Career, Technical, & Agricultural Education

FOUNDATION SKILLS

PATHWAY: All Pathways

COURSE: All CTAE Courses

Safety, Health, and Environment UNIT 7.2:



INTRODUCTION

Annotation: Briefly describe the unit topics, tasks, methods, etc.

In this unit, students will discuss the importance of safety, health, and environmental measures in the working environment.

Grade(s):

| Χ | 9 th |
|---|------------------|
| Χ | 10 th |
| Χ | 11 th |
| Χ | 12 th |
| | |

Time: Two 50 minute periods.

Author: Meghan Cline

Additional Author(s):

Students with Disabilities:

For students with disabilities, the instructor should refer to the student's IEP to be sure that the accommodations specified are being provided. Instructors should also familiarize themselves with the provisions of Behavior Intervention Plans that may be part of a student's IEP. Frequent consultation with a student's special education instructor will be beneficial in providing appropriate differentiation.



FOCUS STANDARDS

GPS Focus Standards: Please list the standard and elements covered.

CTAE-FS-7 Safety, Health and Environment: Learners employ safety, health and environmental management systems in corporations and comprehend their importance to organizational performance and regulatory compliance.

GPS Academic Standards:

National / Local Standards / Industry / ISTE:

ESS06 Safety, Health and Environmental: Understand the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance. Follow organizational policies and procedures and contribute to continuous improvement in performance and compliance.



UNDERSTANDINGS & GOALS

Enduring Understandings: Enduring understandings are statements summarizing important ideas and have lasting value beyond the classroom. They synthesize what students should understand – not just know.

Students will understand the importance of safety, health, and environmental management systems to provide a safe and healthy work environment.

Essential Questions: Essential questions probe for deeper meaning and understanding while fostering the development of critical thinking and problem-solving skills. Example: Why is life-long learning important in the modern workplace?

- Why are safety, health and environmental factors all so important in the workplace?
- How could you find which regulations you have to follow for the type of business you want to open?

Knowledge from this Unit: Factual information.

Students will recall safety regulations pertaining to a career of their choice.

Skills from this Unit: Performance.

Students will develop a plan of action to address a variety of situations regarding safety hazards.



ASSESSMENT(S)

Assessment Method Type: Select one or more of the following. Please consider the type(s) of differentiated instruction you will be using in the classroom.

| | Pre-test |
|----|-----------------------------------------------------------------------------------------|
| | Objective assessment - multiple-choice, true- false, etc. |
| | Quizzes/Tests |
| | Unit test |
| | Group project |
| | Individual project |
| | Self-assessment - May include practice quizzes, games, simulations, checklists, etc. |
| | Self-check rubrics |
| | Self-check during writing/planning process |
| | Journal reflections on concepts, personal experiences and impact on one's life |
| | Reflect on evaluations of work from teachers, business partners, and competition judges |
| | Academic prompts |
| ., | Practice quizzes/tests |
| Х | • |
| | Essay tests |
| | Observe students working with partners |
| | Observe students role playing |
| | Peer-assessment |
| | Peer editing & commentary of products/projects/presentations using rubrics |
| | Peer editing and/or critiquing |
| | Dialogue and Discussion |
| | Student/teacher conferences |
| | Partner and small group discussions Whole group discussions |
| | Interaction with/feedback from community members/speakers and business partners |
| | Constructed Responses |
| | Chart good reading/writing/listening/speaking habits |
| | Application of skills to real-life situations/scenarios |
| | Post-test |
| | 1 OUT TOUT |

Assessment(s) Title: Safety, Health, and Environment Exam

Assessment(s) Description/Directions:

Administer attached quiz to students.

Attachments for Assessment(s): Please list.

Safety, Health, and Environment Exam



LEARNING EXPERIENCES

Instructional planning: Include lessons, activities and other learning experiences in this section with a brief description of the activities to ensure student acquisition of the knowledge and skills addressed in the standards. Complete the sequence of instruction for each lesson/task in the unit.

Sequence of Instruction

- 1. Identify the Standards. Standards should be posted in the classroom for each lesson.

 CTAE-FS-7 Safety, Health and Environment: Learners employ safety, health and environmental management systems in corporations and comprehend their importance to organizational performance and regulatory compliance.
- 2. Review Essential Questions.
 - Why are safety, health and environmental factors all so important in the workplace?
 - How could you find which regulations you have to follow for the type of business you want to open?
- 3. Lead a class discussion on safety, health, and environment.
- 4. Ask students to define safety, health, and environment hazards.
- 5. Ask students to give examples of safety, health, and environmental hazards they have seen in work setting.
- 6. Assign and explain the task to students.
- 7. Evaluate presentations using scoring matrix.
- 8. Assessment Activity

Attachments for Learning Experiences: Please list.

