

COURSE TITLE BLACKBOARD SITE	ARC 5952, Construction Management Fall 2012 – http://my.ltu.edu and select CRN 1750
INSTRUCTOR	John Harmala, AIA Email: jharmala@ltu.edu Mobile Tel: 248-701-3716 Office hours by appointment
SCHEDULE	August 29 – December 21, 2012 Refer to http://www.ltu.edu/registrars_office/calendar_final_exam.index.asp for the last date to withdraw and other important registration related information.
LEVEL/HOURS PREREQUISITE	<ul style="list-style-type: none"> • Graduate or Undergraduate Degree / 2 credit hours • Admission / prerequisite requirements
REQUIRED TEXT (See Blackboard for additional resources)	<p>Project Management for Construction</p> <p>Fundamental Concepts for Owners, Engineers, Architects and Builders</p> <p>by Chris Hendrickson, Department of Civil and Environmental Engineering, Carnegie Mellon University, Pittsburgh, PA 15213 Copyright C. Hendrickson 1998</p> <p>First Edition originally printed by Prentice Hall, ISBN 0-13-731266-0, 1989 with co-author Tung Au.</p> <p>Second Edition prepared for world wide web publication in 2000.</p> <p>Version 2.2 prepared Summer, 2008.</p> <p>Available FREE online:</p> <p>http://pmbook.ce.cmu.edu/</p>
ADDITIONAL RESOURCES	LTU Online student resources: http://www.ltu.edu/ltuonline/
TECHNICAL SUPPORT	Technical support for using Blackboard is provided by the Helpdesk, 248.204.2330 or helpdesk@ltu.edu . Send the Help Desk a form detailing any issues by clicking here http://tinyurl.com/3yqrvne .

COURSE SCHEDULE FOR TRADITIONAL SEMESTER COURSES

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.

Dates	Modules	Topics / Readings	Assignments Due
Prior to Semester Start and Aug 29 – Sep 2	Module 0	Overview of textbook Online Learning Orientation Course Orientation and group formation	Course orientation Instructor conversation Individual pre-assessment Term Project Discussed
Week of Sep 3 – Sep 9	Module 1 (note: more than one module may be scheduled in a week)	The Project Team Responsibilities Required Reading: Hendrickson Chapters 3 & 4	
Week of Sep 10 – Sep 16	Module 2	Construction Project Delivery Methods Required Reading posted @ Blackboard site: Understanding Project Delivery for the Design and Construction of Public Buildings by AIA MN Comparing Construction Management Programs: CM AT-Risk and Agency CM by the Construction Control Corporation Watch video on The Bridging Method at: http://www.bridgingmethod.com/?sec=1	Exercise 1 - Project Delivery Method Exercise Discussed
Week of Sep 17 – Sep 23	Module 3	Construction Bidding & Proposals Required Reading: Hendrickson Chapters 8 Required Reading posted @ Blackboard site: Sample CM Contract for University of Cincinnati Required Reading posted @ Blackboard site:	Exercise 2 - RFP Assignment Discussed
Week of Sep 24 – Sep 30	Module 4	Construction Project Planning Required Reading: Hendrickson Chapters 9&10 Required Reading posted @ Blackboard site: AGC 580: Construction Project Planning and	Term Project – Phase 1 Due & Presented to Class

