BUILDING INFORMATION MODELING

Professor Nancy Yen-wen Cheng  
(nywc@uoregon.edu)  
+ Graduate Teaching Fellows

Wed Fri 10:00-11:50am  
Location:  
Eugene: McK 175 (first session) + McK 101  
Portland: WSB 555

DESCRIPTION
Building Information Modeling (BIM) is transforming architectural design and construction practice by combining 3D geometry with building component data. Representing the building spaces, systems, materials and costs in one integrated database allows more seamless collaboration throughout the building life-cycle. Enabling clients, designers, engineers and builders to see how building systems come together improves efficiency, reduces errors and allows control of greater complexity.

This course teaches how to use BIM for architectural design exploration, communication, and construction. It introduces essential software concepts and hands-on operations with Revit Architecture 2010. Hands-on exercises will lead students through the software interface, standard construction systems and creating parametric families.

FORMAT
Computer lab demonstrations and hands-on practical assignments in Portland and Eugene will be supplemented by discussions with AEC professionals video-conferenced between the two sites.

EVALUATION
Undergraduates: 10% class attendance and participation, 75% assignments & 15% final presentation.  
Graduates: 10% class attendance and participation, 70% assignments & 10% inspiration report & 10% final presentation.

COURSE MATERIALS
Instruction will take place on university computers. For assignments, students need to have access to their own computer loaded with Revit Architecture 2010 which only runs on Windows. The software may be downloaded from http://students.autodesk.com/ The class will rely on digital tutorials, papers and articles including the USC BIM symposium presentation summaries and the BIM Handbook by Charles Eastman et. al