

CM 3110 – Residential & Light Construction Methods
College of Architecture & Construction
Management Term: Spring 2020



Prerequisite: CM 2000 (If you have not taken, you will not be allowed to take CM 3110)

Class Meeting time: M & W 3:30 PM -4:45 pm

Course Website: <http://d2l.kennesaw.edu>

Class Location: Design 1 -103

Class instruction methodology: 2-1-3 100% in classroom and Lecture discussion

Instructor: Michael Collins

Office Hours: TBA

Course Communications:

Preferred method of contact: D2L email only or during office hours

Required Text/ISBN Number:

Building Construction: Principles, Materials, Systems; Mehta, Scarborough, Armpriest (3rd Edition); ISBN-13: 978-0-13-445417-7

COURSE SYLLABUS

Construction Management Faculty are involved in the development of knowledge, understanding, and application in an environment where we monitor, manage, and facilitate the learning process. Instructor strives to provide a rich learning environment that allows for a range of individual learning styles. The following syllabus provides specific topics for the course through various forms of teaching and discovery based on a selection of reading materials and other resources.

Course Catalog Description:

A study of the materials, techniques, and methods used in residential and commercial construction. Material properties, wood products and framing, site work & equipment, foundations, structural systems, building envelopes, and scheduling basics.

Purpose of Course: Introduction of construction means and methods.

Course Objectives & Expectations:

Gain an understanding of construction materials and systems is the combined effort of designers, project managers, fabricators, and construction personnel to build structures. The process must be done within predetermined length of time by using the best possible combination of materials and construction methods, meeting all relevant building code and environmental concerns, and maintaining budgets.

Conflicts, problems and/or issues with this course should be discussed as early as possible with instructor and it will be at instructor's discretion to solve as equitably as possible. Do not delay discussion as sympathy for conflicts or problems diminishes with time. After the fact is not acceptable nor is bringing to instructor's attention towards the end of the course. Course Schedule subject to change with notice.

Course Learning Outcomes:

CLO 1. Ability to determine scopes of work from subcontractor's perspective (SLO #8)

CLO 2 Ability to sequence construction activities (SLO #8)

CLO 3. Recognize fundamentals of sustainable construction (SLO #18)

ASCE Student Learning Outcomes (SLO):

SLO 8 Understanding of basic construction methods, materials, and equipment.

SLO 18 Understand the basic principles of sustainable construction.

Mapping Assessment with CLO

Assessment	CLO 1	CLO 2	CLO 3
Lab 1			X
Lab 2-11/Quiz 1-6	X		
Lab 12		X	

Mapping CLO with SLO

Assessment	CLO 1	CLO 2	CLO 3
SLO 8	X	X	
SLO 18			X

COURSE POLICIES

NO CELL PHONE USE DURING CLASS!

You do not have to turn them off but they must be on silent and put away.

The classroom environment will be treated the same way as if this was a corporate meeting in a large conference room in which your boss was delivering a presentation. He/she would not tolerate cell phone use – it is distracting to instructor and classmates and frankly – it’s considered nonprofessional and quite rude.

Attendance:

Attendance is mandatory in order to participate fully. The *only* acceptable excused absences are: illness (with documentation) or your participation in a University sponsored event which instructor must have prior notice of. Work related conflicts **are not** excused absences.

Quiz / Exam Policy:

6 quizzes will be given which will follow each major topic area. The quiz will be given on date specified during the first 30-45 minutes of class followed by lab exercise or new lecture material (typical). Quizzes will cover material presented/discussed during class, reading assignments, and handouts. Format will be objective/short answer.

Make-up Policy: There are no make-up quizzes or lab assignments - so please do not ask.

Assignment Policy:

Lab assignments should be able to be completed during class time (typical) and due at the end of class. In certain cases, it may be required to complete outside of class as homework and it will be due at the beginning of class on the date specified. If you are not in class for lab exercise, then you will not receive credit for the exercise (see Attendance for exceptions). Incomplete or late assignments will not be accepted. All students are expected to complete assignments as given. Instructor reserves the right to modify assignments as necessary. Keep all returned/graded assignments through the end of the course.

