

Incorporation of a LEED Green Associate Exam Prep Course into the Construction Management Tech. Elective Selection

Jason Gendron

California Polytechnic State University
San Luis Obispo, California

Since the development of LEED began in 1993, the construction industry has gradually been incorporating these certificates into every aspect of the field, predominantly the Commercial sector. With LEED becoming a major element impacting nearly every project, it is crucial for individuals to fully understand what LEED encompasses. As greater numbers of professionals in the industry have begun to strive for their LEED Accreditations, it has become apparent that it is far easier to prepare for these exams while in college when individuals have more time to do so rather than during employment. This project is an evaluation of the most beneficial practices for preparing for the LEED Green Associate Exam and the incorporation of these strategies into a single prep course designed as an online Tech Elective to be offered by Cal Poly so that future students can utilize the opportunity achieve their accreditations whilst in college.

Keywords: *LEED, Green Associate, Exam Prep, Course Development*

How the Project Came About

This senior project came to be through a recognition that LEED has become a major aspect of construction around the world, specifically within the United States. Upon further thought development, it became apparent that the majority of schools which offer degrees specializing or concentrating in construction fail to offer an exam preparation course so that individuals may achieve their LEED Green Associates prior to entering the work force. It was my intention to create a course for which California Polytechnic State University of San Luis Obispo may offer it's students so that not only those taking the course may have an advantage when beginning their careers post-graduation, but also so that Cal Poly's Construction Management program may offer it's students an opportunity not presented by the vast majority of other colleges and universities around the country. Upon analyzing the current Sustainability in the Built Environment (CM 317) course currently offered by the Construction Management department, it seemed most appropriate to write this course to be offered in conjunction to CM 317 to maximize the educational opportunity and provide the greatest opportunity for students enrolled in the LEED Green Associate prep course to pass the LEED GA at the end of the quarter.

Project Process

In order to develop the most beneficial course to future students to successfully pass the LEED Green Associate Exam on the first attempt, I thought it was best to pull ideas and resources from a variety of exam prep courses such as LEED Lab, Green Building Education Services, and GreenCE Sustainable Design Education. After personally going through each of these exam prep courses, I was able to successfully pass the LEED Green Associate Exam with a near perfect score. Upon doing so, I reviewed all of the materials that I had utilized to pass the exam myself and what I thought would be most beneficial to the education of future students attempting to pass the exam through the course I would write. Once compiled I successfully wrote an entire ten week course which is ready to be implemented into the Construction Management curriculum of the California Polytechnic State University of San Luis Obispo.

Deliverables

The objectives of this senior project of which I delivered on include:

- 1) Passing the LEED Green Associate exam
- 2) Compiling the most beneficial study materials from a variety of prep courses
- 3) Using these materials to write my own, original course to be offered by the Construction Management department of California Polytechnic State University, San Luis Obispo which include the following and can be seen at the end of this report:
 - a. Course Outline including the required materials, grade weight distribution, ten week course schedule, and a grading scale
 - b. PowerPoint presentations which students may be able to utilize for overarching themes and concepts of each section of the course
 - c. A midterm which can be used as a practice exam for the LEED Green Associate exam which is made up of 100 multiple choice questions written with a variety of answer techniques (Eg: True/False, Two or more correct answers, All of the above/None of the above answers, A and B or A, B and C only answers, Etc.) This was done to mimic the format of the LEED GA course and will also possess a two hour time limit to maintain further consistency with the actual exam.
 - d. A Final which is to take the actual LEED GA exam and submit proof of taking the exam through the students' "Cal Poly Portal" with the following grade distribution:
 - i. 95% for attempting the exam and passing
 - ii. 70% for attempting the exam but not passing
 - iii. 0% for not attempting the exam