

Course: AH 150

Also Listed As:

Term Effective: 200970, INACTIVE COURSE

Short Title: EMERGENCY MED CARE

Full Title: Emergency Medical Care

<u>Contact Hours/Week</u>	<u>Units</u>	<u>Number of Weeks</u>	<u>Total Contact Hours</u>
Lecture: 5	6	17.34	Lecture: 86.7
Lab: 3			Lab: 52.02
Other: 0			Other: 0
Total: 8			Total: 138.72

Credit Status: D - Credit - Degree Applicable

Grading Modes: L - Standard Letter Grade

Repeatability: N

Schedule Types: 02 Lecture and/or discussion
03 Lecture/Laboratory
04 Laboratory/Studio/Activity

Course Description:

A course in pre-hospital emergency medical care for non-licensed personnel. Specifically designed to enable ambulance, fire and recreation personnel to provide on-the-scene emergency medical care and transportation to the sick and injured patient. PREREQUISITE: Standard First Aid and CPR.

ARTICULATION and CERTIFICATE INFORMATION

Associate Degree:

CSU GE:

IGETC:

CSU TRANSFER:

Transferable CSU, effective 198630

UC TRANSFER:

Not Transferable

PREREQUISITES:

COREQUISITES:

STUDENT LEARNING OUTCOMES:

The purpose of this course is to prepare people to provide on-the-scene emergency medical care and transportation.

COURSE OBJECTIVES:

- 1) Identify those procedures or practices authorized by the scope of practice of an EMT-1. 2) Identify the definitions for the following: a) informed consent; b) negligence; c) implied consent; d) abandonment. 3) Identify the circumstances under which an EMT-1 may discontinue BCLS according to AHA guidelines. 4) Identify six roles and responsibilities of the EMT-1. 5) Identify six areas of personal attitude and conduct expected of an EMT-1. 6) Identify state requirements for EMT-1 certification and recertification. 7) Identify the requirements for the EMT-1 to report child and elder abuse. 8) Identify the requirements for legal detention under Welfare and Institutions Code, Section 5150. 9) Identify the names of the five body cavities listed in the reference list. 10) Identify the terms of anatomical position listed in the reference list. 11) Identify the functions of the seven body systems listed in the reference list. 12) Identify the diagnostic signs & their normal ranges, condition, or response. 13) Demonstrate the ability to obtain BP by palpation. 14) Demonstrate the ability to obtain BP by auscultation. 15) Demonstrate the ability to obtain radial pulse rate. 16) Demonstrate the ability to obtain brachial pulse rate. 17) Demonstrate the ability to obtain respiratory rate. 18) Demonstrate the ability to obtain oral temperature. 19) Demonstrate the ability to determine pupil size & reaction. 20) Demonstrate the ability to assess neurologic status according to the Skills Protocols (mini neuro exam). 21) Demonstrate the ability to auscultate the chest to determine the presence or absence of breath sounds. 22) Demonstrate the ability to assess skin signs. 23) Demonstrate the ability to perform a primary survey. 24) Demonstrate the ability to perform a secondary survey. 25) Demonstrate on a programmed patient the technique for completing a total patient assessment and identify and record diagnostic signs. 26) Demonstrate the ability to record and communicate patient assessment information. 27) Identify the difference between a sign and a symptom. 28) Demonstrate the ability to evaluate capillary refill. 29) Identify the three major body fluid compartments. 30) Identify the length of time the following tissues can survive without perfusion: brain, heart, kidneys, muscle. 31) Identify the function of the following blood constituents: WBCs, RBCs, platelets, and plasma. 32) Identify the amount of blood in the average adult. 33) Identify the primary function of the heart. 34) Identify the primary function of arteries, veins, and capillaris. 35)

Identify the definitions of shock and perfusion. 36) Identify the underlying problem in the four major categories of shock: a) hypovolemic, b) cardiogenic, c) obstructive, and d) distributive. 37) Identify the signs and symptoms of shock. 38) Identify by separating the following causes of shock into the four major categories & identify additional signs and symptoms: a) hemorrhage, b) myocardial infarction, c) tension pneumothorax, d) anaphylaxis, e) sepsis, f) spinal cord trauma. 39) Identify the general treatment of shock according to the Treatment Guidelines. 40) Demonstrate the control of hemorrhage according to the Skills Protocols.

