Minnesota State University Moorhead

CM 327: Sustainability in the Built Environment

A. COURSE DESCRIPTION

Credits: 3

Lecture Hours/Week: 3

Lab Hours/Week: 0

OJT Hours/Week: *.*

Prerequisites: None

Corequisites: None

MnTC Goals: Goal 10 - People/Environment

The purpose of the course is to provide an overview of living in a sustainable environment and what we can do as a society to measure our resource use. Also to encourage a change in our views regarding our limited resources and our overuse of the ecosystem by understanding our own culpability. Student awareness of energy conservation is modeled through construction principles that can be broadly applied to everyday lifestyle changes in our daily activities including where we live and where we work and the consumer choices we make in those environments. The U.S. Green Building Council Leadership in Energy and Environmental Design (LEED) criteria are discussed. Major alternatives to LEED will also be covered. This course is open to all students. MnTC Goal 10.

B. COURSE EFFECTIVE DATES: 05/18/2009 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

1. Vocabulary
2. History and Rise of Sustainability
3. Ethics
4. Building Assessment Systems
5. Building Systems Construction
6. Energy Efficiency Impacts on the Build Environment
7. Green Building Products and Materials
8. LEED and Green Globes
9. Sustainable Sites

D. LEARNING OUTCOMES (General)

1. Student will demonstrate their knowledge base of sustainability as it pertains to the environment, building systems, operation and maintenance of the built environment, and government regulations.
2. Student will demonstrate their ability to apply ethical concepts to regulations and governance as it pertains to the built environment.
3. Student will develop an understanding of how a closed loop is needed to achieve sustainability.

E. Minnesota Transfer Curriculum Goal Area(s) and Competencies

Goal 10 - People/Environment

1. Explain the basic structure and function of various natural ecosystems and of human adaptive strategies within those systems.
2. Describe the basic institutional arrangements (social, legal, political, economic, religious) that are evolving to deal with environmental and natural resource challenges.
3. Evaluate critically environmental and natural resource issues in light of understandings about interrelationships, ecosystems, and institutions.
4. Articulate and defend the actions they would take on various environmental issues.

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

G. SPECIAL INFORMATION

None noted