**BARTON COMMUNITY COLLEGE**

**COURSE SYLLABUS**

**FALL 2013**

# **GENERAL COURSE INFORMATION**

Course Number: OSHA 1012

Course Title: Hazardous Materials

Credit Hours: 2

Prerequisite: None

Division/Discipline:

Course Description: This course provides a detailed overview of the Occupational Safety and Health Administration’s (OSHA) general industry standards related to hazardous materials. Topics covered include flammable and combustible liquids, compressed gasses, cryogenic liquids, and liquid petroleum. Hazardous processes such as spraying and dipping operations are covered as well.

# **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**

This course is designed to provide students with instruction in hazardous material classifications, general environmental controls, process safety management, and emergency planning. This course is recommended for those with the responsibility of managing safety and health in the workplace, safety committee members, and other personnel responsible for safety.

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 & Core Competencies

1. Assess compliance with the sections of OSHA standards 29 Code Federal Regulations (CFR) 1910 Subparts H and S regarding hazardous (Classified) locations.
   1. Identify primary hazards related to hazardous (classified) locations.
   2. Select relevant standards for hazardous (classified) locations.
   3. Explain primary abatement strategies for the specific locations.
2. Interpret OSHA standard 29 CFR 1910.106 regarding flammable and combustible liquids.
   1. Identify primary hazards related to the movement, storage and use of flammable and combustible liquids.
   2. Select relevant standards as they relate to moving, storing and handling of flammable and combustible liquids.
   3. Explain primary abatement strategies for the specific flammable and combustible liquid hazards.
3. Identify OSHA requirements related to compressed gases, acetylene and nitrous oxide.
   1. Identify primary hazards related to movement storage and use of compressed gases, acetylene and nitrous oxide.
   2. Select relevant standards as they relate to moving, storage and handling of compressed gases.
   3. Explain primary abatement strategies for the specific compressed gases hazards.
4. Differentiate OSHA requirements related to cryogenics and refrigerated liquids.
   1. Identify primary hazards related to movement, storage and use of cryogenics and refrigerated liquids.
   2. Select relevant standards as they relate to moving, storing and handling of cryogenics and refrigerated liquids.
   3. Explain primary abatement strategies for the specific cryogenics and refrigerated liquid hazards.
5. Interpret OSHA standard 29 CFR 1910.107 and general duty clause related to spray finishes.
   1. Identify primary hazards related to common spray finishing operations.
   2. Select relevant standards as they relate to spray finishing.
   3. Explain primary abatement strategies for the specific hazards common to spray finishing processes
6. Interpret OSHA standard 29 CFR 1910.122-126 regarding dipping and coating operations.
   1. Identify primary hazards of dipping and coating operations.
   2. Select relevant standards as they relate to dipping and coating operations.
   3. Explain primary abatement strategies for the specific hazards related to dipping and coating operations
7. Interpret OSHA standard 29 CFR 1910.111 regarding storage and handling of anhydrous ammonia.
   1. Identify primary hazards related to the movement, storage and use of Ammonia Anhydrous
   2. Select relevant standards as they relate to movement, storage and use of Ammonia Anhydrous.
   3. Explain primary abatement strategies for the specific hazards related to Ammonia Anhydrous.
8. Interpret OSHA standard 29 CFR 1910.110 regarding storage and handling of liquefied petroleum gasses Subpart H.
   1. Identify primary fire and explosion hazards of LP Gases
   2. Select relevant standards as they relate to liquid petroleum.
   3. Explain primary abatement strategies for the specific hazards to the use of LP gases
9. **INSTRUCTOR'S EXPECTATIONS OF STUDENTS IN CLASS**

# **TEXTBOOKS AND OTHER REQUIRED MATERIALS**

# **REFERENCES**

# **METHODS OF INSTRUCTION AND EVALUATION**

# **ATTENDANCE REQUIREMENTS**

1. **COURSE OUTLINE**