

# SAFETY TECHNOLOGY (SAFE)

## SAFE 120, EMERGENCY PLANNING 2 (2)

Worksite Disaster Response covers material involving the topics of Hazardous Materials for First Responders, Pandemic Influenza and Introduction to Emergency & Evacuation Planning. Students will learn how to identify hazardous materials contamination and basic safety precautions. Topics include hazardous materials related terminology, basic protective procedures, information gathering, preparing for mass decontamination, constructing an emergency and evacuation plan, how to control and mitigate pandemic scenarios. This course covers the outcomes covered in the Occupational Safety and Health Administration (OSHA) Evacuation and Emergency Planning (7105) and Pandemic Influenza Preparedness (7210) certificates. (A special fee will be assessed.)

**General Education:** GEO1, GEO2, GEO5

**Typically Offered:** Offer as required

## SAFE 135, HAZWOPER 3 (4)

Students will become aware of how to safely work in areas that have suffered environmental damage and environmental spills, and they will learn how to clean and protect that environment and environmental emergency situations. Specifically, the treatment, storage or disposal (TSD) operation regulated by 40 CFR parts 264 and 265 by state law authorized under RCRA and required to have a permit or interim status from EPA pursuant to 40 CFR 270.1 or from a state agency pursuant to RCRA. This course covers the outcomes covered in the Occupational Safety and Health Administration (OSHA) 40 Hour HAZWOPER (Hazardous Waste Operations and Emergency Response) certificate. Laboratory required. (A special fee will be assessed.)

**General Education:** GEO1, GEO5

**Typically Offered:** Fall and Spring Semesters

## SAFE 146, SAFETY IN GENERAL INDUSTRY 3 (3)

This course is designed to provide training to workers in general industry with safety responsibilities. The course will be instructed by an OSHA recognized instructor and will emphasize hazard identification, avoidance, control and prevention. Successful participants will be awarded an OSHA 30 card for general industry safety. Laboratory required. (A special fee will be assessed.)

**General Education:** GEO1, GEO5

**Typically Offered:** Fall and Spring Semesters

## SAFE 206, HAZARDOUS MATERIALS 3 (3)

This course is designed to introduce student to the OSHA General Industry standards related to the use of hazardous materials. Topics range from flammable and combustible liquids to cryogenic liquids. Various workplace applications of these materials, including spraying, dipping, etc, are included in the discussion. Students will learn how to recognize, identify, move, store, and handle hazardous materials. This course covers the outcomes covered in the Occupational Safety and Health Administration (OSHA) Hazardous Materials certificate. Safety considerations relating to combustible dusts will also be discussed. Laboratory required. (A special fee will be assessed.)

**General Education:** GEO1, GEO2, GEO5

**Typically Offered:** Fall Semester

## SAFE 211, BEHAVIOR BASED SAFETY 3 (3)

The course reviews the relationship between OSHA and small businesses, how to properly conduct incident investigations and the implementation and impact of proper behavioral based safety practices in the workplace. Additional discussion of process safety management, OSHA subpart H and safety an health management practices are also discussed.

**General Education:** GEO1, GEO2, GEO4

**Typically Offered:** Fall Semester

## SAFE 226, INDUSTRIAL HYGIENE 3 (3)

Students will learn the applicable OSHA regulations and procedures involving Industrial Hygiene. This course aims to prepare student to recognize potential workplace health hazards and know how to correctly avoid, minimize, control, and/or eliminate said hazards where possible. Topics covered will include permissible exposure limits, OSHA health standards, respiratory protection measures, engineering controls, hazards communication, sampling procedures, and others. Additional topics include respiratory protection and ergonomics in relation to the workplace. This course covers the outcomes covered in the Occupational Safety and Health Administration (OSHA) OSHA Guide to Industrial Hygiene (521) certificate. (A special fee will be assessed.)

**General Education:** GEO1, GEO2, GEO4, GEO5

**Typically Offered:** Spring Semester

## SAFE 229, HAZARDOUS MATERIAL TRANSPORTATION AND STORAGE 2 (2)

The course covers topics related to the Hazardous Materials Regulations (HMR) described in CFR 49. The course addresses and provides knowledge of the HMR and its requirements and enables the recognition and properly identify hazardous materials. Discussion of proper methods of the storage, handling and shipment of dangerous goods is also included.

**General Education:** GEO1, GEO4, GEO5

**Typically Offered:** Fall and Spring Semesters

## SAFE 236, MACHINE AND EQUIPMENT SAFETY 3 (3)

This course familiarizes the student with various types of common machinery and the related safety standards. Guidance is provided on the hazards associated with various kinds of machinery and the control of hazardous energy sources (lock-out/tagout). 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, electrical considerations and associated actions created by points of operation and other machinery processes. This course covers the outcomes covered in the Occupational Safety and Health Administration (OSHA) Machinery and Machine Guarding Basics (2045) certificate. (A special fee will be assessed.)

**General Education:** GEO1, GEO2, GEO5

**Typically Offered:** Fall Semester

## SAFE 239, ENVIRONMENTAL COMPLIANCE 2 (2)

The course covers topics relating to the Code of Federal Regulations Title 40. The course discusses the Federal laws and regulations that pertain to environmental protection. Additional topics include the EPA and its mission to protect human health and the environment. Topics include Environmental Protection Agency regulations relating to Air, Water and Soil and other related topics.

**General Education:** GEO2, GEO4

**Typically Offered:** Spring Semester

**SAFE 246, LEGAL ASPECTS OF HEALTH AND SAFETY 2 (2)**

The course includes a study of the legal authority of the Occupational Safety and Health Administration (OSHA). This course includes a review of employer's legal responsibilities and proactive measures to ensure compliance with the OSH act, EPA Regulations, and legal and regulatory framework in America. Ethical considerations in the legal application of health and safety practices will also be discussed.

**General Education:** GE04, GE06

**Typically Offered:** Spring Semester

**SAFE 249, ENVIRONMENTAL HEALTH AND SAFETY TRAINING COMMUNICATIONS 2 (2)**

The course covers topics related to the best practices of environmental health and safety training in both commercial and industrial environments. Emphasis will be placed on the various pedagogical approaches to conducting safety training with non-traditional students and adult learners. The course is designed to give students the skills to conduct environmental health and safety training in commercial and industrial workplaces.

**General Education:** GE01, GE04, GE06

**Typically Offered:** Spring Semester

**SAFE 287, WORK BASED LEARNING I - SAFE 1-3 (1)**

This course provides supervised work experience building on experience in Work-Based Learning with approved employer(s) in an area related to the student's program. Emphasis is placed on integrating classroom learning with work experience. Students will be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies. Activities are coordinated and evaluated by college personnel.

**General Education:** GE01, GE02, GE06, GE08

**Course Entry Requirement(s):** Prerequisite: Minimum 2.0 GPA overall and division approval

**Typically Offered:** Offer as required

**SAFE 336, MACHINE AND EQUIPMENT SAFETY WITH ADVANCED PROJECTS 3 (3)**

This course familiarizes the student with various types of common machinery and the related safety standards. Guidance is provided on the hazards associated with various kinds of machinery and the control of hazardous energy sources (lock-out/tagout). 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. Emphasis will be placed on the special requirements, applications and development of a machine guarding plan for use in industrial automation environments.

**General Education:** GE02, GE03, GE05

**Course Entry Requirement(s):** Prerequisite: Admission into a bachelor degree program or division approval

**Typically Offered:** Not offered this year