

CM 2000 – Construction Graphics

Construction Management Department

College of Architecture & Construction Management

Term: Spring 2020

Prerequisite: None

Class Meeting time: T & R 5:00 PM – 6:15 PM

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

Class Location: Academic Building - Room 324

Course Communications: mcolli64@kennesaw.edu

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

Instructor: Professor Michael N. Collins

Office Location: TBA

Office Hours: By appointment

Required Text/ISBN Number: Principles of Construction Graphics – Fifth Edition

By: Dr. Hussein Abaza & Jacqueline F. Stephens

*Additional reading material for selected topics may be assigned.

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 Syllabus is subject to changes during the semester. Please take notes of any Syllabus changes that are announced during the class and if you have any objection, it must be reported in writing by e-mail to the instructor within three business days after announcing these changes.

Course Catalog Description:

A study of the fundamentals of graphic language used by construction professionals, with an emphasis on developing skills in expressing concepts in visual form and in reading architectural and engineering construction documents.

Student Learning Outcomes covered in this course:

SLO 1 - Create written communications appropriate to the construction discipline.

Course Learning Outcomes:

CLO 1 Generate plan, elevation and section of 3D objects.

CLO 2 Read and interpret Civil, Architecture, and Structural drawings.

CLO 3 Identify conflicts and coordinate between the different construction drawings.

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.

Mapping of CLO with SLO

Assessment	CLO 1	CLO 2	CLO 3
SLO 10	X	X	X

Mapping of assessment with CLO

Assessment	CLO 1	CLO 2	CLO 3
Exam 1	X		
Exam 2		X	
Lab 14			X
Lab 15			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 2 quizzes, a final exam for this course and 4 vocabulary quizzes. Vocabulary quizzes are cumulative. Any problems with behavior during tests student will be excused from class and receive a zero.

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

Assignment Policy: Assignments are posted on D2L. Each assignment has a Drop Box. 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 your work. Assignment turned in after due date and by end date will not be graded. All student work will be graded within one week of submission.

This is a lab class, students will be given lab assignments and/or will be required to participate in scheduled labs in the ACM Technology Laboratory. **Must be present for the lab or you will be given a zero for that assignment.**

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:

Labs	65%
Quizzes/Ethics Essay	15%
Vocabulary	5%
<u>Final Project</u>	<u>15%</u>
Total:	100 %

A = 90-100

B = 80-89

C = 70-79

D = 60-69

F = Below 60

CM 3180: COURSE TOPICAL OUTLINE & SCHEDULE

Week	Topic	Reading	Assignment
	Syllabus Quiz Plagiarism Quiz		
1	Construction Phases-Ethics Area/Mathematics	Chapter 1&3	Exercises 1/Exercise 2
2	Scaling-Dimensioning (introduction to Bluebeam) Reference Symbols	Chapter 4, 5&7	Ethics Essay due Exercises 3&4 Calibrate drawings with Bluebeam Material Worksheets Plumbing Worksheet Electrical Worksheet Bluebeam Materials
3	Martin Luther King Day Vocabulary Quiz 1 CSI Divisions Types of Drawings	Chapter 7&8	List all CSI Divisions for Tulsa drawings (I will assign pages) Exercises 5-7
4	Specifications	Chapter 2	Exercises 8-10 Specification Assignment
5	Tentative Guest Speaker Residential Plans/Review	Chapter 15	Exercises 16-18
6	Quiz 1/ Cover Sheet	Chapter 17	Cover Page Worksheet
7	Vocabulary Quiz 2/Foundations	Chapter 10	Foundation Detail
8	Roofing/Framing/ Ceilings/ Sections	Chapter 11&12	Exercise 21 Exercise 20
9	Contours- Site Schedules	Chapter 17- 19	Contours Exercise 19-19A Exercise 17-17A Exercise 22
10	Vocabulary Quiz 3 Welding Introduction to Excel/ Bluebeam Calculations	Chapter 20	Exercise 23
11	Take-offs	Chapter 21	Cobb County Take-offs
12	Take-offs	Chapter 21	Tulsa Take-offs

13	SPRING BREAK		
14	Quiz 2 Vocabulary Quiz 4/Stairs EX		Final Projects are due Bring in tape measures
15	Stairs Exercise Presentations		Bring in tape measures
16	Presentations		

Note: The topical outline and schedule is tentative and subject to change as per the progress of the course.

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.

6. 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.