

Number & Title of Course:

ARC 5467 Materials and Methods of Construction (3 credits)

Course Description (limit 25 words):

Students learn material-types and conditions Architects consider in their selection and implementation. Included is an in-depth analysis of materials/methods and effect on the human senses.

Course Goals & Objectives (list):

- Students will gain expertise in the technical constraints of the materials, their properties, and application in construction.
- Students will broaden their understanding of design-related issues and on contemporary application of the material or processes discussed.
- Students will synthesize their understanding of material properties through a hands-on full-scale application of materials and systems.
- By gaining a greater understanding of materials and systems, students will not only better qualify their ideas but will also generate new and more informed concepts.
- Students will develop their ability to work in groups through the cantilever project. Three-person teams collaborate in a simulation that engages their understanding of the material covered in class in a real-time design competition.

Student Performance Criterion addressed (list number and title):Understanding:

A.1, Prof Communication;

B.2, Site Design; B.4 Technical Documentation; B.7 Building Envelope Systems;

B.8 Building Material and Assemblies; B.9 Building Service Systems;

Ability:

C.2. Integrated Evaluations and Decision Making Design Process;

C.3. Integrated Design

Topical Outline (include percentage of time in course spent in each subject area):

Class attendance/participation:	10%
Readings + Cantilever Progress Assignments:	30%
Mid Term Exam (Open Note)	30%
Final Cantilever Project	30%

Prerequisites:

Introduction to Technology

Textbooks/Learning Resources:

Building Construction Illustrated, Francis Ching

The Eyes of the Skin, Juhani Pallasmaa

(semester and year):

Spring only; Annually

Faculty assigned (list all faculty assigned during the four semesters prior to the visit):

Charles Molnar, AIA (Adjunct Professor)