CMgt 4000: The Construction Industry Through Time and Tomorrow Fall 2016 (2 credits)

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Introduction to the Course

Course Description

This course centers on the construction industry in all its facets. The intention is to ensure that students taking it are provided with an in-depth understanding of how the industry evolved from early times to the present day and where the industry may be heading in the future. Equipped with this knowledge, graduates will be in a better position to understand their role in whichever sector of the industry they choose to build their careers, and to contribute to positive change and improvement in how the industry serves its clients.

It should be emphasized that this course is neither a history of architectural or engineering

design, nor of construction technology, but concentrates rather on industry structure, organization and the way it delivers its products, though both the history of architecture and that of construction technology is the fabric within which the history of the industry is wrapped.

This course is organized around two primary themes:

- 1. Historical evolution: how today's industry was formed, starting in ancient times and continuing through:
 - Classical Times (2548 BC 200 AD)
 - The Medieval Period (1100 1350)
 - The Renaissance (1350 1730)
 - The Industrial Revolution (1750 1850)
 - The Global Industrial Consolidation (1850 1900)
 - The 20th Century Through the 1950's
 - The 1960's to Present (1900 2014)

While a chronological order will be followed, this will be overlaid in each period with specific industry topics, such as key players, legal framework, project management, quality control, training, time & cost control, regulation, etc.

Concentration will be placed on the European roots of our industry and on developments in North America. One session will focus on how a selected country's construction industries have developed in different directions, and what can be learned.

2. Future trends and directions: arriving at the end of the story, today's industry will be re-examined by summarizing what has been learned, addressing current trends, speculating on future longer-term directions.

Educational Purpose

This course serves as an elective in the BAS Construction and Facility Management major. It can also be used as an elective undergraduate/ graduate course, or may be taken "just for the fun of it" as a non-credit course*.

*If you are a non-degree seeking student, please contact your instructor and notify them that you will not be receiving academic credit for the course.

Course Requirements

A working knowledge of European and American history will be a distinct advantage, as that provides an important contextual background to events we will discuss.

Class participation is expected during online course discussions, and being an active participant in group activities. Attendance at either the Learning Life presentation on the Crystal Palace the

evening of November 7th, or the AIA-MN Convention track presentation by the Construction History Society of America on November 8th, though both optional, is encouraged, and likely requires a small admission fee.

Course Materials

Required Materials

Textbooks

There is no single text that covers the full breadth of this course. A listing of core reading texts will be handed out as the course proceeds and will be supplemented with optional background reading. Material relevant to the course subject texts will be posted on our Moodle site.

As noted, a grasp of world history is essential for a proper understanding of context. It is required therefore that all students purchase:

• Kinder, H. & Hilgemann, W. (2004). *Penguin Atlas of World History (Vols. I + II)*. New York: Penguin. Compact and easy to follow.

Digital Coursepack

The Digital Coursepack aggregates all course materials: textbook, library resources, recorded lectures, weblinks, even pay-per-use items. This is the result of a collaboration between CCE and Wilson Reserves to leverage library resources, abide by copyright clearance requirements, and leverage creative commons resources.

Library Resources

Search discipline-specific resources, access your library account, or chat with a librarian directly from this Moodle block.

Webcam / Microphone - Headset

Prepare to collaborate online in video by ensuring you have a functional webcam designed for video calls and a headset-microphone to assure good audio quality.

Recommended Materials

Recommended, but optional materials for further reading or viewing to enhance your

understanding of each time period are listed in the Recommended Resource section of each module Overview page.

To order course materials that are available through the University of Minnesota Bookstores, go to the Search page at the University of Minnesota Bookstores Web site, and use the option to "Search for Books by Department, Course, or Author."

Or you may call 612-625-6000 or 1-800-442-8636 and ask for ODL book service.

