

<b>COURSE TITLE BLACKBOARD SITE</b>	ARC 4813 – Advanced Revit (Online) Fall 2009 – <a href="http://my.ltu.edu">http://my.ltu.edu</a> and select CRN 2099
<b>INSTRUCTOR</b>	Kimberly Lapinski, Associate AIA Adjunct Faculty – Lawrence Tech University Contact Information: Email: <a href="mailto:klapinski@ltu.edu">klapinski@ltu.edu</a> or <a href="mailto:lapinski_15@hotmail.com">lapinski_15@hotmail.com</a> Work Phone: 248.888.1300 Cell Phone: 586.337.3035 Office: A-142 Office Hours: By Appointment
<b>SCHEDULE</b>	LTU Fall Semester Start: August 26 <sup>th</sup> , 2009 LTU Fall Semester End: December 19 <sup>th</sup> , 2009  See <a href="http://www.ltu.edu/registrars_office/calendar_final_exam.index.asp">http://www.ltu.edu/registrars_office/calendar_final_exam.index.asp</a> for LTU academic calendar information.
<b>LEVEL/ HOURS PREREQUISITE</b>	3 Credit Hours Must have Revit Architecture experience or proof of proficiency
<b>REQUIRED TEXT</b>  (See Blackboard for additional resources)	Mastering Revit Architecture 2009 by Tatjana Dzambazoya, Greg Demchak, and Eddy Krygiel (Publisher: Wiley) (ISBN-13: 9780470295281)  Available for online purchase through LTU Bookstore at: <a href="http://lawrence-tech1.bkstore.com/bkstore/TextbookSelection.do?st=489">http://lawrence-tech1.bkstore.com/bkstore/TextbookSelection.do?st=489</a>
<b>ADDITIONAL RESOURCES</b>	LTU Online student resources: <a href="http://www.ltu.edu/ltuonline/">http://www.ltu.edu/ltuonline/</a>
<b>TECHNICAL SUPPORT</b>	Technical support for using Blackboard is provided by the Helpdesk, 248.204.2330 or <a href="mailto:helpdesk@ltu.edu">helpdesk@ltu.edu</a>

## COURSE SCHEDULE

This fully online course begins with a partial week online course orientation period to familiarize yourself with the online learning environment and to meet online or via the phone with your instructor. Each subsequent week starts on a Monday and ends on a Sunday.

This is a working course schedule meaning that it may change depending on the pace of the course and how well everyone is able to keep up with the material. It will be updated as needed throughout the semester. Details about each Module will be emailed out and posted on Blackboard prior to the start of each week so that you will have all of the information you need to complete the assigned tasks. If at any time you have questions regarding what is assigned, please do not hesitate to contact me. We will spend more time on certain subjects than others, but for the most part we will try and get through 2 chapters a week, so you want to make sure you keep up with your textbook readings.

Dates	Modules	Topics / Readings	Assignments
Prior to Semester Start and Aug 26 – Aug 30	Module 0	View Introduction Presentation Syllabus Review	Bb Discussion Board Skills Test
Week of Aug 31 – Sep 6	Module 1	Chapter 1 – Read Ch1 of the Textbook View Presentation Video  Chapter 2 – Read Ch2 of the Textbook View Presentation Video	Ch1 Assignment  Bb Discussion Board
Week of Sep 7 – Sep 13	Module 2	Chapter 3 – Read Ch3 of the Textbook View Presentation Video  Chapter 4 – Read Ch4 of the Textbook View Presentation Video  Chapter 5 – (Part 1) Read Ch5 of the Textbook	Ch3 Questions  Ch4 Exercises  Stairs and Railings Tutorial
Week of Sep 14 – Sep 20	Module 3	Chapter 5 – (Part 2)  Chapter 6 – Read Ch6 of the Textbook View Presentation Video	Titleblock Tutorial Personalized Titleblock  Roof Exercise Family (Desk) Tutorial