41) Demonstrate the method for assisting the EMT-II or EMT-P with the application of the pneumatic antishock trousers according to the Skills Protocols. 42) Demonstrate the method of placing a patient in the shock position. 43) Demonstrate the method of patient in the shock position who has a back injury. 44) Identify the intravenous solutions used by the EMT-II or EMT-P to treat shock. 45) Demonstrate the ability to palpate and apply pressure to the major pressure points: a) brachial, b) radial, c) femoral, d) carotid for bleeding from neck ^uonly^s and then ^uonly^s one side, e) posterior tibial. 46) Demonstrate how to perform an initial safety check on IV equipment, including: a) name of solution, b) expiration date, c) clarity of fluid, d) sterility and lack of deformity of tubing, e) integrity of bag. 47) Demonstrate sterile procedure for setting up an intravenous solution to include: a) closing flow clamp, b) spiking the bag/bottle, c) priming the tubing for mini-drip (metri-set) and maxi-drip, d) turning off flow clamp, e) reattaching tubing cap. 48) Demonstrate the following IV regulating techniques: a) turning on solution, b) setting rate at TKO (30 drops per minute), c) turning off solution. 49) Identify the composition of gases in the environment. 50) Identify the significance of oxygen to body tissues, particularly the brain. 51) Identify the basic physiology of pulmonary respiration. 52) Identify signs of adequate air exchange. 53) Identify the signs and symptoms and the treatment of acute asthma, hyperventilation, acute pulmonary edema including congestive heart failure, chronic obstructive pulmonary disease (COPD), inhalation of toxic substances, and pulmonary embolism. 54) Identify the safety precautions to be used when working with oxygen. 55) Identify the oxygen flow rate for a patient with COPD. 56) Identify the signs & symptoms and state the treatment of pneumothorax, rib fractures, flail chest, & tension pneumothorax. 57) Identify the function of the following: pharynx, trachea, lungs, bronchi, alveoli. 58) Demonstrate how to ventilate an adult using the mouth-to-mouth technique according to the Skills Protocols. 59) Demonstrate how to ventilate an adult using a positive pressure demand valve resuscitator according to the Skills Protocols. 60) Demonstrate how to provide ventilatory assistance with a demand valve to a conscious patient with breathing difficulties. 61) Demonstrate how to ventilate an adult with a bag-valve-mask device according to the Skills Protocols. 62) Demonstrate how to use an oropharyngeal airway & nasopharyngeal airway. 63) Demonstrate how to use bite stick. 64) Demonstrate how to ventilate through an esophageal airway using a bag-valve ventilating device according to the Skills Protocols. 65) Demonstrate how to ventilate with a mouth-to-mask device according to the Skills Protocols using a demand valve. 66) Demonstrate how to ventilate through an endotracheal tube using a bag-valve device. 67) Demonstrate how to ventilate through an esophageal airway using a demand valve. 68) Demonstrate how to ventilate an infant using a mouth-to-mouth/nose technique.

69) Demonstrate how to connect a regulator to an oxygen cylinder & correct any seal leaks that could occur. 70) Demonstrate how to administer oxygen to a patient using a flow meter, nasal cannula & face mask. 71) Demonstrate how to treat a sucking chest wound according to the Skills Protocols. 72) Demonstrate how to clean & disinfect EMT-1 equipment utilized for ventilating or administering oxygen. 73) Identify how to treat a patient with inadequate air exchange from an unknown cause. 74) Demonstrate pharyngeal suction using the hard catheter according to the Skills Protocols. 75) Demonstrate pharyngeal suction using the soft catheter. 76) Demonstrate the management of a complete airway obstruction in an adult according to Skills Protocols. 77) Demonstrate the management of an obstructed airway in a child. 78) Identify the functions of the following: atria and ventricles (right & left), aorta, vena cava, pulmonary arteries, pulmonary veins. 79) Identify the path of the flow of blood in the circulatory system. 80) Identify the signs & symptoms & treatment of chest pain including heart attack (myocardial infarction), cardiogenic shock, hypertensive emergencies, & cardiac arrest.

