J. Sargeant Reynolds Community College
Course Content Summary

Course Prefix and Number: BLD 200 **Credits:** 3

Course Title: Sustainable Construction

Course Description: Teaches students the specialized construction management best practices that must be utilized when managing a sustainable project. Includes industry standards for green construction as identified by popular building rating systems. Lecture 3 hours per week.

General Course Purpose: The primary purpose of this course will be to indoctrinate students in the fundamentals of building design and technology, which incorporate the principles of sustainable construction, also known as "green" technology. Course required for the Contemporary Technology for Design and Building Construction Management specialization of the Architectural and Engineering Technology AAS degree.

Course Prerequisites and Co-requisites:
None

Student Learning Outcomes:
Upon completing the course, the student will be able to
a. Evaluate the potential of the building site to mitigate environmental impact of the structure and the difference between greenfields and brownfields
b. Identify the concept and means for achieving a building design that results in a "low carbon" footprint and the importance of sustainable energy production;
c. Incorporate recyclable materials into a building design as well as the importance of local sourced materials; and
d. Assess the economic impact/implications of green construction on a building project.

Major Topics to Be Included:
a. "Passive design technology"
b. "Renewable" building materials
c. The importance of recycling and reuse of materials
d. Design of building for "Deconstruction"
e. Renewable energy resources and purchasing of carbon credit