**BARTON COMMUNITY COLLEGE**

**COURSE SYLLABUS**

**Fall 2013**

# **GENERAL COURSE INFORMATION**

Course Number: OSHA 1008

Course Title: Principles of Ergonomics

Credit Hours: 1.5

Prerequisite: None

Division/Discipline: Technical Education Division

Course Description: This course will familiarize participants with the application of ergonomic principles for the reduction of musculoskeletal stress and strain in the workplace with the goal of controlling or preventing workplace musculoskeletal and nerve disorders. Participants will conduct a task analysis of jobs to identify risk factors and present plans for worker protection.

# **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 County 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 covers the use of ergonomic principles to recognize, evaluate, and control work place conditions that cause or contribute to musculoskeletal and nerve disorders. Topics include work physiology, anthropometry, musculoskeletal disorders (MSD), use of video display terminals, and risk factors such as vibration, temperature, material handling, repetition, and lifting and transfers in health care. Course emphasis is on industrial case studies covering analysis and design of work stations and equipment, exercises in manual lifting, and coverage of current Occupational Safety and Health Administration (OSHA) compliance policies.

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. Describe the impact of job and workplace design on employee safety and health.
   * + 1. Identify ergonomics and the concept of neutral postures.
       2. Define cumulative trauma disorders.
       3. Calculate methods used to help minimize musculoskeletal disorders (MSD).
       4. Analyze job tasks which have been associated with the development of MSDs.
       5. Explain the importance of reporting symptoms and injuries in the workplace.
       6. Assess injuries and ergonomic applications in construction.
2. Identify workplace characteristics that may contribute to cumulative trauma disorders.
   * + 1. Develop ergonomic checklists to identify risk factors from work tasks.
       2. Conduct detailed worksite evaluations.
3. List improvements in job, workstation, and equipment design that can reduce the potential for musculoskeletal injury.
   * + 1. Combine walk-throughs, observations, employee interviews, surveys, and questionnaires to formulate effective MSDs reductions.
4. Analyze manual lifting tasks and estimate reasonable lifting limits.
   * + 1. Design lifting techniques using National Institute of Occupational Safety & Health (NIOSH) work practices guidelines for manual lifting.
5. **INSTRUCTOR'S EXPECTATIONS OF STUDENTS IN CLASS**

# **TEXTBOOKS AND OTHER REQUIRED MATERIALS**

# **REFERENCES**

# **METHODS OF INSTRUCTION AND EVALUATION**

# **ATTENDANCE REQUIREMENTS**

1. **COURSE OUTLINE**