81) Demonstrate one rescuer adult CPR according to the Skills Protocols. 82) Identify the differences in one rescuer CPR between a child and an adult. 83) Demonstrate two rescuer adult CPR according to the Skills Protocols. 84) Demonstrate infant CPR according to the Skills Protocols. 85) Demonstrate the two major signs of cardiac arrest. 86) Demonstrate the technique to determine if compressions and ventilations are effective during CPR. 87) Identify three (3) complications of CPR if not done correctly. 88) Identify when CPR can be terminated. 89) Identify the maximum time CPR can be interrupted. 90) Identify the definition of the following: a) myocardium, b) pericardium, c) myocardial infarction. 91) Identify the three structures which protect the brain & spinal cord. 92) Name the two substances which are vital to brain function. 93) Demonstrate the method of assessing level of consciousness (mini neuro exam) according to the Skills Protocols. 94) Identify how disruption of cervical cord function may be manifested in patient signs & symptoms. 95) Identify the primary function of: cerebrum, cerebellum, brain stem, spinal cord, peripheral nerves, autonomic nerves, cerebrospinal fluid. 96) Identify the importance of evaluation of the function of the third cranial nerve. 97) Identify the definitions of the following terms: a) meningitis, b) epilepsy, c) transient ischemic attack (TIA), d) cerebrospinal fluid (CSF) drainage, e) paralysis, f) cerebro-vascular accident (CVA)(stroke), g) paraplegia, h) quadriplegia, i) seizure, j) postictal, k) concussion, l) skull fracture, m) epidural/subdural hematoma, n) cerebral contusion. 98) Identify the importance of evaluating the ABCs as a first priority. 99) Identify the importance of observing spinal precautions in a patient of suspected or confirmed cord injury. 100) List the signs & symptoms, & prehospital management of the following head injuries: a) hematoma of scalp, b) laceration of scalp, c) impaled object. 101) Identify the significance of deteriorating neurological status following head trauma. 102) Demonstrate the technique of opening the airway in a patient with head or neck injuries. 103) Identify the rationale for the use of an airway adjunct in the unconscious patient with suspected head or neck injury. 104) Identify the rationale for

for hyperventilating the unconscious patient with head trauma. 105) Identify the most likely cause of hypovolemic shock in the adult patient with head trauma. 106) Identify in order of treatment priority the following problems in a multiple trauma victim: airway distress, severe external bleeding, head injury. 107) Demonstrate the correct procedure to use when moving a patient with suspected spinal injury. 108) Identify the primary objective in the treatment of the patient with a possible cord injury. 109) Identify the rationale for testing sensory and motor functions before and after moving a patient with suspected spinal cord injury.

TOPICS AND SCOPE:

Inactive Date: 05/11/2009

Inactive Term: Fall 2009

- 1 2 Role of the EMT-1 and Orientation to the Program
- 4 Pt. Assessment, Overview of A&P, Overview of Medical Terminology
- 2 4 Management Skills
- 2 Shock-Assessment & Pathophysiology
- 3 3 Shock-Management
- 3 Respiratory System: A&P Assessment & Management
- 4 3 Chest Trauma
- 3 Airway Management
- 5 6 Cardiovascular System: Pathophysiology Management
- 6 6 Nervous System: A & P Problems & Management
- 7 2 Nervous System: Management (cont)
- 4 Soft Tissue Trauma
- 8 1 Bandaging
- 5 Musculoskeletal Injuries
- 9 1 Splinting
- 5 Medical Emergencies
- 10 3 Environmental Emergencies
- 3 Obstetric & Gynecological Emergencies
- 11 1 OB & Gyn Emergencies (cont)
- 3 Pediatric Emergencies
- 2 Behavioral Emergencies
- 12 6 Extrication and Rescue
- 13 4 Extrication & Rescue (cont)
- 2 Communications
- 14 3 Ambulance Operations
- 3 IV Monitoring
- 15 6 Ambulance Management Skills
- 16 8 Clinical Experience
- 17 8 Clinical Experience
- 18 6 Final Exam and Skills Testing

ASSIGNMENTS:

Each week the students will read the appropriate chapters in the text and complete assigned exercises.

METHODS OF INSTRUCTION:

Lecture, discussion, demonstration, return-demonstration.

Theory will be evaluated by paper and pencil test.
Skills will be tested by return demonstration and
evaluation using check off.

REPRESENTATIVE TEXTBOOKS:

Emergency Care and Transportation of the Sick
and Injured's, current edition
Reading level determined to be college level by KB.
Reference Materials: journals, media

SUPPLEMENTAL DATA:

Basic Skills: N
Classification: I
Noncredit Category: Y
Cooperative Education:
Program Status: 1 Program Applicable
Special Class Status: N
CAN:
CAN Sequence:
CSU Crosswalk Course Department: AH
CSU Crosswalk Course Number: 150
Prior to College Level: Y
Non Credit Enhanced Funding: N
Funding Agency Code: Y
In-Service: N
Occupational Course: B
Maximum Hours:
Minimum Hours:
Course Control Number: CCC000456049
Sports/Physical Education Course: N
Taxonomy of Program: 123030