**BARTON COMMUNITY COLLEGE**

**COURSE SYLLABUS**

**Fall 2013**

# **GENERAL COURSE INFORMATION**

Course Number: OSHA 1013

Course Title: Machinery and Machine Guarding Standards

Credit Hours: 2

Prerequisite: None

Division/Discipline: Technical Education Division

Course Description: This course provides instruction provided on the hazards associated with various kinds of machinery and the control of hazardous energy sources. The course presents an approach to machinery inspection that enables participants to recognize hazards and to provide options to achieve abatement. These hazards include mechanical motions and actions created by points of operation and other machinery processes.

# **CLASSROOM POLICY**

Students and faculty of Barton Community College constitute a special community engaged in the process of education. The College assumes that its students and faculty will demonstrate a code of personal honor that is based upon courtesy, integrity, common sense, and respect for others both within and outside the classroom.

The College reserves the right to suspend a student for conduct that is detrimental to the College's educational endeavors as outlined in the College catalog.

Plagiarism on any academic endeavors at Barton Community College will not be tolerated. Learn the rules of, and avoid instances of, intentional or unintentional plagiarism.

Anyone seeking an accommodation under provisions of the Americans with Disabilities Act should notify Student Support Services. Additional information about academic integrity can be found at the following link:

<http://academicintegrity.bartonccc.edu/>

# **COURSE AS VIEWED IN THE TOTAL CURRICULUM**

Machinery and Machine Guarding Standards stresses an understanding of the complexity of the industrial hazard control problem by thoroughly examining elements of safety and health enumerated in the Occupational Safety and Health Administration (OSHA) general industry standards.

The transferability of all college courses will vary among institutions, and perhaps even among departments, colleges, or programs within an institution. Institutional requirements may also change without prior notification. It is the student's responsibility to obtain relevant information from intended transfer institutions to insure that the courses the student enrolls in are the most appropriate set of courses for the transfer program.

# **ASSESSMENT OF STUDENT LEARNING**

Barton Community College is committed to the assessment of student learning and to quality education. Assessment activities provide a means to develop an understanding of how students learn, what they know, and what they can do with their knowledge. Results from these various activities guide Barton, as a learning college, in finding ways to improve student learning.

## Course Outcomes and Core Competencies

1. Distinguish among basic types of manufacturing processes.
   * + - 1. Describe sources of energy
         2. Determine need for a lockout/tagout program
2. Identify specific violations of current OSHA standards.
   * + - 1. Choose the appropriate standard that covers an identified hazard.
         2. Interpret the standard and the steps needed to correct an identified hazard.
3. Identify other sources of safety and health standards such as the American National Standards Institute (ANSI).
   * + - 1. List and compare other reputable sources that are available for guidance.
         2. Choose and apply an appropriate source for the situation at hand.
4. Describe important considerations in building design and layout such as egress, walking surfaces, materials handling, sanitation, and traffic control.
   * + - 1. Examine the regulations and interpret if a scenario is within the sited standard.
         2. Give examples of methods to comply with sanitation standards.
5. Define the specific classes of industrial trucks and the common hazards associated with their operation and control strategies to reduce hazards.
   * + - 1. Compare and contrast off-road, electric, propane, and diesel industrial trucks.
         2. Develop procedures of hazard isolation on a given industrial truck.
6. Identify point of operation and power transmission exposures for a variety of industrial equipment.
   * + - 1. Differentiate between hydraulic, electric, and other commonly cited hazards.
         2. Explain the point of operation and how it relates to machine guarding.
7. Develop implementation strategies for reducing machine related exposures.
   * + - 1. Explain ways to control energy sources given a situation.
         2. Define the difference between lock Out/tag out and blocking.
8. **INSTRUCTOR'S EXPECTATIONS OF STUDENTS IN CLASS**
9. **TEXTBOOKS AND OTHER REQUIRED MATERIALS**

1. **REFERENCES**

# **METHODS OF INSTRUCTION AND EVALUATION**

# **ATTENDANCE REQUIREMENTS**

1. **COURSE OUTLINE**