



## **ARC 5952: Construction Management, CRN 3300 – Spring 2008**

### **Prerequisites:**

Graduate Level

### **Course Description:**

This course encompasses a comprehensive study of construction management services that includes project planning, scheduling, budgeting, contract administration, and agreements. Additionally, it will include comparisons between traditional construction delivery systems and the commonly used fast tracking and phasing of construction projects.

**Course Title & Blackboard Site:** ARC5952 Construction Management, 2 credit hours  
Spring 2008 – <http://my.ltu.edu> and select CRN 3301

**Instructor:** John Harmala, AIA

**Contact Information:** [jharmala@ltu.edu](mailto:jharmala@ltu.edu)

Tel: 248-732-1027 LTU Tel: 248-204-2813, RM 142

**Class Meetings:** online, See [http://www.ltu.edu/registrars\\_office/calendar\\_final\\_exam.index.asp](http://www.ltu.edu/registrars_office/calendar_final_exam.index.asp) for LTU academic calendar information.

**Addenda:** LTU Online student resources <http://www.ltu.edu/ltuonline/currentonline.asp>  
Course-specific information is provided in the "Course Information" area

**Technical Support:** Technical support for using Blackboard is provided by the LTU Help Desk, 248-204-2330 or [vitrc@ltu.edu](mailto:vitrc@ltu.edu)

### **NAAB Criteria**

The National Architectural Accrediting Board (NAAB) is the sole agency authorized to accredit professional degree programs in architecture in the United States. The mission of the NAAB is leadership in, and the establishment of, educational quality assurance standards to enhance the value, relevance, and effectiveness of the architectural profession. For additional information regarding NAAB go to [info@naab.org](mailto:info@naab.org) The following NAAB criteria have been incorporated into this course:

**Criteria addressed in this Course:**

- Verbal and Writing Skills
- Critical Thinking Skills
- Client Role in Architecture
- Architect's Administrative Role
- Architectural Practice

**Class Objectives:**

To understand and identify the various roles of the architect as they relate to everything from project delivery systems to contract administration.

**Required Texts:**

1. Ralph Liebing, *The Construction Industry: Processes, Players and Practices*, (Upper Saddle River, NJ 07458: Prentice Hall, Inc., 2001) ISBN 0-13-863853-5.
2. *Project Management for Construction: Fundamental Concepts for Owners, Engineers, Architects and Builders*: Chris Hendrickson, Department of Civil and Environmental Engineering, Carnegie Mellon University, Pittsburgh, PA 15213 Copyright C. Hendrickson 1998

First Edition originally printed by Prentice Hall, ISBN 0-13-731266-0, 1989 with co-author Tung Au. Second Edition prepared for world wide web publication in 2000. Version 2.1 prepared Summer, 2003.

Available for free at <http://www.ce.cmu.edu/pmbook/>

**Blackboard learning environment** – Blackboard at [my.ltu.edu](http://my.ltu.edu) contains the syllabus, course schedule, all assignments, reading materials, streaming videos, narrated PowerPoint mini-lectures, links to Web resources, and discussion forums. You will submit all assignments via Blackboard, and are expected to participate regularly in discussion topics. 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. You are advised to check Blackboard on a daily basis.

**Student/Instructor Conversations** – Students keep in touch with the instructor primarily via e-mail messages and occasional telephone calls.

**Required readings** – Textbook chapters should be read according to the schedule outlined in the syllabus. Required supplemental reading will also be posted on the Blackboard site. Chapters will be discussed online.

**Assignments** – There will be three written assignment during the course. They are expected to be of a prescribed length, usually brief, and are expected to thoroughly and accurately respond to the subject. The assignments will be posted at intervals throughout the semester and a specific completion and submittal date will be noted. Correct grammar and punctuation are expected.

**Practical Guidelines for Class Load Expectations**

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

You should reserve at least 6 hours per week to read the required textbook chapters and resources, participate in online discussions, review presentation materials, and work through online quizzes. This effort will total at least 84 hours over the course of the semester. You should organize your remaining time to roughly correspond with the point value of each major 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. The following

***On-Line Learning Schedule***

<i>Sun</i>	<i>Mon</i>	<i>Tue</i>	<i>Wed</i>	<i>Thu</i>	<i>Fri</i>	<i>Sat</i>
Read Textbook Chapter						
		Take On-Line Chapter Quiz				
		Participate in Weekly Blackboard Forums				
Individual and Group Project Work – Coordinate With Colleagues						
Instructor Communication – As Needed						

graphic can be used to guide you in planning your weekly course work to remain on schedule:

**Assignment Details**

All assignments shall be created in Word and deposited in the Digital Dropbox in Blackboard by midnight of the prescribed due date.

