



HEALTHCARE SCIENCE

COURSE: 25.564 Emergency and Disaster Preparedness

UNIT: 10.1 Identifying and Treating Life Threatening Conditions



INTRODUCTION

Annotation:

This unit will give students the ability to identify and treat life threatening injuries of victims in a disaster or emergency situation.

Grade(s):

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

Time: Five 50 minute class periods

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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-EDP- 6: Disaster Medical Assistance. Students will demonstrate the ability to identify and treat injuries of victims in a disaster or emergency situation.

- a. Identify the “killers” (airway obstruction, bleeding, and shock).
- b. Apply techniques for opening the airway, controlling bleeding, and treating for shock.

GPS Academic Standards:

National / Local Standards / Industry / ISTE:



UNDERSTANDINGS & GOALS

Enduring Understanding:

In emergency and disaster situations some patients may have life threatening emergencies. It is important for rescuers to understand how to recognize and respond to victims with life threatening injuries or health issues.

Essential Questions:

- Why is it important to know how to care for victims with the life threatening emergencies?
- How can airway obstruction, bleeding and shock be managed safely and efficiently?

Knowledge from this Unit:

- The techniques for opening the airway, controlling bleeding, and treating for shock.
- Signs of shock
- The three types of bleeding
- Signs and symptoms of shock
- Steps to take to maintain personal safety and the safety of others

Skills from this Unit:

- Utilize standard precautions as designed by OSHA in all first aid simulations.
- Demonstrate first aid procedures to stop bleeding.
- Demonstrate first aid procedure for patient in shock.
- Demonstrate the technique for opening the airway



ASSESSMENT(S)

Assessment Method Type:

- ☐ 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
- ☒ 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:

Identifying Life Threats Performance Task

Assessment(s) Description/Directions:

Students will apply skills and knowledge learned in this unit to identify and treat airway obstruction, shock, and bleeding

Attachments for Assessment(s):

Identifying Life Threats Performance Task



LEARNING EXPERIENCES

Sequence of Instruction

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

HS-EDP- 6: Disaster Medical Assistance. Students will demonstrate the ability to identify and treat injuries of victims in a disaster or emergency situation.

2. Review Essential Questions.

- Why is it important to know how to care for victims with the life threatening emergencies?
- How can airway obstruction, bleeding and shock be managed safely and efficiently?

3. Identify and review the unit vocabulary.

Vocabulary:

- Shock
- Airway obstruction
- Head Injury
- Head-Tilt/Chin-Lift
- Direct pressure
- Pressure points
- Elevation
- Arterial bleeding
- Venous bleeding
- Capillary bleeding

Lesson One:

1. Identify the Standards. Standards should be posted in the classroom for each lesson.
2. Review Essential Questions.
3. Identify and review the unit vocabulary.

Tell the group that, in emergency medicine, airway obstruction, bleeding, and shock are “killers.” The first priority of medical operations is to attend to those potential killers by:

- Opening the airway.

- Controlling excessive bleeding.
- Treating for shock.

Explain that this section will train the group to recognize the “killers” by recognizing their symptoms and their effects on the body.

4. Present multimedia presentation (may provide notes slides for students)

Lesson 2:

1. Identify the Standards. Standards should be posted in the classroom for each lesson.
2. Review Essential Questions.
3. Identify and review the unit vocabulary.
4. Distribute Head-Tilt/Chin-Lift Handout
 - Read over the steps and demonstrate
 - Discuss any questions
5. Head-Tilt/Chin-Lift Lab

Lesson 3:

1. Identify the Standards. Standards should be posted in the classroom for each lesson.
2. Review Essential Questions.
3. Identify and review the unit vocabulary.
4. Introduce controlled bleeding
 - 1 liter of blood loss is a serious situation for an adult. To create a visual prepare 1 liter of fake blood. You may also want to prepare 5-6 quarts to show the comparison of what the body holds to what it can lose before it is serious.
5. Distribute Controlled Bleeding Handout
 - Read over the steps and demonstrate
 - Discuss any questions
6. Controlled Bleeding Lab

Lesson 4:

1. Identify the Standards. Standards should be posted in the classroom for each lesson.
2. Review Essential Questions.
3. Identify and review the unit vocabulary.
4. Introduce Shock
 - Relate shock back to controlled bleeding – if it is not treated immediately it can result in shock

5. Distribute Shock Handout

- Read over the steps and demonstrate
- Discuss any questions

6. Shock Lab

Lesson 5

1. Identify the Standards. Standards should be posted in the classroom for each lesson.
2. Review Essential Questions.
3. Identify and review the unit vocabulary.
4. Assess Identifying Life Threats Performance Task
5. Have each student perform the skills and assess utilizing the rubric
6. While the students are awaiting the performance they can complete one of the following activities:
 - Create a poster that displays the different pressure points in the body
 - Write a reflection on how delayed or incorrect treatment can impact an emergency situation
 - Draw a diagram of the upper airway and label correctly

Attachments for Learning Experiences:

- Multimedia Presentation
- Head-Tilt/Chin-Lift Steps
- Head-Tilt/Chin-Lift Lab Instructions
- Controlled Bleeding Handout
- Controlled Bleeding Lab Instructions
- Shock Handout
- Shock Lab Instructions

Notes & Reflections:

It may be beneficial to the students to provide them with a copy of the performance task rubric at the beginning of the unit so that they may have it to practice with during labs.



CULMINATING PERFORMANCE TASK (Optional)

Culminating Unit Performance Task Title:

Identifying Life Threats Performance Task

Culminating Unit Performance Task Description/Directions/Differentiated Instruction:

Students will apply skills and knowledge learned in this unit to identify and treat airway obstruction, shock, and bleeding

Attachments for Culminating Performance Task: Please list.

Identifying Life Threats Performance Task Rubric



UNIT RESOURCES

Web Resources:

www.citizencorps.gov

Attachment(s):

Materials & Equipment:

- A computer
- LCD projector
- 1 mannequin
- Fake blood (can be made from corn syrup and red food dye)
- 1 box of latex examination gloves
- 4" x 4" dressings (1 dressing for every 2 students)
- 1 triangular bandage per person
- Notecards, markers, and masking tape

Note: Some participants may be allergic to latex examination gloves. If you are aware of anyone in the class who has a latex allergy, either provide hypoallergenic gloves or suggest that the participant bring a pair of thin cotton gloves to wear underneath the examination gloves.

What 21st Century Technology was used in this unit:

<input checked="" type="checkbox"/>	Slide Show Software	<input type="checkbox"/>	Graphing Software	<input type="checkbox"/>	Audio File(s)
<input type="checkbox"/>	Interactive Whiteboard	<input type="checkbox"/>	Calculator	<input type="checkbox"/>	Graphic Organizer
<input type="checkbox"/>	Student Response System	<input type="checkbox"/>	Desktop Publishing	<input type="checkbox"/>	Image File(s)
<input type="checkbox"/>	Web Design Software	<input type="checkbox"/>	Blog	<input type="checkbox"/>	Video
<input type="checkbox"/>	Animation Software	<input type="checkbox"/>	Wiki	<input type="checkbox"/>	Electronic Game or Puzzle Maker
<input type="checkbox"/>	Email	<input type="checkbox"/>	Website		