

Hooman Koliji, PhD  
Assistant Professor  
Architecture Planning and Preservation

**Course: Architectural Design Studio 405** (Graduate Studio – 6 Credits)

**Theme** (appropriated for Spring 2014):

**BUILDING as LANDSCAPE :: LANDSCAPE as BUILDING**

The overall theme of the studio is: building as landscape :: landscape as building. This double play of these concepts suggests new readings of buildings and landscapes: not as distinct entities, but as extensions and continuations of each other. These are discussed in terms of fundamental concepts of space and form, history and theory, building technologies, representation. Students will develop their knowledge through study of form and expression while associating formal explorations with program, site, and context. Students will examine historical perspective of architecture, cultural reflection (building program/typology as a reflection of culture, rituals, etc.), environmental aspects through design assignments and discussions. Students will also explore building technologies (e.g., structural organization and types, integration of sustainability design strategies (i.e. building orientation, urban form, solar energy, ventilation, etc.), and landscape architecture.

The studio will study and examine the critical notion of sustainability in the built environment at various scales: urban, landscape, and building. Through intersecting architecture and landscape design principles, this course argues for a unified vision of design in conceiving built-environment - promoting sustainability in our discipline. The studio will also study interconnected notions of micro-landscape, urban micro-farming, vertical gardening in architecture and will examine these notions through design assignment. Incorporation of green systems into the design process will be examined through study of precedents and design process.

## **Assignment:**

I intend to assign students to design a building related to practices of sustainability in urban context. Examples include: "Learning Center for Urban Farming." Major objectives of this project is to engage students in study and examining ways of designing sustainable buildings. As part of the project, I will ask them to incorporate ideas of urban farming (roof garden, green wall, etc.) in the design.

## **Methodology (on sustainability concepts):**

- General Presentations on sustainability, sustainable design
- Round table discussion on defining "our own" vision of sustainability
- Select readings (architectural design + sustainability)
- Study and analysis of select sustainable buildings and landscape
- Diagraming sustainable concepts
- Design as way of thinking in systems, systematically solving problems
- Designing architectural details (e.g. green wall, roof garden)

## **Learning Objectives:**

Specific learning objectives, such as those of sustainability that are tied to assignments, will be studied through readings, analysis of precedent projects, and most importantly through diagraming and design process.

- (Systems Thinking) : students will extend their exploration of design as systems thinking to consider interconnectedness between parts and whole through the design process. This includes site study strategies, building concept strategies, and building detail design.
- (Environmental Stewardship): students will develop a perspective on the impact of architectural design on environmental stewardship.
- (Food Security): Students will be introduced to concepts and practices of urban farming, including vertical farming, roof gardens, and in general micro-farming.

This will develop an understanding of current practices of food production in urban environments and explore social and economical implications of this practice.

**Learning Assessment:**

Assessment of students' leanings on sustainability concepts is integrated to the design process. Followings provide specific assessment of students' learning:

- verbal narrative of design vision and how they define and meet sustainability goals.
- Study of the precedents: analysis of relevant buildings and landscapes.
- visual diagrams (sustainability diagrams): including site, building, section diagrams. These are pre-design diagrams of studying design strategies, and post-design diagrams of evaluating the design.