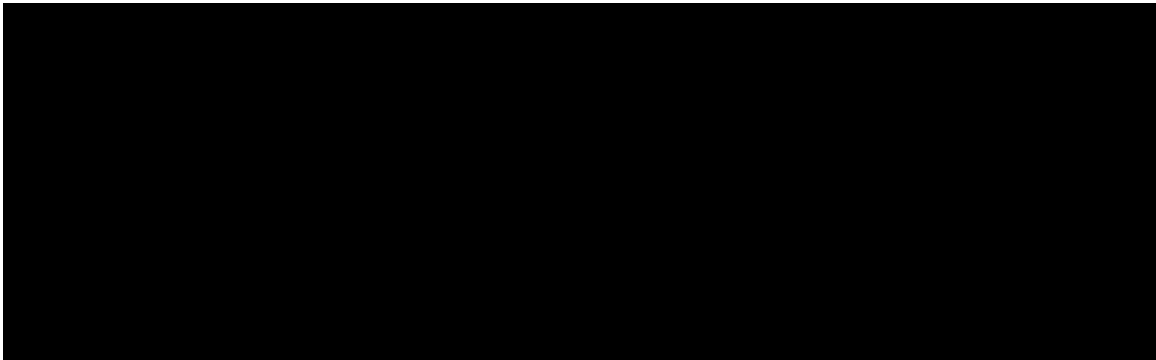


Construction System & Standard

CMGT2820 001

Instructor Information



Course Description

An introduction to energy systems for commercial and residential construction. Systems include electrical, plumbing, heating, ventilation, air conditioning, air distribution, lighting, solar and alternative energy systems and the application and effect on the building envelop and air quality. Current Green Building Standards will be studied including LEED and Energy Star.

Semester(s): Fall & Spring

Course Student Learning Outcomes

- Identify various mechanical and electrical systems used in commercial and residential buildings.
- Describe the differences in electrical systems, HVAC systems and controls, and plumbing distribution systems.
- Identify and describe alternative energy systems.

- Compare Green Building and LEED rating systems and evaluate their benefit to the sustainable building process.
- Research and identify Emerging Systems.
- Calculate Return on Investment for the various rating systems.

Course Prerequisites

None

Communication Plan

Example language:

I will respond to email within 2 days

I will offer feedback on major assignments within 2 weeks

The best way to contact me is via the Canvas Inbox, as I will prioritize this email over other modes of communication.

Keys for Success (how to succeed in the course)

Online: Due to current conditions I suggest we meet in class one day a week and use Canvas for the remaining weekly course content. All assignments, quizzes, tests, etc will be accessed through Canvas. Anticipate one module a week starting the second week of the semester.

Discussions & Note Taking: I will often discuss items of importance that are NOT specifically addressed in the textbook, and to me they are more relevant and important than what is written in the text and I want you to make note of them. We might be discussing a general topic that is addressed in the text but I may offer some commentary that I think is more important or relevant than what is written in the text, I will ask quiz or exam questions about them.

Class Attendance: It is up you to attend class. I hope to post recordings of the lectures that you can view if you miss a class.

Assignment Submission: Assignment issue dates are approximately as shown on the syllabus page in Canvas and as a general rule they will be due the end of the week they are issued and should be submitted through Canvas as a pdf unless otherwise noted. Late assignments will be deducted at 10% per day unless prior arrangements are made with the instructor.

Brief Description of Assignments/Exams

Week		Topic	Text Book Chapter
1		MEP Coordination & Construction Sequence	Canvas Content
2		Plumbing Materials and Systems	1-7, 19
3		Plumbing Materials and Systems	1-7, 19
4		Plumbing Materials and Systems	1-7, 19
5		HVAC Systems	8-18
6		HVAC Systems	8-18
7		HVAC Systems	8-18
8		HVAC Systems	8-18
9		HVAC Systems	8-18
10		Electrical Equipment & Systems	20-30
11		Electrical Equipment & Systems	20-30
12		Electrical Equipment & Systems	20-30
13		Fire Suppression & Fire Alarm	Canvas Content
14		Testing, Inspection, Start-up, Commissioning	Code Check & Canvas Content
15		Testing, Inspection, Start-up, Commissioning	Code Check & Canvas Content
16		Finals	