Dates	Modules	Topics / Readings	Assignments Due
		<p>Scheduling Guidelines</p> <p>Required Construction Planning Podcast to Watch:</p> <p>http://www.youtube.com/watch?v=RRhbzfY2aRw&feature=related</p>	
Week of Oct 1 – Oct 7	Module 5	<p>Construction Planning Continued, Fundamental Scheduling Techniques</p> <p>Required Reading: Hendrickson Chapters 9 & 10</p> <p>Required Reading posted @ Blackboard site: TBD</p>	Exercise 3 – CPM Scheduling
Week of Oct 8 – Oct 14	Module 6	<p>Estimating, Cost Controls & Project Accounting</p> <p>Required Reading: Hendrickson Chapters 12</p> <p>Required Reading posted @ Blackboard site: TBD</p>	Exercise 4 – GMP Exercise
Week of Oct 15 – Oct 21	Module 7	<p>Project Resource Planning – Material & Personnel</p> <p>Required Reading posted @ Blackboard site: TBD</p>	
Week of Oct 22 – Oct 28	Module 8	<p>Project Controls</p> <p>Required Reading posted @ Blackboard site: TBD</p>	
Week of Oct 29 – Nov 4	Module 9	Mid-Semester Test / Case Study Exercise	Test/Case Study Exercise
Week of Nov 5 – Nov 11	Module 10	<p>Construction Project Execution</p> <p>Reading posted @ Blackboard site: TBD</p>	
Week of Nov 12 – Nov 18	Module 11	<p>Lean Construction, Quality Control & Commissioning</p> <p>Term Project Progress Discussion/Presentation Presentations</p>	

Dates	Modules	Topics / Readings	Assignments Due
		Required Reading posted @ Blackboard site: TBD	
Week of Nov 19 – Nov 25	Module 12	Open Forum – Possible Guest Lecturer Light Week – Thanksgiving Break	
Week of Nov 26 – Dec 2	Module 13	Construction Site Safety Required Reading: Hendrickson Chapters 13 Required Podcast @ Blackboard site: OSHA Safety Video	Exercise 5 – Safety Discussed
Week of Dec 3 – Dec 9	Module 14	Quality Project Learning Lessons Hendrickson Chapter 14	
Week of Dec 10 – Dec 16	Module 15	Term Project Presentations	Term Project Due December 12th
Week of Dec 17 – Dec 21	Final Exams	Course Summary End of Course	

STUDENT EVALUATION

The course has **nn** assignments totaling **nn** points. Letter grades are awarded based on the total number of points achieved. Points are deducted for late assignments.

EXAMPLES:

Assignments	Points
Assignments/Exercises	20
Term Project	20
Mid-Term Test/Case Study	20
Final Exam	20
Online Participation	20
Total Points	100

Class Points	Letter Grade
96 and above	A
90 – 95	A-
87 – 89	B+
83 – 86	B
80 – 82	B-

77 – 79	C+
73 – 76	C
70 – 72	C-
61 – 70	D (Undergrad Only)
60 and below	E

Note: Grades lower than a "B" fall below the LTU graduate standard

ASSIGNMENT DETAILS

Course assignments 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.

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.

Assignments/Exercises (20 Points) & Term Project (20 points)

Overview – The details of the individual assignments and overall term project will be delivered through the course Blackboard site. Typically, assignments will be announced on the first Tuesday of the appropriate module.

Deliverables and Evaluation – All assignments and the term project will be submitted to the instructor by email unless otherwise directed. In some instances, such as the term project presentations, work will also be submitted to the course discussion board. The specific requirements will be posted on the Blackboard course site.

Criteria for evaluating student work includes:

- Organization and overall writing quality
- Assignment submitted on time
- Your critique
- Use of either a "lessons learned" or "best practices" approach
- Overall critical thinking and writing quality
- Use of citations from trade or academic journals
- Use of APA or other approved citation formatting

Online Participation (20 points)

Each student is expected to actively participate in online activities. Class participation is evaluated to a maximum of 20 points based actively participating in Blackboard discussion forums, responding to questions posted by the instructor, and interacting positively with other students.

Specific requirements for the module discussion boards will be posted on the course site. However, everyone is required to **minimally** post at least two constructive posts to each discussion question or topic posted by the instructor. This includes a response to the question and a thoughtful post regarding content posted by other students.

In some instances, students might be required to post topics based on the current module. In this case, additional requirements will be posted.

Posting will only be graded during the current module. Access to previous weeks will be available for reference only.

