CME 496- Principles of Green Buildings

1 Credits (1 Lecture Hour)

Lecture – Meets in Baker 148, Mondays 5:00-5:50PM

Instructors– Paul Crovella
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Alexandre Poisson
TBA

Description - This course provides each student the opportunity to: Develop a deep understanding of the design and operation of Green Buildings, Contribute as a team member to the certification of an existing Green Building to LEED standards, and Earn an accreditation as a LEED Green Associate.

Student outcomes:

1. Develop an understanding of the environmental, economic, and technical issues surrounding building construction and operation.

2. Develop a logical approach to problem solving by evaluating sustainable building operations options.

3. Develop the ability to work collaboratively in a multi-disciplinary group, and communicate internally and externally in an effective manner

4. Attain a personal credential in Leadership in Energy and Environmental Design.

Attendance - Students are expected to attend all scheduled classes and laboratories. If special circumstances such as illness, religious holidays, travel difficulties, family emergencies or active participation in college-sponsored events make absence unavoidable you must see me to make up the work. No student will be allowed to complete graded work after that work has been returned to others in the class.

While in class, please keep cell phones turned off, this includes during tests (no cell phone calculators).

To maintain the proper classroom environment, laptop computers may not be used during lecture without permission of the instructor. They should be used during class for taking notes not for games or watching videos.

Academic Honesty – Honesty and integrity are the foundation of professional behavior and are

expected of each student. Any assignment (including those in electronic media) submitted by a student must be of the student's original authorship. Representation of another's work as the student's own shall constitute plagiarism. Cheating, in any form, is an unacceptable behavior within all college courses, and the Code of Student Conduct (as outlined in the ESF student handbook http://www.esf.edu/students/handbook/0910StHandbk.pdf) will be strictly adhered to.

Grading – The course grading will be a combination of grades earned on individual work and group project work.

The final grade will be based on these percentages

Weekly quiz	25%
Score on LEED GA	25%
Class Project/Participation – Instructor evaluation	25%
Class Project/Participation – Team members	25%

Homework - All written work must be word-processed and spell checked. Any calculations may be hand-written neatly with the answer labeled with units and boxed. Any homework not turned in on-time needs to be discussed with me to determine if credit will be given. No late homework will be accepted after the assignment has been graded and returned to the rest of the class.

Course Outline:

Week 1	Course Organization – LEED Lab Presentation overview (Existing Slide Set) — Green Building Assessment activity – Students walk the project boundary and through the building guided by class instructors. Melissa O'Mara – class team building

Week 2	LEED GA – Concepts EBOM – Prerequisites and possible paths to certification Speaker – LEED overview – Josh Stack Prerequisites/Credits assigned

Week 3	Quiz LEED GA – Location and Transportation EBOM – Location and Transportation Speaker – Melissa Fierke? Credit work

Week 4	Quiz LEED GA – Sustainable Sites Concepts EBOM – Sustainable Sites Speaker – Brian Boothroyd Credit work

Week 5	Quiz LEED GA – Water Efficiency EBOM – Water Efficiency Speaker – Trip to Metro? Credit work

Week 6	Student Presentations – Prerequisite/Credit requirements – Data availability, Data retrieval, Data analysis, Data presentation

Week 7	Quiz LEED GA - Energy and Atmosphere EBOM – Energy and Atmosphere Speaker – Josh Arnold Credit work

Week 8	Quiz LEED GA - Energy and Atmosphere EBOM – Energy and Atmosphere Speaker – Josh Arnold Credit Work

Week 9	Quiz LEED GA - Energy and Atmosphere EBOM – Energy and Atmosphere Speaker – Josh Arnold

	Credit work

Week 10	Quiz LEED GA – Materials and Resources EBOM – Materials and Resources Speaker – Chuck Carpenter? Trip to OCCRA? Camillus? Lisa Campagna Credit work

Week 11	Quiz LEED GA – Indoor Environmental Quality EBOM – Indoor Environmental Quality Speaker – Mike Miller, Christine Langlois Credit Work

Week 12	Quiz LEED GA – Regional Priorities EBOM – Innovation credits? Speaker – Kevin Stack, Tracie Hall, Lauren Staniec Credit Work