Assignment Schedule

Due Date	Assignment Name	Assignment Type	Points
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Due Date	Assignment Name	Assignment Type	Points
	Introduce Yourself	Discussion	0
	Post questions here and I'll respond	Discussion	0
	Roll Call Attendance	Assignment	100
8/25	Week 1 - MEP Coordination & Construction Sequence	Quiz	170
9/2	Week 2 - Basic MEP Construction Documents	Quiz	60
9/2	Week 2 - Schematic of Your Sink	Assignment	100
9/9	Week 3 - Basic Plumbing Materials and Systems	Quiz	70
9/21	Plumbing Fixture U-1	Quiz	80
9/24	ADA - Plumbing Fixtures	Quiz	100
10/1	Air Flow Direction	Assignment	50
10/1	HVAC Comfort and Forced Air	Quiz	150
10/8	Refrigeration	Quiz	150
10/22	Basic Forced Air System Coordination	Quiz	150
10/22	HVAC Zones, VAV, FCU, Economizer	Quiz	100

Due Date	Assignment Name	Assignment Type	Points
10/29	HVAC Recap	Quiz	100
11/5	Electrical Basics	Quiz	40
11/5	Electrical Wiring	Assignment	100
11/12	LEED	Quiz	40
11/12	Watch Fire Suppression Videos	Quiz	40
11/19	Commissioning	Quiz	60
11/19	Data/Com	Quiz	50
11/27	Industrial Equipment Quiz	Quiz	140
12/2	Dewatering Systems	Quiz	80
12/2	Smoke Evac / Control System	Quiz	60
12/10	Final Research Report	Assignment	500

Grading Scale

94.00 % or more	A		74.00 – 76.99 %	C
90.00 – 93.99 %	A-		70.00 – 73.99 %	C-
87.00 – 89.99 %	B+		67.00 – 69.99 %	D+
84.00 – 86.99 %	B		64.00 – 66.99 %	D
80.00 – 83.99 %	B-		60.00 – 63.99 %	D-
77.00 – 79.99 %	C+		59.99 % or less	E

How to Navigate to Canvas

Institutional Policies

As members of our academic community, we would like to invite you to review the Institutional Syllabus which covers important policies and procedures. This document contains important links for students on the code of student rights and responsibilities, academic integrity, and grading policies, Title IX and other important acknowledgements. By familiarizing yourself with this information, you can help us create a safe and respectful environment for everyone.

You can access the document by clicking on the following link:

<https://slcc.instructure.com/courses/530981/pages/institutional-syllabus>

Learning Support and Tutoring Services

We are pleased to offer a range of tutoring and learning support services to help you achieve your academic goals. Whether you need assistance with a specific subject or want to improve your study skills, you have many options for tutoring or other support.

To learn more about the services we offer and how to access them, please visit the Institutional Syllabus under the Tutoring and Learning Support tab:

<https://slcc.instructure.com/courses/530981/pages/institutional-syllabus>. We encourage you to take advantage of these resources to help you succeed in your studies. If you have any questions or would like to schedule a tutoring session, please don't hesitate to reach out to us. We are here to support you in any way we can.

Advising and Counseling Support Services

At our institution, we are committed to supporting your academic and personal growth. That's why we offer a range of advising and counseling services to help you navigate the challenges of college life. To learn more about the resources available to you and how to access them, please visit the Institutional Syllabus under the Advising and Counseling Support Services tab: <https://slcc.instructure.com/courses/530981/pages/institutional-syllabus>. Our advising team and the support centers across campus are here to support you in achieving your goals and overcoming any obstacles you may face.

Student Academic Calendar

As students you should be aware of all important dates in the semester, such as the day that courses begin and end, as well as the drop date and the last day to withdraw. To learn more about those dates, navigate to the Student Academic Calendar below:

[SLCC Student Academic Calendar](#)