Technical Requirements

Browsers

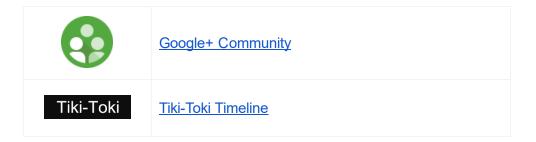
To ensure that all features of this course site work properly, use the recommended browsers and configure them properly (to allow pop-ups, for example).

- For best results, Moodle recommends using the <u>Mozilla Firefox</u> browser.
- This course also incorporates Google applications which work best using the <u>Google</u> <u>Chrome</u> browser. It is helpful to install more than one browser on your computer.

Course Technologies

This course uses the following technologies:

flipgrid.	<u>Flipgrid</u>
1	Google+ Hangout
	Google Drive (docs, slides, forms, drawings, etc)



Student Help



Student Help

Access the many support resources made available to you by the university.

Learning Outcomes

Course-level Outcomes

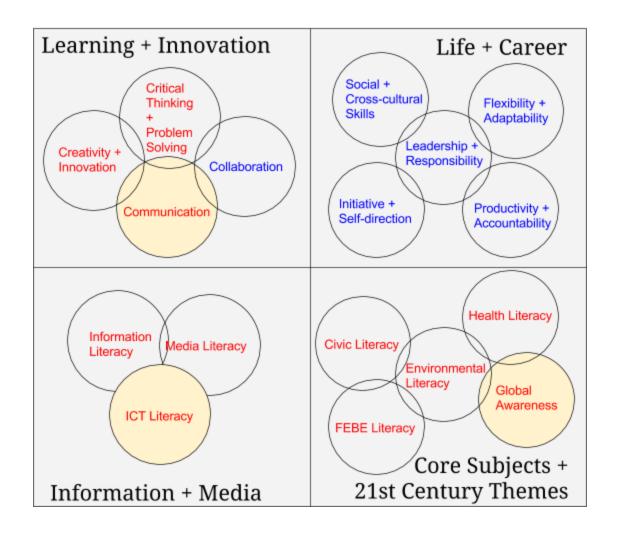
This course supports the following course level outcomes and its identified assessments:

	Course-level Outcomes (CO)	Assessment Measure	PLC	21
1.	Analyze how the construction industry is currently organized and identify the industry's unique characteristics informed by its history.	Tiki-Toki Timeline Video Trailers	1.3; 1.5	B3: ICT Literacy C1: Global Awareness
2.	Examine how the industry evolved from early times to the present day.	Video Trailers	5.2	A3: Communication
3	Within a historical context, predict	Tiki-Toki Timeline	5.2	C1: Global Awareness

	where the industry may be heading in the future.			
4	Reflect on the historical narrative presented and its impact on present day industry organizations.	Forum Posts	1.3	A3: Communication

21st Century Skills

This course focuses on the 21st Century Learning and Development skills highlighted in yellow. Students have the opportunity to earn badges to certify their acquisition of these skills.



Writing Enriched Curriculum

We surveyed our industry constituents and determined their views on writing within the profession, who responded that the following forms of writing, in order of importance and frequency, were most important with the industry:

- Correspondence: letters, memoranda, emails, etc. (98%)
- Proposals, presentations, or feasibility studies (92%)
- Reports: observation, recordkeeping, or minutes (82%)
- Budgets or cost delivery (71%)
- Interpretations of sketches, graphics, or technical drawings (49%)
- Technical documents: specifications, lab reports (16%)
- Procedures or manuals (16%)
- Schedules, written or graphic (16%)
- Industry-standard contract documents and forms (CO, COR, PR, RFI) (16%).

The Construction Management Program is grounded in and informed by industry expectations and recognizes that students are best served when instruction focuses on developing these particular forms of writing. CMgt therefore participates in the University of Minnesota's Writing Enriched Curriculum (WEC) program, the purpose of which is to promote discipline-specific writing instruction, both within each individual CMgt course and across the entire CMgt curriculum. CMgt students will focus primarily on those forms of writing crucial to success in the construction management field.

