AHS 60C: ADVANCED CARDIAC LIFE SUPPORT

Foothill College Course Outline of Record

Heading	Value
Effective Term:	Summer 2023
Units:	2
Hours:	2 lecture per week (24 total per quarter)
Advisory:	Not open to students with credit in RSPT 60B.
Degree & Credit Status:	Degree-Applicable Credit Course
Foothill GE:	Non-GE
Transferable:	CSU
Grade Type:	Letter Grade Only
Repeatability:	Not Repeatable

Student Learning Outcomes

- Discuss airway care procedures and demonstrate cardiac life support proficiency.
- Explain how defibrillators function and their effect on the heart.

Description

Preparation for Advanced Cardiac Life Support Certification for healthcare providers who will be directing or participating in the management of cardiopulmonary arrest or other cardiovascular emergencies. Students practice skills through active participation in simulated cases in order to enhance skills associated with diagnosis and treatment of cardiopulmonary arrest, acute arrhythmia, stroke, and acute coronary syndromes (ACS).

Course Objectives

The student will be able to:

1. Recognize and initiate early management of peri-arrest conditions that may result in cardiac arrest or complicate resuscitation outcome
2. Demonstrate proficiency in providing basic life support (BLS) and the use of an AED device
3. Recognize and manage respiratory arrest
4. Recognize and manage cardiac arrest until termination of resuscitation or transfer of care, including immediate post-cardiac arrest care
5. Recognize and initiate early management of ACS, including appropriate disposition
6. Recognize and initiate early management of stroke, including appropriate disposition
7. Demonstrate effective communication as a member or leader of a resuscitation team and recognize the impact of team dynamics on overall team performance

Course Content

1. Management of peri-arrest and cardiac arrest
    a. BLS survey
    b. ACLS survey
    c. Circulation
    d. Airway care
2. BLS and AED
    a. Proper hand placement for CPR
    b. Prioritizes effective chest compressions
    c. Power on AED
    d. Follows prompts and attaches electrode pads
    e. Analyze rhythm
    f. Maintains a safe environment
    g. Delivers shock if advised by prompt
3. Respiratory arrest
    a. BLS survey
    b. ACLS survey
4. Cardiac arrest
    a. Normal sinus
    b. Sinus bradycardia and sinus tachycardia
    c. Ventricular asystole and agonal rhythms
    d. Ventricular fibrillation
    e. Premature ventricular contraction
    f. Pulseless electrical activity
    g. Atrial fibrillation and flutter
    h. Atrioventricular block
        i. First-degree AV block
        ii. Second-degree AV block
            1. Type 1 (Wenckebach)
            2. Type 2
        iii. Third-degree AV block
    i. Junctional complexes
        i. Premature junctional
        ii. Junctional escape complexes and rhythms
    j. Tachycardia
        i. Paroxysmal supraventricular
        ii. Wide-complex tachycardia of uncertain type
        iii. Ventricular tachycardia
    k. ACLS algorithms for core cases
        i. Purpose of algorithms
        ii. How to use algorithms
    l. Participates in a mega code as a member and a team leader
        i. Communicates effectively with the team
        ii. Performs duties according to assigned role
    m. ACLS medications
        i. Oxygen administration
        ii. Routes of drug administration
            1. IV route
            2. IO route
            3. ET route
        iii. Vasopressors
            1. Epinephrine
            2. Atropine
            3. Antiarrhythmic agents
                a. Amiodarone
                b. Lidocaine
                c. Magnesium sulfate
        iv. Adenosine

   n. Defibrillation and cardiac pacing
      i. Defibrillators
      ii. Importance of early defibrillation
      iii. Standard defibrillators
      iv. Automated external defibrillation
   o. Transcutaneous pacing (TCP)
5. ACS
   a. Prehospital management
   b. Hospital-based management
6. Suspected stroke patient algorithm
   a. Cincinnati prehospital stroke scale
   b. 8 Ds of stroke care
   c. Fibrolytic therapy
7. Effective communication and team dynamics
   a. Role of the team leader
   b. Role of the team member
   c. Communication

Lab Content

Not applicable.

Special Facilities and/or Equipment

Defibrillator with the computer capability to produce various cardiac rhythms. Airway care equipment. Simulation mannequin and equipment. Computer with online capabilities.

Method(s) of Evaluation

Methods of Evaluation may include but are not limited to the following:

Quizzes
Final exam
ACLS certification exams
AHA ACLS scenario-based evaluations

Method(s) of Instruction

Methods of Instruction may include but are not limited to the following:

Lecture presentations and classroom discussion using clinical simulation scenarios
In-class Mega code stations with a team leader and other supporting roles
Students will perform hands-on demonstrations within group lectures

Representative Text(s) and Other Materials

AHA. Advanced Cardiovascular Life Support Provider Manual. 2020.

Types and/or Examples of Required Reading, Writing, and Outside of Class Assignments

1. Each week the student will be assigned readings that correspond to subject matter discussed; reading assignments will be approximately 20-40 pages per week

Discipline(s)

Respiratory Technologies and Emergency Medical Technologies