

Texas Essential Knowledge and Skills for Career and Technical Education

Subchapter: Law, Public Safety, Corrections and Security

OSET III - Safety Regulations (Two Credits).

- a) General Requirements: This course is recommended for students in Grades 10-12.
Recommended prerequisite: OSET I & II.
- b) Introduction: Students will learn variety of health and safety problems worldwide, and learn preventative measures to resolve, reduce and/or eliminate safety and health issues encountered at the workplace. Students will be provided with detailed information of various federal agency that are involved in workplace safety and health. Focus will be on the Occupational Safety and Health Administration (OSHA) regulations and the Department of Transportation (DOT) regulations with emphasis on identifying and applying appropriate regulatory standards (for example, site, workplace and pre/post trip inspections, compliance strategies in handling and transporting hazardous materials, reporting and recording of incidents, training, and recertification). This course will allow students to reinforce, apply, and transfer their academic knowledge and skills to a variety of interesting and relevant activities, problems and settings.

End-of-Course Outcomes:

1. Identify Federal Agencies (e.g. OSHA, DOT, EPA, WHO, DOL, etc.) that are involved and responsible for workplace safety and health.
2. Retrieve specific information, particularly from OSHA 29 CFR Part 1910 regulations and DOT 49 CFR regulations.
3. State specific purpose, mission and functions of OSHA 29 CFR Part 1910 regulations, DOT 49 CFR regulations (and other federal agencies as necessary).
4. Describe employees and employers rights and responsibilities

A. Knowledge and skills.

(1) The student will be able to demonstrate professional standards/employability skills as required by professional industry. The student is expected to:

- (a) The student achieves business and industry employability skills standards such as attendance, on-time arrival, meeting deadlines, working toward personal/team goals every day, and ethical use of technology.

(2) *The student will be able to report and record work-related injury/illness/fatality. The student is expected to:*

- (a) Identify if injury/illness/fatality is work-related exposure
- (b) Identify if injury/illness is pre-existing event such as cold/flu, mental illness, etc.
- (c) Identify if it involves days away from work and includes medical treatment
- (d) Complete the injury/illness forms with specific incidents
- (e) Orally report fatality/catastrophe of 3 or more people within 8 hours of incident to OSHA

(3) *The student will be able to recognize hazardous material. The student is expected to:*

- (a) Understand that some hazardous materials/substances can be silent killers
- (b) Know the route of exposure to hazardous materials/substances; they are through inhalation, ingestion, injection and absorption
- (c) Apply safety, isolation and identification methods when involved with hazardous materials
- (d) Recognize that hazardous material are an ever-present danger either at work or home
- (e) Recognize the federal color-code assigned to specific hazards/materials e.g. red means danger, etc.
- (f) Utilize safety data sheet (SDS) also known as material safety data sheet (msds) when in-doubt of; when handling, when exposed to or when manipulating hazardous materials/substances
- (g) Recognize unsafe work condition

(4) *The student will be able to describe range of hazards. The student is expected to:*

- (a) Understand that hazardous materials can be flammable, reactive, explosive and corrosive.
- (b) Differentiate multi-hazard exposure
- (c) Identify hazard levels (numbers, value, etc.)

(5) *The student will be able to handle and store materials/substances that are hazardous or non-hazardous. The student is expected to:*

- (a) Understand storage/stacking and means of egress rules

(b) Provide warning/caution signs

(c) Understand that there are safety protective equipment (guardrails/covers/derail/bumper-block) available to protect people and materials

(6) The student will be able to receive and/or provide training as required by OSHA. The student is expected to:

(a) Receive general information

(b) Understand that training is required for new jobs, when job task or function changes or when on restricted/limited task

(c) Understand specific training information as it pertains to specific task

(d) Understand the safety and security of specific training

(e) Understand that other training requirement/renewal/refresher may vary depending of job specifications

(f) Provide training dates and documentations as required by OSHA

(g) Display competency in training skills (be able to train others).

(7) The student will be able to adopt and apply safety measures. The student is expected to:

(a) Control workplace hazards at the source whenever possible

(b) Improve workplace safety and health program/awareness

(8) The student explores the administrative provisions. The student is expected to:

a. Identify and adhere to all parties who conduct drug and alcohol tests required by DOT agency regulations;

b. define terms used in Part 40 of the Federal Motor Carriers Safety Regulations (FMCSR) related to procedures for transportation workplace drug and alcohol testing programs

c. read and comprehend exemptions from requirements of Part 40 ;

d. identify forms used to report Management Information System (MIS) data to a DOT agency;

e. Discuss the activities of transportation employers, safety-sensitive transportation employees (including self-employed individuals, contractors and volunteers as covered by DOT agency regulations), and service agents.

f. read and understand 49 CFR Parts 300-399

(9) The student develops leadership experience as it relates to transportation, systems. The student is expected to:

- a. plan, propose, conduct, and evaluate industry-based occupational experiences;
- b. apply proper record-keeping skills as they relate to industry-based occupational experiences and;
- c. demonstrate knowledge related to employer responsibilities

(10) The student demonstrates appropriate personal and communication skills. The student is expected to:

- a. examine workplace civil rights, ethical and legal responsibilities;
- b. demonstrate an understand definitions and acronyms commonly used within the safety and health agencies/organizations
- c. Employ writing and preparation skills using technical information; and demonstrate speaking skills.

(11) The student applies appropriate research methods for DOT Regulations utilizing the FMCSA guidelines. The student is expected to:

- a. identify compatibility of state laws and regulations affecting interstate motor carrier operations
- b. discuss driver medical requirements and exemptions
- c. discuss safety fitness procedures and factors to be considered in determining safety ratings
- d. demonstrate an understanding of the processes involved in application for a certificate of registration to operate in municipalities in the united states on the United States-Mexico international border or within the commercial zones of such municipalities; and
- e. identify special training requirements §380.107: General requirements

(12) The student delves into the commercial driver's license standards; requirements and penalties (§383 FMCSA). The student is expected to:

- a. demonstrate an understanding of terns used in §383 of the FMCSA rules and regulations
- b. discuss single license requirements;
- c. demonstrate an understanding of testing and licensing procedures;
- d. explain driver disqualifications and penalties

(13) The student discusses methods to reduce sources of workplace hazards in order to promote a safe working environment. The student is expected to:

- a. discuss safe work practices and emergency procedures;

- b. identify rules and laws designed to promote safety and health in the transportation environments;
- c. read and comprehend the Federal Motor Carrier Safety Regulations General §390;
- d. explain the purpose of §390 safety regulations;
- e. demonstrate knowledge of §390 Subpart B General Requirements and Information
- f. demonstrate and understanding of driver regulations; and
- g. discuss investigative techniques including root cause