



COURSE TITLE	ARC 5952 Construction Management	
BLACKBOARD SITE		
INSTRUCTOR	John Harmala, AIA	
	Email: <u>jharmala@ltu.edu</u>	
	Mobile Tel: To be provided	
	Office hours by appointment	
SCHEDULE	August 31 – December 22, 2011	
	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	Graduate or Undergraduate Degree / 2 credit hours	
PREREQUISITE	 Admission / prerequisite requirements 	
REQUIRED TEXT	Project Management for Construction	
(See Blackboard for	Fundamental Concepts for Owners, Engineers, Architects and Builders	
additional resources)		
	by 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.	
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	Second Edition prepared for world wide web publication in 2000.	
	Second Edition prepared for world wide web publication in 2000.	
	Maria 2.2 maria 1.6 maria 2000	
	Version 2.2 prepared Summer, 2008.	
	Available FREE online:	
	http://pmhaak.aa.emu.adu/	
	http://pmbook.ce.cmu.edu/	
ADDITIONAL	LTU Online student resources: http://www.ltu.edu/ltuonline/	
RESOURCES	LTO Online student resources. <u>http://www.nu.edu/nuonline/</u>	
TECHNICAL SUPPORT	Technical support for using Blackboard is provided by the Helpdesk,	
	248.204.2330 or <u>helpdesk@ltu.edu</u> . 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 31 – Sep 4	Module 0		
Week of Sep 5 – Sep 11	Module 1 (note: more than one module may be scheduled in a week)	Overview of textbook Online Learning Orientation Course Orientation Supplemental Reading posted @ Blackboard site: "The Industry That Time Forgot" by Barry LePatner	
Week of Sep 12 – Sep 18	Module 2	Construction Project Delivery Methods Required Reading posted @ Blackboard site:	First Assignment DIscussed
		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	
Week of Sep 19 – Sep 25	Module 3	Construction Project Delivery Methods – Integrated Project Delivery	
000 20		Required Reading posted @ Blackboard site:	
		Integrated Project Delivery: A Guide by AIA California	
Week of Sep 26 – Oct 2	Module 4	The Project Team Responsibilities Required Reading: Hendrickson Chapters 3 & 4	Assignment 1 Due Tuesday, September 27 th
Week of Oct 3 – Oct 9	Module 5	Presentations & Discussion of Assignment 1 Construction Cost Estimating Basics, Value Engineering & Project Financial Assessments Required Reading: Hendrickson Chapter 5	Assignment 2 Discussed





Dates	Modules	Topics / Readings	Assignments Due
		Required Reading posted @ Blackboard site:	
		Value Engineering by Consulting Engineers of Yukon	
Week of Oct 10 – Oct 16	Module 6	Construction Pricing, Bidding & Contracts	
		Required Reading: Hendrickson Chapters 8	
		Required Reading posted @ Blackboard site:	
		Sample CM Contract for University of Cincinnati	A
Week of Oct 17 – Oct 23	Module 7	Construction Project Planning Required Reading: Hendrickson Chapters 9&10	Assignment 2 Due Tuesday, October 18 th
		Required Reading posted @ Blackboard site:	Assignment 3
		AGC 580: Construction Project Planning and Scheduling Guidelines	Discussed
		Required Construction Planning Podcast to Watch:	
		http://www.youtube.com/watch?v=RRhbzfY2aRw&feature=related	
Week of Oct 24 – Oct 30	Module 8	Construction Planning Continued, Fundamental Scheduling Techniques	
		Required Reading: Hendrickson Chapters 9 & 10	
		Required Reading posted @ Blackboard site:	
		TBD	
Week of Oct 31 – Nov 6	Module 9	Cost Controls, Project Accounting & Managing Risks (OAC)	
		Required Reading: Hendrickson Chapters 12	
		Required Reading posted @ Blackboard site:	
		TBD	
Week of Nov 7 – Nov 13	Module 10	Lean Construction, Quality Control & Commissioning	
		Term Project Progress	





Dates	Modules	Topics / Readings	Assignments Due
		Discussion/Presentation Presentations	
		Required Reading posted @ Blackboard site:	
		TBD	
Week of	Module 11	Risk Analysis & Assessment	
Nov 14 – Nov 20		Required Reading posted @ Blackboard site:	
		TBD	
Week of Nov 21 –	Module 12	Risk Analysis & Assessment	
Nov 27		Required Reading posted @ Blackboard site:	
		TBD	
Week of Nov 28 –	Module 13	Light Week – Thanksgiving Break	Assignment 3 Due Tuesday, November
Dec 4			29th
		Possible Site Visit / Guest Lecturer	
Week of Dec 5 –	Module 14	Project Safety	
Dec 3 – Dec 11		Required Reading:	
		Hendrickson Chapters 13	
		Required Podcast @ Blackboard site:	
		OSHA Safety Video	
Week of	Module 15	Quality Project Learning Lessons	Term Assignment
Dec 12 –			Due Tuesday,
Dec 18		Hendrickson Chapter 14	December 13th
		Term Project Presentations	
Week of	Final Exams	Course Summary	Final
Dec 19 – Dec 22		End of Course	Exam/Assignment Due Tuesday,
			December 20th

STUDENT EVALUATION

The course has **100** points. Letter grades are awarded based on the total number of points achieved. Points are deducted for late assignments.





EXAMPLES:

Assignments	Points
Assignments	15
Term Project	35
Final Exam	30
Participation	20
Total Points	100

Class Points	Letter Grade
96 and above	А
90 – 95	A-
87 – 89	B+
83 – 86	В
80 – 82	В-
77 – 79	C+
73 – 76	С
70 – 72	C-
61 – 70	D (Undergrad Only)
60 and below	E

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

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.

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 to store your email address in my 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 may 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 strongly encourage your participation 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.





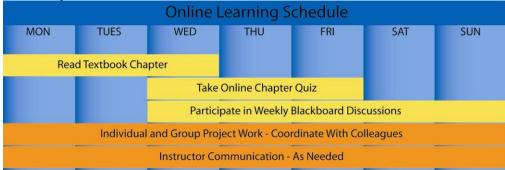
- I will treat all members of the class fairly, and will do my best to accommodate individual learning styles and special needs.
- If any of these points need clarification, or should special circumstances arise that require my assistance, please contact me so that we may discuss and resolve the matter.

PRACTICAL GUIDELINES FOR CLASS LOAD EXPECTATIONS

A three-credit course generally requires <u>at least</u> 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 <u>at least</u>:
 - 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 may be used to guide you in planning your weekly course work to remain on schedule:



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.

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" or "SafeAssign" function. Some assignments are also posted to the Blackboard Discussion Forum for student comments.





SYLLABUS ADDENDA

Please see the LTU Online "Current Students" web site <u>http://www.ltu.edu/ltuonline/</u> 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 <u>eHelp web site</u> 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.