

Course syllabus

CMG 3833 - Sustainable Buildings

Term: Spring 2026

Course Time: Monday, Wednesday and Friday: 9:00 AM to 9:50 AM

Classroom: Klehm Hall 4431

Course Dates: Jan. 12- May 08, 2026

Faculty: Dr. Reachsak Ly

Email: rlly@eiu.edu (Preferred communication method)

Office: Klehm Hall 4014

Teaching Method: Lecture

Office Hours:

Monday, Wednesday and Friday (10:00 AM to 11:00 AM)

Tuesday and Thursday (11:30 AM to 12:30 PM)

Communication Response Time: Within 2 days

Required Textbooks and Readings

- **Required Textbook:** Sustainable Construction: Green Building Design and Delivery, 4th Edition Charles J. Kibert ISBN: 978-1-119-05532-7
- **Suggested Textbooks:**
 - LEED Green Associate Study Guidebook
 - LEED Core Concepts Guide

Course description:

Study of the principles of environmentally sustainable construction with application of green buildings and standard construction techniques and mechanical systems. Included is the Green Building Rating System LEED (Leadership in Energy and Environmental Design) for benchmarking the design, construction, and operation of high-performance green buildings.

Course objectives:

After completion of the course the student will be able to:

- Identify terminology and definitions commonly used in sustainability and the building industry.
- Describe the principles of sustainable design, site development considerations, and Green Building concepts.
- Evaluate the cost implications of applying green building principles to constructing a building.
- Identify site issues with respect to green construction.
- Describe green principles to improve building efficiency.
- Assess renewable energy sources for use in green building.
- Identify green building principles to improve the effective use of available building materials.
- Identify green building principles to improve the indoor environment of a building.
- Identify the environmental performance of different segments of the LEED Green Building Rating System as applied to a building.

- Use the “Assessment Guide for LEED” to analyze buildings for green concepts.

Graded Course Requirements Information

Homework Assignments and Quizzes

- The homework assignments cover all contents from lectures, textbooks, readings and class discussion.
- The quizzes are unannounced. Please note, there will be no chances for a pop-up quiz make up.
- Attending all lectures is the only way to not miss a pop-up quiz.

Case study presentation

The team project includes two deliverables: (1) in-class presentation, (2) a report summarizing your findings written in an academic manner. Detailed information will be discussed in the lectures.

Exams

Exam cover lectures, textbook, readings and class discussion.

Grading Structure

Content	Percentage
Attendance and Participation	10%
Homework assignment	30%
Case study presentation	20%
Quiz	15%
Exam	25%
Total	100%

LEED GA

Grading Scale:

Individual grade items and your final grade will be assessed as follows:

A = 100- 90%

B = 89- 80%

C = 79-70%

D = 69-60%

F = less than 60%

Course Requirements:

1. Complete readings, assignments, attend class, and submit assignments and exams on time.
2. Independent study of the textbook and other relevant material is required.
3. Attendance: If you do not attend and participate you will not succeed in this class. Only **documented** emergencies and legitimate University activity-related events (e.g., athletes for games, sponsored field trips for other classes) will be excused. Tardiness reduces points awarded by ½. No points are awarded for absences.
4. Homework Assignments, Tests, and Communication will be conducted through the campus learning management system. The student is required to access the system *daily* for updates and to submit assignments.

Course outline

* The course schedule is subject to change throughout the semester. Revisions will be noted in class.

Week	Date	Topics	Readings / Assignments / Quizzes (Tentative)
1	12 - Jan 14 - Jan 16 - Jan	Course Introduction Green Building Introduction and Green Terminology	Chapter 1 Introduction and Overview
2	19 - Jan 21 - Jan 23 - Jan	<i>Background</i>	Chapter 2 Background
3	26 - Jan 28 - Jan 30 - Jan	<i>Ecological Design</i>	Chapter 3 Ecological Design
4	2 - Feb 4 - Feb 6 - Feb	<i>Green Building Assessment</i>	Chapter 4 Green Building Assessment
5	9 - Feb 11 - Feb 13 - Feb	<i>LEED Integrative Process</i>	Chapter 7 The Green Building Design Process
6	16 - Feb 18 - Feb 20 - Feb	<i>LEED Sustainable Sites</i>	Chapter 8 The Sustainable Site and Landscape
7	23 - Feb 25 - Feb 27 - Feb	<i>LEED Energy and Atmosphere</i>	Chapter 9 Low Energy Building Strategies
8	2 - Mar 4 - Mar 6 - Mar	<i>LEED Water Efficiency</i>	Chapter 10 Building Environment Hydrological Cycle
9	9 - Mar 11 - Mar 13 - Mar	<i>LEED Materials and Resources</i>	Chapter 11 Closing Material Loops
10	16 - Mar 18 - Mar 20 - Mar	Spring Break No class	
11	23 - Mar 25 - Mar 27 - Mar	<i>Built Environment Carbon Footprint</i>	Chapter 12 Built Environment Carbon Footprint

12	30 - Mar 1 - April 3 - April	<i>LEED Indoor Environmental Quality</i>	Chapter 13 Indoor Environmental Quality
13	6 - April 8 - April 10 - April	<i>LEED Innovation LEED Regional Priority</i>	Chapter 14 Construction Operations and Commissioning
14	13 - April 15 - April 17 - April	Green Building Economics	Chapter 15 Green Building Economics
15	20 - April 22 - April 24 - April	<i>Case Study Presentation</i>	Chapter 16 The Cutting Edge of Sustainable Construction
16	27 - April 29 - April 1 - May	<i>Exam Review Exam</i>	

Note: This is a tentative schedule, and subject to change as necessary. The instructor reserves the right to make changes to the topics or sequence of topics, schedule, assignments, grading plan, and content of the course.

Academic Integrity:

Students are expected to maintain the principles of academic integrity and conduct as defined in EIU's Code of Conduct (<http://www.eiu.edu/judicial/studentconductcode.php>). Violations will be reported to the Office of Student Standards. In this class, students may assist each other in accomplishing a homework assignment, but the submitted work must be the student's own original work. **Copying work or plagiarism will not be tolerated. Students may not collaborate on tests or quizzes. Cheating or plagiarism will, at least, result in a zero on the assignment or exam.**

- *AI and Academic Integrity:* Students are not allowed to use advanced automated tools (artificial intelligence or machine learning tools such as ChatGPT, Grammarly, or Dall-E 2) on assignments in this course. Each student is expected to complete each assignment without substantive assistance from others, including automated tools.

Students with Disabilities:

If you are a student with a documented disability in need of accommodations to fully participate in this class, please contact the Office of Student Disability Services (OSDS). All accommodations must be approved through OSDS. Please stop by Ninth Street Hall, Room 2006, or call 217-581-6583 to make an appointment

Emergency Preparedness Plan:

Instructions regarding procedures to follow in the event of an emergency are posted in all classrooms. Students are responsible for acquainting themselves with these instructions so that they are prepared in the event of an emergency.

The Academic Success Center:

Students who are having difficulty achieving their academic goals are encouraged to contact the Academic Success Center (www.eiu.edu/~success) for assistance with time management, test taking, note taking, avoiding procrastination, setting goals, and other skills to support academic achievement. The Center provides individualized consultations. To make an appointment, call 217-581-6696 or go to 9th Street Hall, Room 1302.