Career, Technical, & Agricultural Education

HEALTHCARE SCIENCE

25.521 Introduction to Healthcare Science COURSE:

5.1 Introduction to Community Safety-Adult CPR UNIT:



INTRODUCTION

Annotation:

In this unit students will acquire skills for managing cardiopulmonary emergencies through the American Heart Association or American Red Cross Adult CPR training. The skills will include assessing the victim, and managing foreign body airway obstruction for conscious and unconscious victim. The student will also learn how to administer CPR.

Grade(s):

9 th
10 th
11 th
12 th

Time:

Five 50 minute periods

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Additional Author(s):

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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-IHS-13:

The student will demonstrate basic life support techniques on an adult victim while utilizing personal protective equipment devices and adhering to all standard precautions within OSHA guidelines.

Simulations may be used for demonstration purposes as necessary.

- a. Analyze the role of the respiratory and circulatory systems as it pertains to basic life support
- **b.** Perform the following: location of pulse sites, clearing and opening of obstructed airway (conscious and unconscious), rescue breathing, cardiopulmonary resuscitation, and recovery position
- c. Successfully complete the American Red Cross (ARC) and/or American Heart Association's (AHA) Adult basic life Support for healthcare Providers Training
- **d.** Apply AED and follow directions based on the scenario for an adult victim

GPS Academic Standards:

National / Local Standards / Industry / ISTE:



UNDERSTANDINGS & GOALS

Enduring Understandings:

Students will understand:

- "Chain of Survival" and activation of the EMS system
- Signs and symptoms of, respiratory and/or cardiac distress
- Identify emergency situations regarding the cardiopulmonary system
- Prioritize care for multiple victims based on assessment results
- Identify equipment/devices used for personal protection during first aid treatment according to OSHA regulatory guidelines

Essential Questions:

- How do I know if a child/infant is choking and needs assistance?
- How do I determine whether a victim is an infant or a child and which guidelines do I follow?

- What is "Chain of Survival" and how is the EMS system activated?
- What are signs and symptoms of adult choking, respiratory and/or cardiac distress?

Knowledge from this Unit:

- How to access the EMS system
- Basic CPR guidelines for adults
- When it is appropriate to use an AED
- How to observe standard precautions in performing CPR

Skills from this Unit:

- Identify emergency situations
- Demonstrate CPR technique for an adult and use an AED
- Apply standard precautions in practicing and performing CPR



ASSESSMENT(S)

Assessment Method Type:

	Pre-test Pre-test
	Objective assessment - multiple-choice, true- false, etc.
	Quizzes/Tests
	Unit test
	Group project
	Individual project
Х	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
X	Peer-assessment Peer-assessment
	Peer editing & commentary of products/projects/presentations using rubricsPeer editing and/or critiquing
Χ	Dialogue and Discussion
	Student/teacher conferences
	Partner and small group discussions
	Whole group discussions
	Interaction with/feedback from community members/speakers and business partners
Χ	Constructed Responses
	Chart good reading/writing/listening/speaking habits
	Application of skills to real-life situations/scenarios

Post-test

Assessment(s) Title:

CPR Competency Exam (practical and written test)

Assessment(s) Description/Directions:

• Follow directions on the written test and submit test to instructor. Students will be given a scenario and must demonstrate appropriate CPR techniques as indicated for the victim.

Attachments for Assessment(s):

American Heart Association and/or American Red Cross handbook, classroom textbook



LEARNING EXPERIENCES

Sequence of Instruction

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

HS-IHS-13: The student will demonstrate basic life support techniques on an adult victim while utilizing personal protective equipment devices and adhering to all standard precautions within OSHA guidelines. Simulations may be used for demonstration purposes as necessary.

2. Review Essential Questions.

- How do I know if a child/infant is choking and needs assistance?
- How do I determine whether a victim is an infant or a child and which guidelines do I follow?
- What is "Chain of Survival" and how is the EMS system activated?
- What are signs and symptoms of adult choking, respiratory and/or cardiac distress?

3. Identify and review the unit vocabulary.

4. Assessment Activity.

- a) Review standard precautions in use of mannequins.
- b) Read information in chapter/unit related to CPR.
- c) Complete workbook pages related to CPR.
- d) Show the corresponding videos from either the ARC or AHA.
- e) Demonstrate CPR techniques to students.
- f) Students will practice CPR on mannequins.

- g) Students will role-play resuscitation on a mannequin while instructor monitors student progress.
- h) Allow additional class time the following day for students to practice one and two rescuer CPR.
- i) Administer written test followed by practical exam.

Attachments for Learning Experiences:

Notes & Reflections:

Teachers should be instructors with the American Red Cross and or American Heart Association. The materials supplied by theses organizations must be followed in your classroom. These materials must be used from your handbook and not utilized from this lesson plan. Supplemental Check off is included in this plan. For teachers who are not yet trained as a CPR instructor for the American Heart Association or American Red Cross, an additional resource so that students may receive credentials may be to contact your local fire department or healthcare facility who may have trained instructors willing to help provide instruction.



CULMINATING PERFORMANCE TASK (Optional)

Culminating Unit Performance Task Title:

- CPR and AED Procedures
- Role-playing the appropriate response for a victim requiring CPR

Culminating Unit Performance Task Description/Directions/Differentiated Instruction:

- Students will perform CPR and AED Procedures on a mannequin based on American Heart Association or American red Cross Guidelines; they will also manage foreign body airway obstruction on a conscious and unconscious adult
- Divide students into small groups and provide a mannequin and a specific victim scenario to respond to.
- Students will role-play appropriate response.

Attachments for Culminating Performance Task:

Rubric with AHA or ARC curriculum materials



UNIT RESOURCES

Web Resources:

- Google webquest for CPR data
- www.americanheart.org
- www.redcross.org

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

Materials & Equipment:

- Textbook for CPR
- Computer/internet access
- TV/DVD/DVD player
- Worksheets
- Skills checklist rubrics
- AED
- Adult CPR mannequins- 3 students per mannequin

What 21st Century Technology was used in this unit:

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	Х	Video
Animation Software		Wiki		Electronic Game or Puzzle Makeı
Email	Х	Website		ı