

CM 3500 – Building Codes

Construction Management Department
College of Architecture & Construction Management
Term: Spring 2020

Prerequisite: CM 3110

Class Meeting time: T & R 3:30 – 4:45 PM

Course Website: <http://d21.kennesaw.edu>

Class Location: Architecture - 175

Class instruction methodology: Lecture & Lab (2-2-3)

Instructor: Michael Collins

Office Location: TBA

Office Hours: Monday – By Appointment
Wednesday – By Appointment
Friday – By Appointment

Email /Phone: mcolli64@kennesaw.edu, office: TBA

Course Communications: email address above

Required Text/ISBN Number: Online

COURSE SYLLABUS

The intent of the syllabus is to provide the students with information on the course content, required learning outcomes, grading policy, course policies, and Kennesaw State University student policies and resources. This syllabus also includes the tentative topical outline and schedule. Each student is expected to abide by the stated policies.

Course Catalog Description:

This course will provide an overview of building codes from the perspective of construction managers and superintendent. Various issues related to building codes, which must be considered by the PM/CM/superintendent, will be discussed and follow the scheduled reading assignments.

Student Learning Outcomes:

- SLO1 Understand construction quality assurance and control through the understanding of building codes regulations.
- SLO2 Understand the legal implications of contract, common, and regulatory law to manage a construction project.
- SLO3 Analyze methods, materials, and equipment used to construct projects.
- SLO4 Demonstrate the purpose of building codes applications in the construction industry

Course Learning Outcomes:

- CLO 1 – Demonstrate how commercial and residential codes are used for the protection for the health, safety and general welfare as it is related to occupancy and construction of buildings
- CLO 2 – Analyze construction documents for code applicability and purpose
- CLO 3 – Understanding how codes effect the level of a projects outcome
- CLO 4 – Understanding law as it pertains to building codes

Purpose of this course:

All courses in the Construction Management program contribute to the body of knowledge required to complete the Capstone project necessary for graduation. Each course in the Construction Management program provides the student with an opportunity to attain knowledge, skills, and abilities in one or more of the 20 Student Learning Outcomes (SLO) set forth by the American Council for Construction Education (ACCE). The student's level of achievement of SLO is measured through one or more Course Learning Outcomes (CLO). The mapping of CLOs with SLOs for the course is shown in the table below followed by the table that presents the mapping of CLO with assessment tools.

Assessment	CLO 1	CLO 2	CLO 3	CLO 4
SLO 1			X	
SLO 2				X
SLO 3	X			
SLO 4		X		

Mapping of Assessment with CLO

Assessment	CLO 1	CLO 2	CLO 3	CLO 4
Study Session 1		X		
Study Session 9	X			
Code Simulation - Electrical	X			
Exam 1			X	X

COURSE POLICIES

Attendance Policy: Attendance is required for this course. Excused absences are given with proper notice and/or documentation. The Class Participation grade is based on your attendance to the class and other approved functions.

Quiz / Exam Policy: There are quizzes for each lecture of this course. Quizzes are taken in D2L. A cumulative final exam is given at the end of the semester; all students must be present for the final exam.

Make-up Policy: No make-up exams are given.

Assignment Policy: Assignments are posted on D2L. Each assignment has either a Drop Box or is identified as a graded component of the course. Students are expected to attend class and complete assignments in a timely manner. Due dates and times are given for all assignments. It is your responsibility to submit the work in the appropriate Drop Box in D2L before the time expires. If the Drop Box has an End Date, then that is the last possible date to submit late work. All student work will be graded within one week of submission.

Course Technology: This course requires access to a computer. The Construction Management Department has 105 computer stations available for student use. At a minimum, students should be able to use a word processing application, a spreadsheet application and a presentation application (i.e., Microsoft Word, Excel and PowerPoint). Construction documents are supplied in PDF format, students may view them using Bluebeam software in the department, or on PDF viewers of their choice.

