ARCH 4833/6226
Green Construction

Fall 2018
3 credit hour lecture
School of Architecture

WHEN & WHERE
T/Tr, 12:00 noon – 1:15 pm
Location TBD

INSTRUCTOR
Jason Brown
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OVERVIEW
Green Construction focuses on:

- Issues of sustainability in general and on the role of buildings in sustainability, and
- Strategies and technologies to improve the energy efficiency and performance of buildings, as well as to reduce the environmental impact of buildings.

Topics include:

- Global energy use and its impacts
- Sustainability
- Energy use in buildings
- Thermal sciences
- Building mechanical systems
- Life cycle analysis/life cycle costing
- Building energy modeling
- Incorporation of renewable energy production

The course emphasizes technical aspects of building design, materials selection, construction processes, and building operations. The use of objective criteria for assessing building ‘green-ness’, from meta issues such as building location and site to operational details such as the selection of building technologies and systems is stressed throughout the course. The course will provide detailed information of the use of assessment methods in design.

The course is open to graduate students in the Schools of Design and Engineering and to undergraduate students by permission of instructor. The course is part of the undergraduate certificate in sustainable architecture.

FEATURES
The course primarily features in-class discussion and lectures by the instructor, other GT faculty, and outside guest lecturers. Coursework is primarily project-based, supplemented with some shorter homework assignments. Student presentations are part of the projects and serve to advance the in-class discussions.