have a car that you can use?

Why do you have an interest in urban design?

What is your knowledge of architecture, landscape design and civil engineering?

What specific design, graphic, research and computer skills do you have that can be applied to this studio (e.g., GIS, Sketch up, Photoshop, In-design, etc.)?

Have you ever written or illustrated a professional planning document?

Have you ever prepared a zoning ordinance, site plan or design guidelines?

Do you have any familiarity with the Smart Code, Form-based Codes or any type of design review regulations/process?

Most is the most beautiful place you every visited?

What are your three favorite large cities?

What is your favorite urban space or place?

In four or five sentences, describe your ideal neighborhood (a place where you would want to live/work/play):

Do you think the Yankees will win the World Series again in 2010?