Course requirements and evaluation criteria are detailed below. Please review these requirements carefully. See the section Academic Resources / Assessment Guidelines for information about assessment of written and oral presentations.

Details for all assignments are shown below. Please note that you should **not** submit any assignments to the Blackboard “Digital Drop Box.” All assignments are submitted using the Blackboard “Assignments” function. Some assignments are also posted to the Blackboard Discussion Forum for student comments.

## **STUDENT EVALUATION**

The course has 400 total points (left column). Letter grades are based on percentage points

<b>ASSIGNMENT</b>	<b>POINTS</b>
Assignment 1	30
Assignment 2	45
Assignment 3	75
Exam 1	50
Exam 2	50
Final Exam	75
Class Participation	75
<b>TOTAL POINTS</b>	<b>400</b>

<b><u>OVERALL GRADING SCALE:</u></b>	
<b>GRADE</b>	<b>CLASS PERCENTAGE</b>
A	95 and above
A-	90-94
B+	87-89
B	83-86
B-	80-82
C+	77-79
C	73-76
C-	70-72
E	69 and below

Note: Percentages are rounded, e.g., 94.5 → 95% (A), 94.5 → 94.0% (A-), etc.  
Grades lower than a "B" fall below the LTU graduate level standard

(Final grade lowered up to 5% for more than 3 unexcused absences.)

### **Assignments 1,2 & 3 (30, 45 & 75 points respectively)**

Specific instructions about each assignment will be detailed the course.

Organization and overall writing quality – 9 points

Assignment submitted on time – 3 points

Use of citations from legitimate industry or academic sources – 2 points

Use of acceptable citation formatting (ie. Turabian, APA, etc.) – 1 point

Overall critical thinking – 15, 30 & 60 points respectively

### **Class Participation**

Each student must participate in class activities. Evaluation is based upon responses to questions posted by the instructor and interacting positively with other students. At the discretion of the instructor, a Blackboard discussion forum might be utilized to augment the classroom experience. If so, students will be advised of the specific requirements for participation but the scoring will be as follows:

A minimum of 2 contributions per discussion thread – 5 points

Discussion contribution during entire course – 2 points

Proper grammar – 3 points

Quality content – 5 points

## **Makeup Policy**

Homework: Late homework will be marked down by one-half grade per each calendar day late (Saturday and Sunday combined will count as one day). Late homework will be dated received upon the first day the instructor see it unless submitted to Gayle Schaeff (Room A111) or Sallie Ilg (T430) and date stamped by the attending secretary;

Section Tests: Make-up tests are at the discretion and convenience of the instructor. Typically, a make-up test will only be permitted with written advanced notice.

## **Grading Policies**

Grades are posted in the “GRADES” section of the course Bb site.

For questions on grades for projects or tests, please see the instructor as soon as possible after they are returned.

If an incorrect grade is recorded in your Bb GRADES, then you must alert the instructor (preferably via email) as soon as possible. Requests for corrections or other adjustments will be accepted up to two weeks after the grade has been posted. No adjustments will be made after that time.

## **Syllabus Addenda**

Please see the LTU Online “Current Students” web site <http://www.ltu.edu/ltuonline/currentonline.asp> for comprehensive information about Lawrence Tech’s academic services, library services, student services, and academic integrity standards. The contents 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 group assignments. Please note that the SafeAssignment 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 SafeAssignment product.

## **LTU Academic Honor Code**

“Academic integrity and honesty are basic core values of Lawrence Technological University. In carrying out its academic mission, Lawrence Technological University, like all universities, depends on the honesty and integrity of its faculty, staff, and students, and for this reason every member of the Lawrence Technological University community is charged with upholding the Academic Honor Code. Actions that breach the Code erodes the trust of those who look to universities for honest evaluations of academic work arrived at through honest processes. Violations may also cause individual harm in that reports of performance made to post-graduate schools, professional societies, and employers would inaccurately represent a student’s progress. Lawrence Technological University is committed to creating an academic community that values both individual and collaborative efforts that promote learning and discovery. Such a community expects honesty and integrity in the work of all its members. The Academic Honor

Code speaks to the work of individual students within the community. It should not be construed as arguing against the important collaborations that also occur among students on campus. This document is intended to clarify the adjudication of issues regarding academic honesty and fair play for students.”