Course Technology Requirements: Lap top and thumb drive

Evaluation & Grading:

Lab Assignments	40%
Class Exercise	15%
Quizzes	45%

A = 90-100

B = 80-89

C = 70-79

D = 60-69

F = Below 60

UNIVERSITY POLICIES Statement of Student Rights and Responsibilities KSU Student Code of Conduct

Plagiarism and Cheating:

No student shall receive, attempt to receive, knowingly give or attempt to give unauthorized assistance in the preparation of any work required to be submitted for credit (including examinations, laboratory reports, essays, themes, term papers, etc.). Unless specifically authorized, the presence and/or use of electronic devices during an examination, quiz, or other class assignment is considered cheating.

Engaging in any behavior which a professor prohibits as academic misconduct in the syllabus or in class discussion is cheating. When direct quotations are used, they should be indicated, and when the ideas, theories, data, figures, graphs, programs, electronic based information or illustrations of someone other than the student are incorporated into a paper or used in a project, they should be duly acknowledged. No student may submit the same, or substantially the same, paper or other assignment for credit in more than one class without the prior permission of the current professor(s).

University Policy on Academic Misconduct: Academic honesty and integrity are fundamental values of the University community. Students should be sure that they understand the KSU Student Academic Integrity Policy at http://kennesaw.edu/handbooks/faculty/section2_13.php

University Policy on Accommodating Students with Disabilities:

Students requesting accommodation for disabilities must first register with the Office of Disabled Student Support Services at http://www.kennesaw.edu/stu_dev/dsss/dsss.html. The Office of Disabled Student Support Services will provide documentation to the student who must then provide this documentation to the instructor when requesting accommodation. You must submit this documentation prior to submitting assignments or taking the quizzes or exams. Accommodations are not retroactive, therefore, students should contact the office as soon as possible in the term for which they are seeking accommodations.

**Netiquette: Communication Courtesy: All members of the class are expected to follow rules of common courtesy in all email messages, threaded discussions and chats.

<http://teach.ufl.edu/docs/NetiquetteGuideforOnlineCourses.pdf>

Electronic Recording & Social Media Policy

Electronic recording performed without the consent of the people being recorded chills the free exchange of ideas. Academic freedom, free inquiry, and freedom of expression should not be limited by the fear that one's brainstorming, polemic discourse, speculative inquiry, or any other kind of expressed curiosity made within the space of a university classroom will be made public without one's consent. This fear is unacceptable regardless of whether one is in an online, hybrid, or face-to-face classroom setting.

Accordingly, no person shall electronically record any class discussion without the written permission of the instructor. No person shall publish online or elsewhere any electronic recording of a class discussion without the written permission of the instructor and any other persons who were recorded. This policy is not intended to discourage electronic recording in the classroom or the use of social media when such actions are performed with the written consent of the instructor and any other persons who were/will be recorded. Faculty accommodate all reasonable requests to electronically record a class discussion; these requests must be documented by the Disabled Student Support Services available at:

http://www.kennesaw.edu/stu_dev/dsss/prospect.shtml

GETTING HELP

For issues with technical difficulties, please contact the Student Helpdesk:

1. Fill out a service form <http://uits.kennesaw.edu/support/formselect.php?s=tech>
2. Email: studenthelpdesk@kennesaw.edu
3. Call: 770-499-3555

Getting Started With Technology Services <http://uits.kennesaw.edu/>

Any requests for make-ups due to technical issues MUST be accompanied by the ticket number received from ITS when the problem was reported to them. The ticket number will document the time and date of the problem. You MUST e-mail your instructor within 24 hours of the technical difficulty if you wish to request a make-up.

Additional Technology Resources

1. Student Service Desk and Help Center studenthelpdesk@kennesaw.edu
2. Browser Checker https://usg.desire2learn.com/d2l/tools/system_check/systemcheck.asp?ou=6606
3. USG Desire2Learn Help Center <https://d2lhelp.view.usg.edu/>
4. D2L Training Options & Resources for Students
<https://web.kennesaw.edu/acs/pages/desire2learn/student-resources-d2l>
5. Computertrain Online Courses <http://www.kennesaw.edu/dlc/FacultyResources/>
6. ITS Documentation Center
http://uits.kennesaw.edu/docs/netaccess/guides/windows7_wifi_instructions.pdf
7. Check Service Outages <http://status.usg.edu/>
8. Maintenance Schedule <https://usg.desire2learn.com>

