

Bossier Parish Community College  
Master Syllabus

**Course Prefix and Number:** CONS 200

**Credit Hours:** 3-3-0

**Course Title:** Sustainable Construction Science

**Course Prerequisites:** CONS 101 and CONS 102

**Textbook(s):** Leffers, Regina. Sustainable Construction and Design 1<sup>st</sup> Edition. Pearson, 2010. ISBN: 9780135027288.

**Course Description:** Introduction to the technologies of sustainable construction focusing on energy efficiency, sustainable materials, environmental impact and indoor air quality. Impacts of sustainable construction studied will include changes to the building process, verification and reporting, and meeting the needs of present generations without compromising the abilities of future generations.

**Learning Outcomes:**

At the end of this course, the student will:

- A. demonstrate systems thinking processes for global sustainability issues such as interdependence, natural systems, collaboration, and material consciousness;
- B. explain high-performance green design and construction delivery systems for green projects; and
- C. apply the U. S. Green Building Council – Leadership in Energy and Environmental Design assessment and rating standards.

To achieve the learning outcomes, the student will or will be able to:

(The letter designations at the end of each statement refer to the learning outcome(s).)

1. explain the science of matter and material properties as it applies to sustainability; (A)
2. define the part that nature plays in sustainability; (A)
3. discuss generative design and construction; (A)
4. define and elaborate on the concepts of collaboration for sustainability action
5. illustrate the concept of high-performance green buildings and the advantages of this type of construction; (B)
6. become familiar with economic issues involving high performance green buildings; (B)
7. develop a conceptual understanding of sustainable construction, whole-building design and integrated design; (B)
8. discuss the differences between conventional, high performance, and green building delivery systems; (B)
9. understand the process of executing a green building project; (B)
10. use in presentations the LEED point system for sustainability attainment; (C)
11. demonstrate familiarity with USGBC's suite of LEED assessment standards; (C)
12. become familiar with various documentation requirements for green building projects; (C)

13. discuss the challenges for future green buildings and adjusting both the perception and methods ecological design; (C) and
14. become aware of strategies for application of LEED to various project types. (C)

**Course Requirements:** Textbook, MS Office Powerpoint Software

**Course Grading Scale:**

90 – 100	A
80 – 89	B
70 – 79	C
60 – 69	D
0 – 59	F

**Attendance Policy:** The college attendance policy is available at <http://www.bpcc.edu/catalog/current/academicpolicies.html>

**Course Fees:** N/A

**Nondiscrimination Statement:** Bossier Parish Community College does not discriminate on the basis of race, color, national origin, gender, age, religion, qualified disability, marital status, veteran's status, or sexual orientation in admission to its programs, services, or activities, in access to them, in treatment of individuals, or in any aspect of its operations. Bossier Parish Community College does not discriminate in its hiring or employment practices.

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