Week 13	• Quiz • • LEED Process – • Rehearsal – final presentation

Week 14	Final Presentation

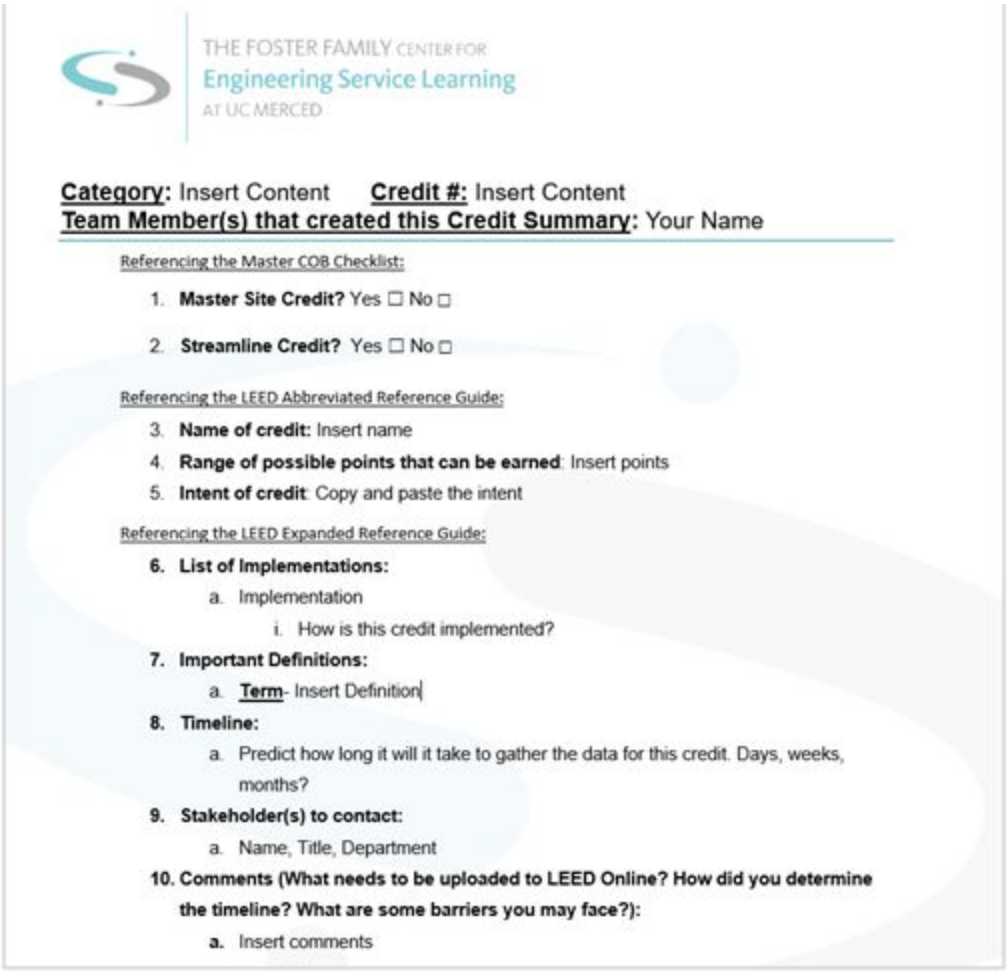
Week 15	Students evaluate experience, plan for succession, provide feedback from LEED GA

Assignments –

Assignment 1

ASSIGNMENTS:

Homework #1: Minimum Program Requirements AND Prerequisite Summaries (5 points): Maximum three (3) pages of text, 1.5 spacing and 11pt font, hard copy. Summarize [3] Minimum Program Requirements outlined in the Reference Guide. Then, list and summarize the [12] Prerequisite requirements, also outlined in the Reference Guide. **DUE WEEK 3,**



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AT UC MERCED

Category: Insert Content **Credit #:** Insert Content
Team Member(s) that created this Credit Summary: Your Name

Referencing the Master COB Checklist:

1. **Master Site Credit?** Yes ☐ No ☐
2. **Streamline Credit?** Yes ☐ No ☐

Referencing the LEED Abbreviated Reference Guide:

3. **Name of credit:** Insert name
4. **Range of possible points that can be earned**: Insert points
5. **Intent of credit**: Copy and paste the intent

Referencing the LEED Expanded Reference Guide:

6. **List of Implementations:**
   a. Implementation
      i. How is this credit implemented?
7. **Important Definitions:**
   a. **Term**- Insert Definition
8. **Timeline:**
   a. Predict how long it will it take to gather the data for this credit. Days, weeks, months?
9. **Stakeholder(s) to contact:**
   a. Name, Title, Department
10. **Comments (What needs to be uploaded to LEED Online? How did you determine the timeline? What are some barriers you may face?):**
    a. Insert comments