Writing Abilities, Assessment Qualities, and Genre

The program's <u>writing plan</u> identifies six competencies that each student in the Construction Management program will develop by graduation. The table below maps the writing abilities students develop alongside how these abilities are assessed and what genre (form of writing) typically represents this ability:

Ability	Assessment Qualities	Genre Used
Communicate clearly: Articulate problems, proposals, procedures, and policies using concrete, unambiguous language.	 Correct grammar and punctuation Accurately presented Clear, concise, correct 	 Correspondence Proposals Directives, instructions Estimates, schedules Specifications

Use evidence: Habitually maintain and comprehensively recall, recite, and apply documents, records, notes, data, and independent research in support of critical thinking.	 Maintain notes Data and research adequately cited Data and research applied to analyze and solve problems Arguments supported by logic 	 Field and observation reports Specifications Proposals Negotiations Meeting minutes Research papers "White" Papers
Communicate about problems and conflicts: Objectively analyze, recite, assess, evaluate, interpret, and communicate issues, problems, conflicts and their solutions.	 Stakeholder perspectives presented, compared and contrasted Clear and bias-free restatement of problems 	 Correspondence Change management Schedules Lab reports Feasibility studies Essays Activity Reports Daily production logs
Understand and address stakeholder concerns: Inspire confidence using language, tone, authentic voice, and technical detail appropriate to the stakeholder perspective and ability to comprehend.	 Audience is consistently addressed in a clear way Appropriate tone is used Anticipate audience objections Portrayed in writer's own voice 	 Presentations Proposals Policies and Procedures Change Management and negotiation Feasibility studies Meetings Articles Blogs and Columns
Correctly use industry-standard documents: Read, create, modify, and interpret drawings, forms, and other industry-standard documents.	 Correct application and timing of documents Correct description and application and citation of drawings 	 Contracts Construction drawings and specs Shop drawings, survey notes Change management Punchlists Activity Reports
Interpret technical material: Demonstrate mastery and proper application of technical terminology, tools, jargon, and software.	 Integrate properly captioned graphic and written content Effective use of trade software to communicate message 	 All forms of written communication and drawing MS Excel, Word, Project, AutoCAD Survey, lab reports

About Oral Aspects of this Class

Oral communication skills are a huge aspect of professional success. The introductory forum and the online forums, all on the FlipGrid application, represent the oral communication elements of this class. Of course, your workplace presents the ultimate environment for practicing your communication skills.

Presentations

None required in this course, other than the somewhat unusual posts on the Tiki-Toki Timeline application, essentially your "presentation" of an idea or event in history.

Course Schedule

Modules run from Monday through Sunday. All assignments are due by 11:55 p.m. Sunday at the end of the week in which they are assigned. For more information, see Assignments and Grading.

Module / Week	Topic	Learning Activities and Course-level Learning Outcomes (LO)	
First Day	Getting Started	Update Your Moodle Profile Introduce yourself using Flipgrid	
1	Classical Times (2548 BC - 200 AD)	• Forum 1	
2	The Medieval Period (1100 AD - 1350 AD)	 Forum 2 Video Trailer 2 Database Tiki-Toki Timeline Topic Choice 	
3	The Renaissance (1350 AD – 1730 AD)	 Forum 3 Video Trailer 3 Database Attend Construction History Society of America (CHSA) track at the AIA-MN 	

		Convention, or the Learning Life session on the Crystal Palace • Provide Course Feedback
4	The Industrial Revolution (1750 AD – 1850 AD)	Forum 4Video Trailer 4 Database
5	Global Industrial Consolidation (1850 AD – 1900 AD)	Forum 5Video Trailer 5 Database
6	The 20th Century Through the 1950s	Forum 6Video Trailer 6 Database
7	The 1960s to the Present and Tomorrow	 Final Tiki-Toki Timeline Entries Due Tiki-Toki Peer Response Reflection Online Course Evaluation

Assignment Guidelines

Assignment guidelines are in the <u>Assignment Summary</u> document in the Essential Information section of your Moodle site.

