

# ARCH673 BUILDING CULTURE COURSE SYLLABUS

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**THOSE WHO CANNOT LEARN FROM HISTORY ARE DOOMED TO REPEAT IT.**

GEORGE SANTAYANA

**WE ARE MADE WISE NOT BY THE RECOLLECTION OF OUR PAST, BUT BY THE RESPONSIBILITY FOR OUR FUTURE.**

GEORGE BERNARD SHAW

**WE CAN'T SOLVE PROBLEMS BY USING THE SAME KIND OF THINKING WE USED WHEN WE CREATED THEM.**

ALBERT EINSTEIN

## COURSE GOALS & DESCRIPTION

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Comprehension of major themes, theories, and techniques will be developed through several means:

- ....Studying case histories and theories of building craft
- ....Studying principles of building science and sustainable building principles
- ....Studying 19<sup>th</sup> and 20<sup>th</sup> century histories of how we came to use energy relative to buildings in the United States

We will:

- ....explore definitions of technology.
- ....explore the tasks of architecture and how they are made manifest in building craft.
- ....explore basic themes in the development of building technique.
- ....explore basic themes in the development of building technologies, building science, and sustainability in architecture.
- ....demonstrate and apply knowledge through analysis and critique of SD2009 construction documents

The course takes up the themes of Arch 673 Building Culture -- comprehension of major themes, theories, and techniques in the development of architectural building craft and corresponding value systems -- with a specific focus on questions of "traditional" and "new" knowledge into sustainable approaches in the design and construction of small structures.

In particular, the course highlights the relationship between the way things are constructed (technique of assembly, technology, materials, process), and deeper cultural meaning. For instance, the construction of Gothic cathedrals is a reflection of the structure of the society that created them, their belief systems, conception of the universe, religious beliefs, and educational customs. While this reflection of the culture is obvious and well known, it can also be said about buildings and cities in general.

ARCH673 has been a relatively broad survey of the above themes, relative to western architecture. Beginning with a course transformation that served the goals of the 2007 DOE Solar Decathlon, I've directed the course to focus specifically on how our building cultures now are encompassing a new concern for the stewardship of the built environment. Continuing to use the Solar Decathlon as a backdrop and vehicle for learning, my intent for the course is to have a semester-long discussion, writ large, about:

-conventional wisdom of building construction/time-tested knowledge/indigenous & vernacular knowledge/passive strategies

and

-current knowledge about alternative energy technologies and active strategies/building science/new materials/"cutting edge" technologies/design, documentation, and project delivery strategies.