

EV-250 Special Topics (Fire Prevention and Ergonomics)

4 credits

Prerequisites: EV- 100 Occupational Safety and CH-115 Basic Organic and Biological Chemistry

Fire Prevention In this course the students will learn about fire fighting equipment including but not limited to fixed and portable fire suppression equipment. The students will also be introduced to different methods of fire prevention, how certain chemicals and materials burn, and what additional hazards they will produce. This course will also address fire detection and employee alarm systems. Resources will include the local Fire Departments, National Fire Protection Association (NFPA), and Federal Emergency Management Agency (FEMA).

Ergonomics This course will address different means to reduce the number and severity of musculoskeletal disorders (MSDs) caused by exposure to risk factors in the workplace. Ergonomics is the science of fitting the job to the worker. Work-related musculoskeletal disorders (WMSDs) can result when there is a mismatch between the physical requirements of the job and the physical capacity of the worker. Repetitive motion throughout a workday, working in awkward position(s), exerting a great deal of force to perform jobs, and repeatedly lifting heavy objects can be contributing factor(s) in individuals to develop WMSDs.

Course Objectives:

1. Identify potential fire hazards
2. Identify different means of fire suppression systems and understand each systems limitations
3. Understand how each fire suppression system, fixed or portable operate
4. Understand regulatory agencies such as FEMA and NFPA regulations in regards to fire detection systems and plant alarm systems.
5. Recognize Cumulative Trauma Disorders (CTD); types of CTD, jobs that are associated with CTD
6. Students will learn how to identify CTD Indicators
7. Students will learn different methods for the prevention CTD; which include, redesigning jobs, workstations and employee training.