Dates	Modules	Topics / Readings	Assignments
Week of Sep 21 – Sep 27	Module 4	Chapter 7 – Read Ch7 of the Textbook  Chapter 8 – Read Ch8 of the Textbook View Presentation Video	Ch6/Ch7 Questions Starck Faucet Assignment Profile Families Tutorial  My First Mass Exercise
Week of Sep 28 – Oct 4	Module 5	Chapter 9 – Read Ch9 of the Textbook View Presentation Video  Chapter 10 – (Part 1) Read Ch10 of the Textbook View Presentation Video	Ch8/Ch9 Questions Massing Tutorial  Ch10 Tutorial Design Options Tutorial
Week of Oct 5 – Oct 11	Module 6	Chapter 10 – (Part 2)  Chapter 11 – Read Ch11 of the Textbook View Presentation Video	Ch10 Questions Design Options Test  Parametric Family Tutorial
Week of Oct 12 – Oct 18	Module 7	Chapter 12 – Read Ch12 of the Textbook View Presentation Video  Chapter 13 – Read Ch13 of the Textbook View Presentation Video	Curtain Systems Tutorial  Ch12/Ch13 Questions Dormer Roof Tutorial Ch13 Roof Extra Credit
Week of Oct 19 – Oct 25	Module 8	Chapter 14 – Read Ch14 of the Textbook View Presentation Video  Mid-Term Exam	Mid-Term Written Exam Mid-Term Practical Exam
Week of Oct 26 – Nov 1	Module 9	Chapter 15 – Read Ch15 of the Textbook View Presentation Video  Chapter 16 – Read Ch16 of the Textbook View Presentation Video	Area Analysis Tutorial  Rendering Tutorial Walkthrough Tutorial

Dates	Modules	Topics / Readings	Assignments
Week of Nov 2 – Nov 8	Module 10	Chapter 17 – Read Ch17 of the Textbook  Chapter 18 – (Part 1) Read Ch18 of the Textbook View Presentation Video	Ch16/Ch17 Questions Ch17 Tutorials  Sun & Shadow Assignment
Week of Nov 9 – Nov 15	Module 11	Chapter 18 – (Part 2)  Chapter 19 – Read Ch19 of the Textbook View Presentation Video	Ch16-Ch18 Questions Design Assignment  Ch18/Ch19 Questions Book Exercise
Week of Nov 16 – Nov 22	Module 12	Chapter 20 – Read Ch20 of the Textbook View Presentation Video  Chapter 21 – Read Ch21 of the Textbook	Ch20 Questions Grouping Tutorial  Details Tutorial Ch21 Questions (Extra Credit)
Week of Nov 23 – Nov 29	Module 13	Chapter 22 – Read Ch22 of the Textbook View Presentation Video  <b><i>Thanksgiving Break – Happy Thanksgiving Everyone!!!</i></b>	Callout View Tutorial
Week of Nov 30 – Dec 6	Module 14	Chapter 23 – Read Ch23 of the Textbook View Presentation Video  Chapter 24 – Read Ch23 of the Textbook View Presentation Video	Bb Discussion Board  Bb Discussion Board
Week of Dec 7 – Dec 13	Module 15	Appendix B – Read Appendix B of the Textbook	Bb Discussion Board
Week of Dec 14 – Dec 19	Module 16	Final Exam	Final Written Exam Final Practical Exam

What I've done is front-load the schedule so that as we approach the end of the semester there is less work to do giving you more time to catch up on things you may have gotten behind on. In addition, for those of you taking studio classes, I have noticed this is always a busy time because of final projects due. Hopefully the way this schedule is laid out it will allow you to keep on schedule with this class even though your other class loads may increased.

## STUDENT EVALUATION

The course has assignments as listed above in the course schedule. Additional instructions and information about each assignment will be emailed to you and posted on Blackboard prior to the start of each week. Your grades will be calculated with the percentage and point system detailed below. Letter grades are awarded based on the total number of points achieved.