Notes & Reflections: May include notes to the teacher, pre-requisite knowledge & skills, suggestions, etc. Students may work independently or in groups to complete the assignment. Safety concerned in this lesson relates only to an overview of safety in the workplace. Safety related to the pathway, classroom, and laboratory should be covered in other, more specific safety lessons.



CULMINATING PERFORMANCE TASK (Optional)

Culminating Unit Performance Task Title: Health and Safety Skills

Culminating Unit Performance Task Description/Directions/Differentiated Instruction:

Select one of the following scenarios:

- 1. You are opening up a restaurant, and you need to know what regulations you are to follow. OSHA (Occupational Safety and Health Administration) is the main federal agency that enforces health and safety legislation. Research at least 10 applicable safety and health regulations and present the steps that a restaurant entrepreneur would need to take to meet federal/state regulations. Identify at least 10 examples of potential safety or health risks in a restaurant. (www.osha.gov and www.usda.gov)
- 2. You are the manager of a busy department store and need to update your emergency procedures in case of a fire. List the guidelines for fire safety. Distinguish among different phases of fire. Explain the thermal layer concept, and match fire classes with their descriptions. List the four main classes of fire extinguishers. Describe the differences between a flammable liquid and a combustible liquid, and give the temperature differences. The National Fire Protection Association provides useful information on fires. (www.nfpa.org)
- 3. You are the CEO of a business and are interested in the ergonomic process in order for your business to flow more smoothly and keep your employees safe, healthy, and productive. Define ergonomics and describe the two approaches to the ergonomic process. Define body mechanics and list the basic rules for proper body mechanics. Explain how NIOSH (National Institute for Occupational Safety and Health) evaluates the ergonomic process, and state the NIOSH responsibilities in the ergonomic process. (www.cdc.gov/NIOSH)
- 4. Select an occupation and research the potential safety, health, and environmental hazards. Explain what agencies have regulation control related to a career you choose. Prepare a detailed report.

In preparing your plan, be sure to include the following:

- 1. Explain the problem in detail.
- 2. Research your situation. Refer to the given website for information.
- 3. Develop a plan of action.
- 4. Place all information in a poster or some other visual aid.

5. Present the report to the class.

Attachments for Culminating Performance Task: Please list.

Scoring Matrix

| Grading Criteria | Superior 5 | Excellent 4 | Good 3 | Fair 2 | Poor 1 |
|---------------------|---------------|----------------|-----------|-----------|-----------|
| Organization | | | | | |
| Quality of | | | | | |
| Information | | | | | |
| Grammar & | | | | | |
| Spelling | | | | | |
| Interest Level | | | | | |
| Speaking & | | | | | |
| Eye Contact | | | | | |
| Team Participation* | | | | | |

^{*}Team Participation may be omitted if students work independently.

Superior – Meets all requirements; exhaustive coverage; completely understands problem and ability to apply solution; shows originality; few grammatical errors.

Excellent – Meets all requirements of task; well defined and documented; excellent understanding and ability to apply solution; shows evidence of creativity; few errors.

Good – Meets requirements; fairly well planned and documented; shows an understanding and ability to apply data to the solution of new problems; could show more evidence of creativity and more details; few grammatical/mechanical errors.

Fair – Uneven work; meets some requirements; poor coverage; little understanding and ability to apply data to problem solving; needs to improve in significant areas; many grammatical/mechanical errors.

Poor – Meets few if any requirements; little understanding and little application of solution; grammatical/mechanical errors significant.



| UNIT RESOURCES | | | | | | | |
|------------------------------------|--------|--------------------|--|---------------------------------|--|--|--|
| Web Resources: | | | | | | | |
| www.osha.gov | | | | | | | |
| www.usda.gov | | | | | | | |
| www.nfpa.org | | | | | | | |
| www.cdc.gov/NIOSH | | | | | | | |
| | | | | | | | |
| Attachment(s): | | | | | | | |
| | | | | | | | |
| Materials & Equipment: | | | | | | | |
| Materials a Equipment. | | | | | | | |
| What 21st Contury Tochnology was u | rcod i | in this unit. | | | | | |
| What 21st Century Technology was u | seu i | <u>.</u> | | | | | |
| Slide Show Software | | Graphing Software | | Audio File(s) | | | |
| Interactive Whiteboard | | Calculator | | Graphic Organizer | | | |
| Student Response System | | Desktop Publishing | | Image File(s) | | | |
| Web Design Software | | Blog | | Video | | | |
| Animation Software | | Wiki | | Electronic Game or Puzzle Maker | | | |
| Email | Χ | Website | | I | | | |
| | | | | | | | |
| | | | | | | | |