CASL GREEN BUILDING:
High Performance Wall Assembly

Architecture 410/510 - 3 credits (open to students from any major; no prereq. Fulfills major elective requirements for architecture)
Architecture 406/606 - 1 credit (advanced technology option for architecture majors; prereq. ARCH 4/570 Building Construction, ARCH 4/591 Environmental Controls Systems)

Schedule: Fall 2011, Tuesdays & Thursdays, 4pm - 7pm.
Class meeting location: CASL house--1801 Moss St.
Optional Graded or P/NP

Description
In today’s push for environmentally responsible building, the ability to understand and implement a high performance wall assembly is critical to minimizing the overall energy use of buildings. This course will analyze the performance of energy saving wall systems to understand costs and benefits, as well as design and physically construct a high-performance rain-screen exterior wall assembly as part of the on-going renovation to the CASL (Center for the Advancement of Sustainable Living) house. As future designers, owners, and stewards of buildings, your visions will have a significant impact on the built environment and you will have an important role in helping builders achieve project goals. In this course you will compare what you conceive with how you build as you study, design, document and construct a wall that contributes to the transformation of a 1920's era house into a state-of-the-art demonstration project. In addition to the technical and physical knowledge gained through this process, you will also develop leadership and management skills by participating in teams, organizing activities and being responsible for a specific aspect of the project.

Expectations
Students enrolled in the three credit course will participate in 6 hours/week of work at the house with the instructor, and an additional 6 hours of independent work that will be scheduled to suit the needs of the project as it develops. All students must complete the shop safety training which is offered by the AAA studio shop at the beginning of the term. Architecture students who intend to use this course to fulfill their advanced technology elective requirement must register for an additional credit of special studies that will provide advanced study of the wall systems. In addition to completing the work assigned to all students, graduate students will conduct in-depth study on a topic that is relevant to the project. Illustrated abstracts of graduate student investigations will be posted on the CASL website.

Instructor
David R. Schmitz, AIA
Principal, engage:ARCHITECTURE
With 10 years of experience as a residential designer, architect and wood fabricator, whose local practice focuses on creative, environmentally sustainable projects, David’s goal is to encourage and empower you to be thoughtful, responsible stewards of buildings and develop your ability to understand and transform residential construction through hands-on projects.