



Creating a LEED General Associate Exam Preparation Technical Elective



Abstract

Sustainability in building design is increasing in demand within the construction industry. The Construction Management program at California Polytechnic State University currently requires classes that address sustainable building, but does not have a class that specifically prepares students for professional certification in this field. The purpose of this course is to prepare students for the LEED Green Associate exam, which if passed, will earn the student the Green Associate credential. By offering this class as a technical elective, students will be given the opportunity to build off their previous knowledge of green building and pursue a certification that will help solidify their knowledge. This project provides an in-depth analysis of the proposed curriculum, course content, assignments, and evaluation methods that will be used in the proposed technical elective.

Key Words: LEED, Curriculum, Technical Elective, Syllabus, Sustainability

Course Structure

Reading	Lecture	Assignment	Quiz	Final
Students will read sections that directly apply to the credit category being covered	Weekly lectures highlight key information from the associated credit category	Students will apply their knowledge of LEED credits to real projects through weekly assignments	Weekly quizzes that contain questions similar to those expected on the exam	The final will serve as a mock LEED GA exam

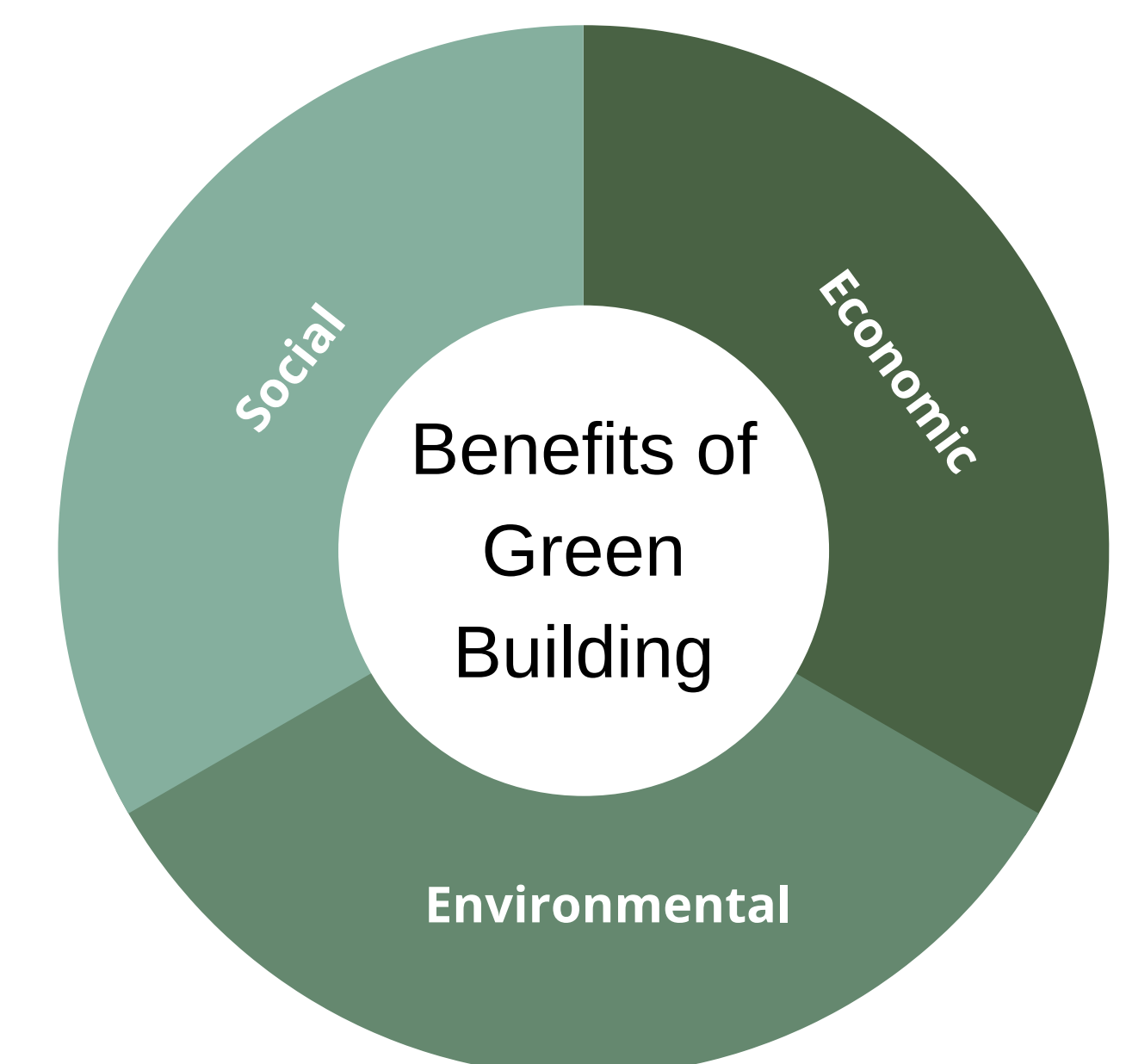
Learning Objectives

1. Understand how LEED certification works and how the LEED rating systems are structured.
2. Discuss how project team members can utilize integrative strategies to establish sustainable design practices for the project.
3. Identify the benefits of locating projects in previously developed areas.
4. Recognize the importance of site assessment and preserving the natural environment surrounding the project.
5. Be able to evaluate a building's water usage and understand how to reduce indoor and outdoor water usage.
6. Be able to evaluate a building's energy usage and understand methods of implementing energy efficient strategies.
7. Analyze the life-cycle of building materials and evaluate considerations when choosing building materials.
8. Identify the significance that indoor environmental quality has on occupant health and describe methods of improving indoor environmental quality.
9. Understand the environmental impacts of the built environment and the value of sustainable design.

Exam Structure

100 Questions
2 Hours
Recall Questions
Test knowledge of concepts by asking students to define terms, recall facts, identify processes, and grouping items into categories.
Application Questions
Evaluate knowledge of procedures and performance.
Analysis Questions
Evaluate the students reasoning and problem-solving abilities.

Course Materials



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