Grade Computation Criteria	Point Totals
<b>Practical Exercises/Tutorials</b> Textbook & Tutorial Work @ 30%	30 Points
<b>Chapter Work</b> Papers & Questions @ 15%	15 Points
<b>Mid-Term Exam (Practical &amp; Written)</b> Revit Practical Exam @ 15% Revit Written Exam @ 5%	15 Points 5 Points
<b>Final Exam (Practical &amp; Written)</b> Revit Practical Exam @ 15% Revit Written Exam @ 5%	15 Points 5 Points
<b>Design Options Test</b> Practical Skills Test @ 5%	5 Points
<b>Participation Requirements</b> Online Participation @ 10%	10 Points
<b>Total Possible Points</b>	<b>100 Points</b>

Class Points	Letter Grade
93 and above	A
90 – 92	A-
87 – 89	B+
83 – 86	B
80 – 82	B-
77 – 79	C+
73 – 76	C
70 – 72	C-
67 – 69	D+
63 – 66	D
60 – 62	D-
59 and below	F

## EDUCATIONAL GOALS

Between lectures and labs, this course explores the more in-depth features of the Revit Architecture program and expands on the basic 3D modeling techniques as well as introducing the more advanced features of the Revit Architecture program including but not limited to custom family creation, working with design options, rendering, and sun/shadow studies. An emphasis is put on those features that will be most beneficial to the student as they enter the profession.

## **STUDENT LEARNING OBJECTIVES / OUTCOMES**

To develop an advanced understanding of BIM technologies and procedures as they relate to the practice of architecture. To provide the students with a real world application understanding of Revit Architecture that the student can continue to expand and build upon during their matriculation at Lawrence Technological University and then as they enter the profession.

## **PREREQUISITE SKILLS**

Must have Revit Architecture experience or proof of proficiency

## **INSTRUCTIONAL METHODS AND COURSE ORGANIZATION**

**Blackboard Learning Environment** – Blackboard at my.ltu.edu contains the syllabus, all assignments, narrated mini-lecture videos, written lecture notes, chapter questions, links to Web resources, and discussion forums. You will submit all assignments via Blackboard and are expected to participate in discussion topics as assigned. Please take time to familiarize yourself with the organization of the Blackboard site. You will want to check the site frequently for announcements reminding you of new resources and upcoming assignments.

**Student/Instructor Conversations** – Students can keep in touch with the instructor via e-mail, Blackboard resources such as Pronto and Wimba, telephone conference calls, IM conversations, and face-to-face meetings upon request.

**Self-Assessments** – Pre- and post- self-assessment tools will help students measure their entering skills and progress during the course.

**Required Reading** – Textbook chapters should be read according to the schedule outlined in the syllabus.

## **CLASS POLICIES AND EXPECTATIONS**

*I plan to offer you a valuable learning experience, and expect us to work together to achieve this goal. Here are some general expectations regarding this course:*

Each student has a LTU email account. If you wish to use a different email address for this course, please **change your email address in Blackboard under “Blackboard Tools”, then “Personal Information”** and send an email to me so I can store your address in my email directory.

Readings, discussion forum participation, and assignments must be completed according to the class schedule. It is important to contact the instructor as needed to discuss personal needs regarding course requirements and assignments.

It is essential that all students actively contribute to the course objectives through their experiences and working knowledge.

All assignments must be submitted on schedule, via Blackboard, and using Microsoft Office compatible software and/or the Revit Architecture 2009 software. If you need to submit an assignment via email for any reason, contact the instructor in advance.

Assignments must be completed to an adequate standard to obtain a passing grade. Requirements for each assignment will be detailed in the weekly Module instruction email as well as posted on Blackboard.

Be prepared to log into Blackboard at least once each day. Please focus your online correspondence within the appropriate Blackboard discussion forums so that your colleagues can learn from you.

At midterm and at the end of the course, you will be invited to participate in a University evaluation of this course. Your feedback is important to the University, to LTU Online, and to me as an instructor, and I encourage you to participate in the evaluation process.

It is important for you as students to know what to expect from me as your instructor:

- I will be available to you via e-mail and phone, and will promptly reply to your messages.
- I will be available to you for face-to-face appointments as requested.
- I will maintain the Blackboard web site with current materials, and will resolve any content-related problems promptly as they are reported to me.
- I will send out a weekly e-mail update to all class members to guide upcoming work and remind you of assignment due dates.
- I will return all assignments to you promptly, and will include individualized comments and suggestions with each assignment.
- I will hold our personal written or verbal communications in confidence. I will not post any of your assignments for viewing by the class without requesting your approval in advance.
- I will treat all members of the class fairly, and will do my best to accommodate individual learning styles and special needs.
- If any of these points need clarification, or when special circumstances arise that require my assistance, please contact me so that we can discuss the matter personally.

