ARCH 399 : REVIT FUNDAMENTALS  CRN 37301
Grading: Pass/No Pass (2 Credits)
Time: Tuesday & Thursday 8:30am - 9:50am
Eugene Location: 101A Mckenzie Hall
Eugene Campus Instructor:
Leonard Yui, AIA, LEED AP:
Email: yui@uoregon.edu

*Please, come to the first day of class if you are interested in signing up. Registration priority will be given to graduating students. This course will be offered in the summer as well.

COURSE DESCRIPTION:
One of the most notable shifts in professional practice is the wide acceptance and integration of Building Information Modeling (BIM). This class introduces a new way of thinking about deliverable documents and the collaborative framework that a parametrically virtual model is working to provide.

BIM is becoming an industry standard because of its intuitive interface and for its ability to facilitate opportunities to connect between the Architect, Consultants, and Contractor. BIM simultaneously delivers real time working drawings and high quality spatial renderings to streamline the concepts-to-working drawings process.

COURSE OBJECTIVES:
This course will utilize Autodesk Revit 2011 and provide the basic skills to create and maintain a parametric building model to use for renderings, working drawings, massing studies, and coordination of disciplines. Some of the program features that will be discussed are as follows:

- Navigation and View Management
- Maintaining Dynamic Drawings.
- Creating Building/Wall Sections & Details.
- Engaging External Resources.
- Creating Parametric “Families.”
- Maintaining Design Options.
- Maintaining Tables and Schedules.
- Maintaining Materials Library.
- Creating Conceptual Massings.
- Intro to Simultaneous Work Environments.
- Professional Annotation Applications.
- Intro to Consultant Interactions with the Model.

COURSE FORMAT:
The course will primarily utilize a “sustainable” project of your choosing to assist in the learning process and as a promotional final product for your portfolio. The research for the case study can also include the option of creating a project that contributes toward a UO professor’s research. The individual assignments will be fashioned to support the completion of your Final Case Study Project.

This course will meet twice a week with lectures, exercises, and assignments. Lectures are designed to expose you to the most useful tools for a professional setting. Selected guest speakers from prominent firms will present their use of the program. Basic working drawing knowledge is highly recommended.

SOFTWARE AND HARDWARE:
The course is held in a computer lab, which will allow you to have access to the program. However, it is also highly recommended you install Autodesk Revit 2011 (FREE for students from the Autodesk website) on to your personal computers. For MAC users please install Windows using Bootcamp (It is highly recommended not to use Parallels, VMWare and other dual operating systems due to Revit’s intensive utilizations of system resources.)
**COURSE SCHEDULE:** *(the schedule is subject to change to respond to the class need and pace)*

**Week One: Introduction, Navigation, & Basic Model Building**
- **Tuesday:** Intro to Basic Interface and Concepts, Review syllabus & course objectives, Assign Final Assignment.

**Week Two: The Basic Building Components**
- **Tuesday:** Structural Grids, Levels, Intermediate Dimensions, True North/Actual North Views, Elevations, 3D View, Camera Views, Multiple Views. *(Assignment #1 Due)*
- **Thursday:** Room Names, Basic Visibility Graphics, Overrides, Curtain Walls Windows & Doors, Stairs, Basic Printing

**Week Three: Families**
- **Tuesday:** Instance vs Type Parameters, Loading and Using Basic Families. *(Assignment #2 Due)*
- **Thursday:** Creating Basic Families

**Week Four: Families & Masses**
- **Tuesday:** Creating Parametric Families
- **Thursday:** In-Place Mass, Conceptual Masses, Groups, Group Array

**Week Five: SITE and Sections**
- **Tuesday:** Site Topography Drawings, Building Pad, Parking Layout, Trees *(Assignment #3 Due)*
- **Thursday:** Building Sections, Wall Sections, Basic Annotation.

**Week Six: Documentation**
- **Tuesday:** Detail View, Detail Tools, Detail Components. *(Assignment #4 Due)*
- **Thursday:** Sheets Legend, Sheet Organization, Title Block

**Week Seven: Documentation & Renderings**
- **Tuesday:** Scheduling, Tags, Table, Legends, Advanced Annotations. *(Assignment #5 Due)*
- **Thursday:** Renderings, Materials, Materials Library, Lighting, Walkthroughs

**Week Eight: Fine Tuning Graphics & Maintenance.**
- **Tuesday:** Importing & Exporting, Linked Files
- **Thursday:** Advanced Visibility Graphics, View Cleanup, Auditing & Purging Model, Compact Model

**Week Nine: Other Applications**
- **Tuesday:** Design Options *(Assignment #6 Due)*
- **Thursday:** Introduction to Worksets, Requesting Items, Closing Ideas about the Future of Revit and its application to Sustainability.
Week Ten: (Review Week) - No Class

Finals Week: (Final Assignment Due)
Wednesday: June 8th @ 8:30am: Review of Final Assignments. See Final Assignments for requirements. Location T.B.A.

ASSIGNMENTS & GRADING:

Pass/No Pass Grades will be determined off of the following percentages. The assignments will reflect the week’s lectures and support the completion of your final project.

- Attendance: 10%
- Assignments: 60%
- Final Project: 30%

RECOMMENDED BOOKS: