GEORGIA | PEACH STATE PATHWAYS

Career, Technical, & Agricultural Education

HEALTHCARE SCIENCE

COURSE: 25.521 Introduction to Healthcare Science

UNIT: 3.1 Safety Applications in Healthcare

INTRODUCTION

Annotation:

In this unit students will be introduced to the safety guidelines for classroom, laboratory, and facility setting as outlined by OSHA. Students will learn about the principles of good body mechanics and apply these principles in moving and lifting. They will also research and develop a disaster preparedness plan, practice disaster preparedness procedures and plan for home evacuation in case of a disaster.

Grade(s):

X	9th
X	10th
X	11th
X	12th

Time: Five 50 minute class periods

Author: Laura Mesmer, RN, Phyllis Dumas, RN, Brochure Rubric-Modification of Rubric by Tiffany Lacey

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:

HS-IHS-2: Students will maintain a safe work environment & prevent accidents by using safety precautions and or practices including adherence to hazardous labeling requirements and compliance with safety signs, symbols and labels.

- **a.** Analyze the role and the responsibilities of the healthcare provider (student) in the classroom, laboratory, and various workplace settings in an emergency situation.
- **b.** Demonstrate disaster preparedness procedures for each emergency situation – fire prevention and the emergency evacuation plan, inclement weather, sniper attack, student (patient) out-of-control, bioterrorism, and bomb threat
- **c.** Compare and contrast common emergency codes used in the workplace setting to notify staff of impending emergency procedures (code 99, Dr. Twister, etc.) and acknowledge that these codes may vary in each setting.
- **d.** Demonstrate and incorporate proper use of ergonomics and correct body mechanics in the classroom, laboratory, and workplace

CTAE-FS-2: Academic Foundations: Learners achieve state academic standards at or above grade level.
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:

SCSh2: Students will use standard safety practices for all classroom laboratory and workplace investigations
SAP1: Students will analyze anatomical structures in relationship to their physiological functions

National / Local Standards / Industry / ISTE:

UNDERSTANDINGS & GOALS

Enduring Understandings:

Students will understand:

- Principles of good body mechanics
- Types of fire extinguishers and purpose of each
- Policies for clients/facility evacuation
- Identification of emergency codes
- OSHA guidelines for safety practices

Essential Questions:

- How does practicing good body mechanics affect me?
- How do safety and emergency guidelines, policies, procedures, codes, and practices work in the classroom and healthcare setting/?
- How do I maintain safety in the classroom, laboratory, and workplace settings?

Knowledge from this Unit:

- The basic principles and necessity of good body mechanics
- The basic OSHA guidelines are: MSDS sheets, clinical safety, & standard precautions.
- The differences in emergency codes and the purpose of each.
- The different types of fire extinguishers and the purpose of each.
- The role and the responsibilities of the healthcare provider (student) in the classroom, laboratory, and various workplace settings in an emergency situation

Skills from this Unit:

- Demonstrate proper body mechanics
- Develop an evacuation plan
- Demonstrate how to respond in various disasters

ASSESSMENT(S)

Assessment Method Type:

_____ Pre-test
X 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
X Subjective assessment/Informal observations
__ 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

Assessment(s) Title:

Safety Test

Assessment(s) Description/Directions:

- This is a test over the whole unit on safety to be given at the end of the week.
- The instructor will need to create safety violations in a lab setting.
- The instructor will also want to have some safety procedures done correctly.
- Instructions for Instructor included below.
- The students will go in the lab in groups of 3-4 and identify what is safe and what is not.
- Student handout included below

Attachments for Assessment(s):

Rubric for Performance Task
Uploaded file: Are all Patients Safe in the.doc

Student/Teacher Directions, Graphic Organizers, Templates, etc. (Optional)
Uploaded file: Instructions for Safety Unit Activity.doc

Student Handout (Optional)
Uploaded file: Are all Patients Safe in the.doc

LEARNING EXPERIENCES

Sequence of Instruction

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

HS-IHS-2: Students will maintain a safe work environment & prevent accidents by using safety precautions and or practices including adherence to hazardous labeling requirements and compliance with safety signs, symbols and labels.

CTAE-FS-2. Academic Foundations: Learners achieve state academic standards at or above grade level.
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

SCSh2. Students will use standard safety practices for all classroom laboratory and workplace investigations
SAP1. Students will analyze anatomical structures in relationship to their physiological functions

2. Review Essential Questions.

- How does practicing good body mechanics affect me?
- How do safety and emergency guidelines, policies, procedures, codes, and practices work in the classroom and healthcare setting/?
- How do I maintain safety in the classroom, laboratory, and workplace settings?

3. Identify and review the unit vocabulary.

4. Assessment Activity.

Learning Activities:

1. Introduce the lesson by creating unsafe situations in the classroom and asking students to comment on their observations. Explain to students that they will learn about different aspects of safety and to do that they will have a special project to complete as a team and present to the whole class. Ask them what kinds of disasters they have knowledge of or have heard. Ask them if they recall what happened to the people involved. Then introduce the disaster preparedness task on day one and give students the instruction sheet and rubric for the assignment. Students will need some computer lab time to work on this assignment and give them a deadline for completion.
2. Define principles of correct body mechanics (see handout)
3. Use multimedia presentation to discuss safety
4. Demonstrates correct use of body mechanics
5. Identify components of the MSDS sheets and proper actions to take for hazardous materials
6. Identifies code names with emergency procedures
7. Create a plan for various disasters-disaster plan activity
8. Student may role-play emergency situations
9. Discuss the role and the responsibilities of the healthcare provider (student) in the classroom, laboratory, and various workplace settings in an emergency situation including disasters
10. Discuss Fire Safety
11. Demonstrate Correct use of fire extinguisher
12. Complete lab safety activity
13. Complete written safety test

Attachments for Learning Experiences:

Notes & Reflections: May include notes to the teacher, pre-requisite knowledge & skills, suggestions, etc.

Multimedia presentations are available at the websites listed below to assist in teaching this unit. The skills evaluation sheets that accompany your textbook can be used for the body mechanics and fire safety evaluations.

CULMINATING PERFORMANCE TASK (Optional)

Culminating Unit Performance Task Title:

1. Safety Violations, 2 Body Mechanics, 3 Disaster Preparedness, Demonstrate proper body mechanics

- Creation of evacuation plan for emergency preparedness: tornado, fire, etc.
- Demonstrate use of fire extinguisher
- Disaster drill- evacuate students

Culminating Unit Performance Task Description/Directions/Differentiated Instruction:

The instructor will need to create safety violations in a lab setting.

The instructor will also want to have some safety procedures done correctly.

Instructions for Instructor included below

Students will go in the lab in groups of 3-4 and identify what is safe and what is not.

Student handout included below

There are 3 other performance tasks associated with this unit they are as follows:

Body Mechanics

Fires Safety

Disaster Preparedness

Attachments for Culminating Performance Task:

Rubric for Performance Task: Disaster Preparedness Brochure & Demonstration

UNIT RESOURCES

Web Resources:

Lab safety Library: http://siri.uvm.edu/ppt/powerpt.html

This is a great site that has multiple power point presentations about all kinds of safety. The Instructor can make their own power point or use one from this site.

Laura Mesmer's web site:

http://effinghamschools.schoolwires.com/1077209261928187 17/blank/browse.asp?A=383&BMDRN=2000&BCOB=0&C=56906

This site is Laura Mesmer's personal site, there is a fire safety and a safety power point here (it does include body mechanics

http://www.osha.gov/fso/ote/training/outreach/gi_outreach_tp.html OSHA website with many multimedia safety presentations including instructor notes, teachers can also complete training and train their students on the OSHA guidelines. Students can receive completion cards.

Attachment(s): Supplemental files not listed in assessment, learning experiences, and performance task.

Materials & Equipment:

- Textbook
- Worksheets
- Internet
- Video
- Marker board
- Guest Speaker- Fire Department
- Disaster rubric
- Disaster Project instruction sheet
- Interactive lecture
- Body Mechanics and Fire Extinguisher Rubrics
- Items to create safety hazards

What 21st Century Technology was used in this unit?:

X	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	X	Website		