COURSE OUTLINE AND SCHEDULE

DFTG 1376 – 002-LL(68923) 
REVIT RESIDENTIAL

HOUSTON COMMUNITY COLLEGE - SOUTHEAST 
FALL 2013

INSTRUCTOR: IWAO TAKAHASHI
<table>
<thead>
<tr>
<th>WEEK NUMBER</th>
<th>LECTURE TOPICS AND ACTIVITIES (LAB, EXAM, PRESENTATION, ASSIGNMENTS) *</th>
<th>STUDENT PROJECT</th>
<th>REFERENCE CHAPTERS OF TEXTBOOK (AUTODESK REVIT ARCHITECTURE 2013 FOR ARCHITECTS &amp; DESIGNERS), OTHER MATERIALS</th>
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| 1 (Aug. 31) | **Course Introduction**  
Objective: Review the expectations and requirements of the course.  
**Overview and Scope of Revit Architecture, and Building Model – I** (Lecture and Practice)  
Objective: Identify the basic capability and function of Revit 2013.  
**Topics:**  
Conceptual Understanding of Revit 2013  
Building Information Modeling  
User Interface  
Project Settings  
Basic Elements  
Walls  
Doors  
Windows  
**The idea of Green Home** (Lecture)  
Objective: Understand the scope of Revit Residential  
**Assignment 1**  
- *Homework Exercise: Quick Start* | **Quick Start Project** | **Course Syllabus**  
Ch. 1  
Introduction to Autodesk Revit Architecture 2011  
Ch. 2  
Getting Started with Revit Architecture  
**Quick Start (Handout)** |
| 2 (Sep. 7)  | **Building Model – II** (Lecture and Lab Practice)  
Objective: Understand basic Building Elements.  
**Topics:**  
Walls  
Windows, Doors  
**Assignment 2**  
- *Chapter Tutorials (Ch.2, 3)*  
- *Homework Chapter Tutorials (Ch.4)* |  |  
Ch. 3  
Creating the First Project  
Ch. 4  
Using Basic Building Components |
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| 3 (Sep. 14) | **Building Model – III** (Lecture and Lab Practice)  
Objective: Understanding the methods of editing Elements the use of Datum.  
**Topics:**  
Selection, Move, Copy, Group  
Level, Grids  
**Assignment 3**  
- Chapter Tutorials (Ch.5, 6)  
- Homework Chapter Tutorials (Ch.6) | | Ch. 5 Using the Editing Tools.  
Ch. 6 Working with Datum and Creating Standard Views |
| 4 (Sep. 21) | **Building Model - IV** (Lecture and Lab Practice)  
Objective: Understanding Building Elements.  
**Topics:**  
Floors, Roofs, Ceilings, Rooms  
Stairs, Railings  
**Assignment 4**  
- Chapter Tutorials (Ch.7, 8)  
- Homework Chapter Tutorials (Ch.8) | | Ch. 7 Using Basic Building Components II  
Ch. 8 Using Basic Building Components III |
| 5 (Sep. 28) | **Building Model - V** (Lecture and Lab Practice)  
Objective: Understand Site Elements and Mass.  
**Topics:**  
Toposurface, Property Lines, Building Pads  
Massing, Building Elements with Mass  
**Assignment 5**  
- Chapter Tutorials (Ch.9, 10)  
- Homework Chapter Tutorials (Ch.10) | | Ch. 9 Adding Site Features  
Ch. 10 Using Massing Tools |
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| 6 (Oct. 5)  | **Construction Documents** (Lecture and Lab Practice) | Ch. 11 Adding Annotations and Dimensions  
Ch. 12 Creating Project Details and Schedules |
|             | Objective: Understanding annotations and detail drawings.  
**Topics:**  
Tags, Symbols, Dimensions  
Callout View, Regions, Details, Text, Schedules.  
**Assignment 6**  
- Chapter Tutorials (Ch.11, 12)  
- Homework Chapter Tutorials (Ch.12) |
| 7 (Oct. 12) | **Mid-Term Examination (9:00 – 10:00 AM)**  
**Presentation and Layout of Project - I** (Lecture and Lab Practice)  
Objective: Understanding Views in 2D layout and 3D Model.  
**Topics:**  
Drawing Sheets, Views  
Navigation Tools, Orient Tools  
**Assignment 7**  
- Chapter Tutorials (Ch.13, 14)  
- Homework Chapter Tutorials (Ch.14) |
|             | Ch. 13 Creating Drawing Sheets and Plotting  
Ch. 14 Creating 3D Views  
Use of Revit Structure recommended  
Use of Family Editor Required  
Use of Design Options for the alternative solution of sustainability |
| 8 (Oct. 19) | **Presentation and Layout of Project - II** (Lab Practice)  
Objective: Understanding Rendering and Walkthroughs, and advanced features.  
**Topics:**  
Renderings, Walkthroughs  
Structural Elements, Design Options, Area Analysis, Linking Models, Worksharing, Solar Studies  
**Assignment 8**  
- Chapter Tutorials (Ch.15, 16)  
- Homework Chapter Tutorials (Ch.16) |
|             | Ch. 15 Rendering Views and Creating Walkthroughs  
Ch. 16 Using Advanced Features |
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<td>9 (Oct. 26)</td>
<td><strong>Green Home Project making - I</strong> (Lab Practice)</td>
<td>Green Home Project</td>