Grading

Grading Table

The following table summarizes the requirements and grading of the assignments in this course. The specific instructions for each activity are included in the appropriate forum, assignment, or quiz.

Learning Activity	Individual/Grou p	Assessment	Points	% of Grade
Forum Posts	Individual	6 Forum posts and peer responses (2 posts via Flipgrid)	6 @ 50 pts/ea 300 pts total	30
Video "Trailer" Database Posts	Individual	5 Trailers via Moodle Database	5 @ 60 pts/ea 300 pts total	30
Tiki-Toki Timeline Project	Individual / Group	Topic Choice Asst. Tiki-Toki Timeline Peer Forum	Choice Asst @ 50 pts Timeline @ 175 pts Peer Response Forum @ 175 pts 400 pts total	40
Total			100	100%

Late Submissions

Late work will only be accepted with prior approval from the instructor.

Make-up Work for Legitimate Absences

You are responsible for informing your instructor as soon as possible of missed classes for <u>legitimate reasons</u> and provide documentation of the reason for absence. Reasonable and timely accommodations will be arranged.

Withdrawals

Week 10 is the last week to withdraw without your college's approval. For details check the <u>Cancel/add & refund deadlines</u> page.

Incompletes

An "Incomplete" requires prior approval from the instructor for extraordinary circumstances. Contact your instructor if you need to arrange an incomplete.

Grade Distribution

For more information on UMN Grade Distribution, please see Grades and Grade Basis.

Grade Distribution

Percentage Achieved	Course Grade	Definition of Grades and Workload Expectations
93-100	А	achievement that is outstanding relative to the level necessary to meet course requirements.
90-92	A-	
87-89	B+	
83-86	В	achievement that is significantly above the level necessary to meet course requirements.
80-82	B-	
77-79	C+	
73-76	С	achievement that meets the course requirements in every respect.
70-72	C-	
67-69	D+	
60-66	D	achievement that is worthy of credit even though it fails to meet fully the course requirements.
0-59	F	Represents failure (or no credit) and signifies that the work was either (1) completed but at a level of achievement that is not worthy of credit or (2) was not completed and there was no agreement between the instructor and the student that the student would be awarded an 'I' (see also I). Academic dishonesty: academic dishonesty in any portion of the academic work for a course shall be grounds for awarding a grade of F or N for the entire course.
	S	achievement that is satisfactory, which is equivalent to a C- or better (achievement required for an S
	I	Assigned at the discretion of the instructor when, due to

extraordinary circumstances, e.g., hospitalization, a student is prevented from completing the work of the course on time. Requires a written agreement between instructor and student.
http://policy.umn.edu/Policies/Education/Education/GRADINGTRA NSCRIPTS.html

For more information on UMN Grade Distribution, please see Grades and Grade Basis.

Expected Student Academic Work per Credit

UMN defines one undergraduate credit as equivalent to 42-45 hours of learning effort distributed across a semester (including all classroom and outside activities).

UMN defines one graduate credit as exceeding 45 hours of learning effort distributed across a semester (including all classroom and outside activities).

Please review the <u>UMN Policy on Expected Student Academic Work per Credit.</u>

Students Rights and Responsibilities

Student Rights

Students can expect:

- the instructor will return email and phone communications within 2 days unless otherwise announced in the course
- discussion participation will be responded to/graded within 3 days of the due date
- assignments will be graded within 4 days of the due date

Student Responsibilities

Students are responsible for:

- reviewing any assigned learning resources as stated in the weekly Module Overviews
- reading all discussion postings in the weekly modules as assigned
- posting weekly discussion postings as assigned
- assuring that their computer is compatible and working to engage effectively in this online course
- uploading assignments before or on the assigned due date/time

Academic Resources, Policies, and Accommodations

Academic Resources

Academic Policies

Academic Accommodations

Syllabus subject to change

This syllabus may change as needed to support the student learning outcomes for this course.