Academic Resources

1. Academic Tutoring Services http://www.kennesaw.edu/stu_dev/alp/academic.shtml
2. Disability Resources http://www.kennesaw.edu/stu_dev/dsss/dsss.html
3. ESL Study and Tutorial Center <http://www.kennesaw.edu/us/programs/esl.php>
4. Library <http://www.kennesaw.edu/library/>
5. Supplemental Instruction <http://www.kennesaw.edu/us/programs/si.php>
6. The Writing Center <http://www.kennesaw.edu/writingcenter/index.php>
7. Math Lab <http://mathlab.kennesaw.edu/>
8. The KSU Writing Center helps students in all majors improve their writing. Experienced, friendly writing assistants help with topic development, revision, research, documentation, grammar, and more. For more information or to make an appointment, visit writingcenter.kennesaw.edu or stop by English Building, Room 242 (Kennesaw campus) or Building A, Room 184 (Marietta campus)

Student Support and Wellness Resources

1. Career Services Center <https://careerctr.kennesaw.edu/>
2. Counseling and Psychological Services <http://sss.kennesaw.edu/cps/>
3. Center for Health, Promotion and Wellness http://www.kennesaw.edu/col_hhs/wellness/
4. Student Health Clinic <http://studenthealth.kennesawstateauxiliary.com/>

KSU desires to resolve student grievances, complaints and concerns in an expeditious, fair and amicable manner. The Complaints and Appeals Page was developed to assist current and prospective students in submitting complaints and appeals and to direct them to the most effective venue for accurate information and resolution. The resources on the page will direct students to the specific venue to appropriately address related student complaint. http://www.kennesaw.edu/complaints_appeals.shtml

Complaints for online students are resolved following the same general procedures for students who attend classes on campus. However, for any process that requires that a student appear in person, the university may make other arrangements. For processes that cannot be completed via telephone, e-mail, or written correspondence, the university may set up a two way Video conference site in place of a meeting on the KSU campus.

Week	TOPIC	RELATED READING	ASSIGNMENTS
1	Introduction to course		
	Thermal Properties	Chapter 5, 6	
2	Fire Related Properties	Chapter 7	
	Acoustical Properties	Chapter 8	
3	Sustainable Construction	Chapter 10	Web research
	Soils & Foundation	Chapter 11, 12	
4	Lumber and Wood	Chapter 13, 14	
	Wood Frame Construction	Chapter 15, 16	
5	Quiz 1 - Wood		
	Structural Steel	Chapter 18, 19, 20	Steel Specs
6	Quiz 2 - Steel		Steel Dwgs
	Concrete	Chapter 21, 22, 23	Concrete Specs
7	Quiz 3 - Concrete		Concrete Dwgs
	Masonry Material	Chapter 24, 25, 26	Masonry Specs
8	Quiz 4 - Masonry		Masonry Dwgs
	Exterior Systems	Chapter 27, 28, 29	
9	Exterior Systems	Chapter 30, 31, 32	Exterior Specs
	Quiz 5 - Exterior Systems		Exterior Dwgs
10	Roofing Materials & Systems	Chapter 33, 34	
	Roofing		Roofing specs and dwgs
11	Finishes	Chapter 36, 37	
	Finishes		Finishes specs and dwgs
12	Scheduling Basics		

Specific topic information and quiz dates will be posted on course

D2L calendar.

STUDENT LEARNING OUTCOMES

Upon graduation from an accredited ACCE 4-year program a graduate shall be able to:

ACCE SLO	TARGET
SLO 1 – Create written communications appropriate to the construction discipline.	
SLO 2 – Create oral presentations appropriate to the construction discipline.	
SLO 3 – Create a construction project safety plan.	
SLO 4 – Create construction project cost estimates.	
SLO 5 – Create construction project schedules.	
SLO 6 – Analyze professional decisions based on ethical principles.	
SLO 7 – Analyze construction documents for planning and management of construction processes.	
SLO 8 – Analyze methods, materials, and equipment used to construct projects.	
SLO 9 – Apply construction management skills as a member of a multi-disciplinary team.	
SLO 10 – Apply electronic-based technology to manage the construction process.	
SLO 11 – Apply basic surveying techniques for construction layout and control.	
SLO 12 – Understand different methods of project delivery and the roles and responsibilities of all constituencies involved in the design and construction process.	
SLO 13 – Understand construction risk management.	
SLO 14 – Understand construction accounting and cost control.	
SLO 15 – Understand construction quality assurance and control.	
SLO 16 – Understand construction project control processes.	
SLO 17 – Understand the legal implications of contract, common, and regulatory law to manage a construction project.	
SLO 18 – Understand the basic principles of sustainable construction.	
SLO 19 – Understand the basic principles of structural behavior.	
SLO 20 – Understand the basic principles of mechanical, electrical and piping systems.	