## **PRACTICAL GUIDELINES FOR CLASS LOAD EXPECTATIONS**

A three-credit course generally requires at least nine hours per week of time commitment. Here are some practical guidelines to help schedule your time commitments for this online course:

- A 14-week semester would require at least 126 hours of time commitment to successfully complete all readings, activities, assignments, and tests as described in this syllabus.
- You should reserve at least 4 hours per week to read the required textbook chapters and resources, participate in online discussions, and review presentation materials. This effort will total at least 56 hours over the course of the semester.
- You should organize your remaining time to roughly correspond with the point value of each assignment.

These guidelines may not reflect the actual amount of outside time that you – as a unique individual with your own learning style – will need to complete the course requirements. The number of hours each week will vary based on assignment due dates, so please plan ahead to insure that you schedule your academic, work, and personal time effectively.

## **ASSIGNMENT DETAILS**

General course assignment descriptions are detailed below.

Please note that you should not submit any assignments to the Blackboard “Digital Drop Box.” All assignments are submitted using the Blackboard “Assignments” or “SafeAssign” function. Some assignments are also posted to the Blackboard Discussion Forum for student comments. Please make sure when submitting assignments that you actually click the submit button and not just the save button. You will know an assignment was submitted successfully when you see a green box with a check mark appear in that assignment category.

### **Practical Exercises/Tutorials**

All chapters will be covered in a sequential order at a rate of approximately two chapters per week. The procedural requirements for completing and submitting chapter work will be stated in the weekly class assignments and lectures as well as on Blackboard. The written and verbal criteria will have to be adhered to when submitting work.

### **Chapter Work**

All chapters will be covered in a sequential order at a rate of approximately two chapters per week. The procedural requirements for completing and submitting chapter work will be stated in the weekly class assignments and lectures as well as on Blackboard. The written and verbal criteria will have to be adhered to when submitting work.

## **Tests, Exams, and Online Participation**

### **Design Options Test**

The Design Options Test will be given by the instructor to test your knowledge and understanding of this particularly important and useful Revit feature.

### **Midterm Exam**

The Midterm Exam will be part written and part practical in order to allow the student to show basic mastery of the material covered in the textbook, video lectures and tutorials.

### **Final Exam**

The Final Exam will be part written and part practical in order to allow the student to show basic mastery of the material covered in the textbook, video lectures and tutorials.

### **Participation Requirements**

Each student is expected to actively participate in online activities. Class participation is evaluated to a maximum of 10 points (10% of your total grade) based on participation in Blackboard discussion forums, responding to questions posted by the instructor, and interacting positively with other students.

### **LATE ASSIGNMENTS**

Points will be deducted for late assignments. The point values deducted vary by assignment but it's typically around 20% of the total possible points. Once an assignment is late, it's late, so whether you turn it in one day late or one month late, it will get deducted the same amount of points. The only assignments that will not be accepted late are the Extra Credit assignments. Those must be turned in on or before the due date otherwise you will not receive the Extra Credit for them.

### **ASSIGNMENT SUBMISSIONS**

I will be using the Revit Architecture "history" feature to make sure that students are submitting their own work. What this tool allows me to do is view, by student initials and number, who worked on a file and when. If it is found that a student is submitting files worked on or belonging to someone else, that student will be reported to the University and be subject to the consequences deemed appropriate.

### **SYLLABUS ADDENDA**

Please see the LTU Online "Current Students" web site <http://www.ltu.edu/ltuonline/> for comprehensive information about Lawrence Tech's academic services, library services, student services, and academic integrity standards. The content of this web site is explicitly included as syllabus requirements.

The LTU Online "Current Students" web site also includes grading rubrics used by your instructor to evaluate written assignments, discussion forum participation, and assignments. Please note that the SafeAssign anti-plagiarism product will be used for written assignments submitted for this course. Please see the instructions included on the LTU Online web site regarding the use of the SafeAssign product.