Evaluation & Grading:

Study Session Quizzes	55%
Residential Quizzes	15%
Assignments	5%
Final Project	17%
Class participation	5%
Quiz 1	3%

A = 90-100

B = 80-89

C = 70-79

D = 60-69

F = Below 60

- **CM 3500 COURSE SCHEDULE (Course Syllabus is subject to changes during the semester)**

Class	Subject of Lecture	Readings	Assignment
	Syllabus Quiz Plagiarism Quiz	There is no book for this class	
Week 1	Intro to Codes/Use, Occupancy	Using code book on the internet	Write about an incident that caused a code change or a code to go into effect
Week 2	Detailed Occupancy/Building Types		Determine occupancy of your building, height allotment, type of construction, any special requirements Determine occupancy load
Week 3	General Building Heights and Areas/Fire Safety		Check and fix grading on your site
Week 4	Fire Protection		Work on your project
Week 5	Loads		Draw an egress plan for your building based on the fire safety codes, including number of exits required (if the drawings do not comply correct the drawings)
Week 6	Accessibility/Plumbing & Electrical		Determine plumbing code for your building
Week 7	Egress		Determine what type of roof your structure needs and draw it on your plans,

			Include detailed drawings
Week 8	Egress		Draw a wall section of your wall per code
Week 9	Exterior, Roofs, Foundations		Determine Floor live load, Floor Live Load Reduction, Roof live load, P_g (ground snow load), P_f , C_e (terrain factor), I (risk or importance factor), C_t (thermal factor), Wind exposure, wind speed both V_{ult} & V_{asd} , Surface roughness for your building, ground snow load, roof snow load
Week 10	Interior, Elevators/Concrete, Masonry, Wood, Soils		Check your means of egress, check dead end halls and correct based on occupancy classification, determine type of extinguishers need in your building, make sure the exits are correct on your building if not correct
Week 11	International Energy Conservation Code		Make your building meet the accessibility code/ Make your building ADA compliant
Week 12	Codes & Project Outcomes/Law & Building Codes		Choose one Green Code & apply it to your building Include an inspection template
Week 13	SPRING BREAK		
Week 14	Residential Codes Footings/Foundations		
Week 15	Floors & Walls/Footings		
Week 16	Presentations		

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/>

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.

KSU Tobacco Policy

Tobacco products: cigarettes, cigars, pipes, all forms of smokeless tobacco, clove cigarettes and any other smoking devices that use tobacco such as hookahs or simulate the use of tobacco such as electronic cigarettes.

University property: all land and improvements owned, occupied, leased, or controlled by the University or the University System of Georgia. This includes, but is not limited to, buildings, offices, meeting rooms, residence halls (including private rooms), parking garages, parking lots, athletic fields, and stadium seating areas.

Visitors and third parties: contractors and subcontractor, spectators, and other individuals visiting, working, or attending activities and events on University property.

Policy

KSU prohibits the use of tobacco products on any University property. The use of tobacco products is prohibited in all vehicles—private or public—located on University property. Further, this policy prohibits any advertising, sale, or free sampling of tobacco products on University property unless specifically stated and approved for research purposes.

The University president hereby establishes and designates responsibility to KSU Smoke/Tobacco-Free Committee (the Committee) for developing, implementing, and overseeing tobacco and smoke-free policy, procedures, best practices, and activities for the University. The University president designated the associate vice president for Operations as the Committee Chair, responsible for leading Committee activities and designating Committee members to ensure representation by faculty, staff, and students.

KSU procedures related to this policy are managed by the Committee and various departments with related procedures and functional responsibilities. In addition to the Office of Human Resources and the Office of the Vice President for Student Affairs (see Contact Information above), the departments listed below also have functional responsibilities and maintain procedures related to this policy. All procedures and contact information are maintained on the KSU Smoke/Tobacco Free website (see link provided below under Section 8, Associated Procedures).

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.	