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<td>Objective: Implement Project Design</td>
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<td><strong>Assignment 9</strong></td>
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<td>• Schematic Design (Bubble Diagram, Mass Elements, Mass Floor, Mass Floor Schedule, Exterior Rendering)</td>
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<td>10 (Nov. 2)</td>
<td><strong>Green Home Project making - II</strong> (Lab Practice)</td>
<td>Green Home Project</td>
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<td>Objective: Implement Project Design</td>
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<td><strong>Assignment 10</strong></td>
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<td>• Preliminary Design (Title Sheet, Site Plan, Floor Plans, Roof Plans, Elevations, Building Sections, Renderings)</td>
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<td>11 (Nov. 9)</td>
<td><strong>Green Home Project making - III</strong> (Lab Practice)</td>
<td>Green Home Project</td>
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<td>Objective: Implement Project Design</td>
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<td><strong>Assignment 11</strong></td>
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<td>• Construction Documents (Site Plan, Floor Plans Roof Plans, Elevations, Building Sections)</td>
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<td>12 (Nov. 16)</td>
<td><strong>Green Home Project making - IV</strong> (Lab Practice)</td>
<td>Green Home Project</td>
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<td>Objective: Implement Project Design</td>
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<td><strong>Assignment 12</strong></td>
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<td>• Construction Documents (Wall Sections and Detail Drawings, Drafting Views with CAD file Archives)</td>
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<td>13 (Nov. 23)</td>
<td><strong>Green Home Project Analysis - I</strong> (Lab Practice)</td>
<td>Green Home Project</td>
<td>Use of Autodesk 3Ds Max Design recommended</td>
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<td>Objective: Analyze Project Design</td>
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<td><strong>Assignment 13</strong></td>
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<td>• Analyze Project Design with Solar Study</td>
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<td>14 (Dec. 1)</td>
<td><strong>Green Home Project Analysis - II</strong> (Lab Practice) Objective: Analyze Project Design</td>
<td>Green Home Project</td>
<td>Use of Autodesk 3Ds Max Design recommended</td>
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<td><strong>Assignment 14</strong></td>
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<td>• Analyze Project Design with Daylight Analysis (Use Alternative Software or online tools)</td>
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<td>15 (Dec.14)</td>
<td><strong>Student Presentation</strong>**</td>
<td>Green Home Project</td>
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<td>Final Examination (9:00 – 10:00 AM)</td>
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<td>Green Home Project Submission (Due 11:00 AM)</td>
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**NOTES:**

* Students are required to complete all Assignments (Lab Practice), Examination, and Student Presentation.

** Students are required to have the approval of the contents by instructor at least by the last class of Week 13 (Nov. 23). Students are required to act formal manner including attitude and outfit.

Students who enrolled in Texas public institutions of higher education as first-time college students during the Fall 2007 term or later are subject to section 51.907 of the Texas Education Code, which states that an institution of higher education may not permit a student to drop (withdraw with a grade of “W”) from more than six courses. This six-course limit includes courses that a transfer student has previously dropped at other Texas public institutions of higher education if they fall under the law.

Students should be sure they fully understand this drop limit before they drop a course. Please visit the admissions office or counseling/advising center for additional information and assistance.

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The instructor reserves the right to modify the syllabus and course outline during the semester.