HSCI 0012 - PROFESSIONAL CPR AND INFECTION CONTROL

Catalog Description

Hours: 16 (10 lecture, 6 activity)
Description: Provides the American Heart Association (AHA) Basic Life Support/CPR certification for Healthcare Providers. Also provides mandated training for recognizing risks of bloodborne pathogens, infection control, body substance isolation (BSI), and personal protection equipment in accordance with OSHA standard 29 CFR 1910.1030 specific to the healthcare professional. (not transferable)

Course Student Learning Outcomes

- CSLO #1: Demonstrate the ability to perform a primary assessment on an adult, child or infant and perform chest compressions, establish an airway, and perform adequate positive pressure ventilations.
- CSLO #2: Demonstrate the ability to assess and identify the signs and symptoms of a complete airway obstruction and perform the appropriate intervention to remove the foreign body and restore a patient airway.
- CSLO #3: Describe the different types of infectious diseases and bloodborne pathogens, and the different levels of exposure due to direct and indirect routes of transmission.
- CSLO #4: Describe the necessary Universal and Standard precautions when using body substance isolation techniques during patient care interventions.

Effective Term

Fall 2024

Course Type

Credit - Degree-applicable

Contact Hours

16

Outside of Class Hours

23

Total Student Learning Hours

39

Course Objectives

Lecture Objectives:
1. Describe updates to AHA CPR Guidelines and ECC updates
2. Describe the BLS/CPR basic steps for adults
3. Describe the steps for AED operation
4. Describe the basic steps of CPR for children
5. Describe the basic steps of CPR for infants
6. Describe use of AED on an infant or child under 8 years of age
7. Describe requirements of OSHA standard 29 CFR 1910.1030
8. Describe universal precautions used in healthcare professions
9. Describe bloodborne pathogens
10. Describe how bloodborne pathogens are spread
11. Describe the different types of bloodborne pathogens
12. Describe occupational practices and engineering controls
13. Describe regulated waste and body fluid clean-up
14. Describe field associated exposures and infections
15. Describe clinical associated exposures and infections
16. Describe Exposure Incident and reporting requirements

Laboratory/Activity Objectives:
1. Demonstrate the BLS/CPR basic steps for adults
2. Demonstrate 2-Rescuer team CPR for adults
3. Demonstrate proper application of AED on patient
4. Demonstrate proper AED operation and shock delivery
5. Demonstrate the basic steps for performing CPR on a child
6. Choose correct AED pads for an infant or child under 8 years
7. Demonstrate the basic steps for performing CPR on an infant
8. Demonstrate how to administer mouth-to-mouth breaths to a victim
9. Demonstrate choking relief of responsive child older than 1 year
10. Demonstrate choking relief of unresponsive child older than 1 year
11. Demonstrate how to relieve choking in a responsive/unresponsive infant
12. Demonstrate proper lifting/moving techniques of an unresponsive patient
13. Demonstrate safety techniques used in patient gurney operations
14. Demonstrate proper hand washing techniques
15. Demonstrate the use of personal protective equipment
16. Demonstrate airway management and injection practices

General Education Information

- Approved College Associate Degree GE Applicability
  - AA/AS - Health Ed/Physical Ed
- CSU GE Applicability (Recommended-requires CSU approval)
- Cal-GETC Applicability (Recommended - Requires External Approval)
- IGETC Applicability (Recommended-requires CSU/UC approval)

Articulation Information

- Not Transferable

Methods of Evaluation

- Classroom Discussions
  - Example: Student participation is required to discuss the potential for indirect pathogen exposures, the proper use of Universal and Standard precautions during patient contact, and the proper use of Personal Protective Equipment to prevent direct and indirect exposures.
- Objective Examinations
  - Example: Given a multiple choice examination, students will demonstrate the ability to correctly identify the indications of cardiopulmonary failure, identify the appropriate steps in sequence to provide appropriate lifesaving interventions, and correctly select the rate and depth of chest compression for cardiopulmonary resuscitation (CPR). True or False: Compression depth on an adult during CPR should be 1-2 inches.
- Skill Demonstrations
  - Example: Given a simulated emergency medical scenario, the student will correctly demonstrate the appropriate BLS/CPR skills and interventions to properly establish a patent airway, and how to deliver positive pressure ventilation utilizing a pocket

mask with supplemental oxygen administration. Grade based on industry standards.

Repeatable

No

Methods of Instruction

- Activity
- Lecture/Discussion
- Distance Learning

Activity:

1. During the practical skills lab, the Instructor will demonstrate a proper rapid assessment of a choking infant, how to remove the airway obstruction utilizing back blows and chest compressions, and successfully dislodge the foreign body obstruction (FBO) to reestablish the infants airway. This is followed by student demonstrations.

Lecture:

1. During a lecture presentation the instructor will discuss the pathology of cardiac arrest, rapid assessment and recognition of absent pulses and respiratory arrest, and the operation of an automatic external defibrillator (AED) for the cardioversion of ventricular fibrillation. Students are expected to be able to explain the rapid assessment procedures.

Distance Learning

1. In hybrid format, students can watch an infectious disease lecture on the different types of infectious diseases and bloodborne pathogens, and the different levels of exposure due to direct and indirect routes of transmission and take the exam online.

Typical Out of Class Assignments
Reading Assignments

1. Read the required chapters in the "American Heart Association BLS/ CPR for the Health Care Professional" prior to the start of the course, and be prepared to take a pretest quiz at the beginning of class. 2. Read the assigned Chapters in OSHA-Bloodborne Pathogens in First Response Environments, prior to the start of the course. Student will be prepared to discuss universal precautions and demonstrate the proper use of personal protective equipment.

Writing, Problem Solving or Performance

1. Student will submit a written assignment identifying the early and late signs and symptoms of bacterial meningitis, and the required infection control precautions to prevent exposure. 2. Student will demonstrate the correct rate and proper depth of chest compressions while performing cardiopulmonary resuscitation on the adult and pediatric patient.

Other (Term projects, research papers, portfolios, etc.)
Required Materials

- BLS for Healthcare Providers
  - Author: American Heart Association
  - Publisher: American Heart Association
  - Publication Date: 2021
  - Text Edition:
  - Classic Textbook?:
  - OER Link:
  - OER:
- Bloodborne Pathogens in First Response Environments
  - Author: American Heart Association
  - Publisher: Jones & Bartlett
  - Publication Date: 2021
  - Text Edition: 8th
  - Classic Textbook?:
  - OER Link:
  - OER:

Other materials and-or supplies required of students that contribute to the cost of the course.

AHA CPR certification card fee