Full text of the LTU Academic Honor code can be found at:

[http://www.ltu.edu/currentstudents/honor\\_code.asp](http://www.ltu.edu/currentstudents/honor_code.asp)

Specifically, all academic submitted work must have the following statement written or typed on it: *“I have neither given nor received unauthorized aid in completing this work, nor have I presented someone else’s work as my own.”*

If a student studies with or completes a homework assignment for this class while working with another student, then:

- The student must add a line to the honor code mentioning the collaboration, and write in their name(s).
- If identical work is submitted, both will receive a zero grade.

During exams, anyone found with copies of another student’s homework or exams (from this semester or any semester) will automatically be assigned a failing grade for the exam. A failing grade will also be assigned for a quiz or test if a student is caught communicating with anyone other than instructor or teaching assistant during the quiz or test.

The student must submit their work in their own words, using quotation marks for direct quotes (referenced properly to avoid plagiarism), and list all sources used with appropriate citations. This includes quotes from the textbook when answering homework problems. Carefully read and make sure you understand and follow the rules regarding correct annotation and citing of references. Make consistent use of the Turabian citation formats, or an appropriate equivalent.

Refer to the course Blackboard site for the URL containing these rules. Refer to the LTU Academic Honor Code for a complete explanation of University consequences of plagiarism and cheating.

### **Retention of Student Work:**

As noted in the University’s undergraduate catalog, “all two and three dimensional drawings, as well as reports and other written studies submitted in satisfaction of any required or elective courses become the property of the University. When such work is kept, arrangements will be made for the student to receive suitable photographic copies as a record of his or her design work.” Exemplary examples of student work may be retained for Open House, for accreditation visits, or as examples for future classes. Only one copy of a team report need be submitted to the instructor; when a second copy is required, it is to be submitted to the ‘client’ of the project.

### **Course Schedule**

Every attempt will be made to hold to the established course schedule. However, the instructor reserves the right to modify the schedule in an effort to better serve the students. Please check the Blackboard site regularly for changes and updates.

The “TOPICS/READINGS” section of the schedule lists reading assignments, podcasts, etc. that should be completed by the student before the corresponding class. Supplemental reading assignments & podcasts will be posted on Blackboard in the Course Documents folder.

The student should advise the instructor by the end of the first week if a test date conflicts with a religious holiday or an otherwise special day, and an attempt will be made to adjust the course schedule.

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

<b>DATES</b>	<b>MODULE</b>	<b>TOPICS/READINGS</b>	<b>DESCRIPTION</b>
Week of May 12th	0	Course Orientation  Supplemental @ Bb: "The Industry That Time Forgot" by Barry LePatner	Course orientation Instructor conversation
Week of May 19th	1	Chapter 1: Pages 1-27 The Construction Industry at Large  Supplemental reading @ Bb: "The Digital Age of Architects: Information Master Builders?"  <b>Submit introduction paragraph</b>  <b>Assignment #1 Release – Due date to be determined</b>	History, changing roles and future  Architect as master builder
Week of May 26th	2	Chapter 1: Pages 35-41. Liebing  Chapter 1: Hendrickson (online)	Workforce and construction effectiveness Selecting partners
Week of June 2nd	3	Chapter 1: Pages 41-66 The Construction Industry at Large  Supplemental reading @ Bb  <b>EXAM 1</b>	Alternative delivery systems – Design/Bid/Build  Construction Management (CM) alternatives – Delivery Systems
Week of June 9th	4	Tbd  <b>Assignment #2 Release – Due date to be determined</b>	Construction Management (CM) alternatives  Guest Interview with Walbridge Aldinger
Week of June 16th	5	tbd	tbd
Week of June 23rd	6	tbd	tbd

Week of June 30th	7	Tbd <b>Assignment #2 Release – Due date to be determined</b>	tbd
Week of July 7th	<b>8</b>	<b>tbd</b>	tbd
Week of July 14th	9	<b>tbd</b>	tbd
Week of July 21th	10	<b>FINAL EXAM</b>	Construction phase & job site safety
July 23rd		<b>LAST DAY OF CLASS</b>	