Mid-Term Test (20 Points) & Final Exam (20 points)

The final exam will be posted at the end of the semester. It will test topics covered throughout the semester. Questions will include everything will be in multiple formats such as short essay or multiple choice. The test will be administered through the Blackboard sites and more details will be provided near the end of the semester.

EDUCATIONAL GOALS

This course encompasses an overview 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.

STUDENT LEARNING OBJECTIVES / OUTCOMES

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

PREREQUISITE SKILLS

- Verbal and Writing Skills
- Critical Thinking Skills
- Basic Understanding of Architect's Traditional Administrative Role

INSTRUCTIONAL METHODS AND COURSE ORGANIZATION

This course will use critical thinking exercises, online discussions to gain an overview of construction management. Weekly reading assignments and tasks will be used to present new ideas. Meanwhile, each student will develop a case study project which will require traditional research and dialogue with the construction industry.

Blackboard Learning Environment – Blackboard at my.ltu.edu contains the syllabus, all assignments, reading materials, streaming videos, narrated PowerPoint mini-lectures, podcasts, written lecture notes, chapter quizzes, 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.

Student/Instructor Conversations – Students keep in touch with the instructor via e-mail messages, telephone conference calls, and IM conversations.

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. Chapters will be discussed online.

Assignments – There will be three exercises based on weekly module topic. Typically, each assignment will be due during the following week. All assignments will be submitted by email to the instructor unless otherwise indicated.

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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.

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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. Chapters will be discussed online.

Publisher Web Site – A publisher web site at <http://www.nnn.com/nnn> includes instructional materials, PowerPoint slides, case studies, application exercises, and practice quizzes. You should make use of as many of these resources as you need to be successful.

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 written 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. If you need to submit an assignment via email, contact the instructor in advance.

Assignments must be completed to an adequate standard to obtain a passing grade. Requirements for each assignment are detailed in this syllabus.

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.

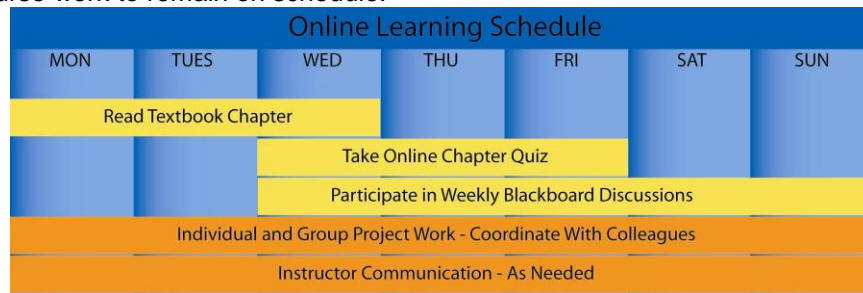
- I will return all assignments to you promptly, and will include individualized comments and suggestions with each assignment.
- I will hold our personal written or verbal communications in confidence. I will not post any of your assignments for viewing by the class without requesting your approval 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 (the Summer semester is compressed into 10 weeks) would require at least 126 hours of time commitment to successfully complete all readings, activities, assignments, and texts as described in this syllabus.
- 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. This means that you should plan to spend at least:
 - 8-9 hours preparing your case study review;
 - 24-40 hours working with your group on the three parts of your semester-long project;
 - 8-9 hours working on the various components of your reflective consolidation (final exam).

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



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 in these 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 SafeAssign anti-plagiarism product will be used for written assignments submitted for this course. Please see the instructions included on the [eHelp web site](#) regarding the use of the SafeAssign product.

Undergraduates: Leadership Transcripts

The leadership transcript enables students to track co-curricular activities that are undertaken above and beyond the requirements of the LTU curriculum. The leadership transcript serves students by enhancing the leadership portfolio; providing the opportunity for a transcript of distinction; enhancing their resumes; and assisting in articulating leadership experience. It can be accessed by logging on to Banner Web and clicking the Student and Financial Aid tab. Leadership Activities is located at the bottom of the list. More information is available at <http://www.ltu.edu/leadership>.