South Central College

ICP 1040 Cardiac Care in EMS

Course Outcome Summary

Course Information

Description The course will prepare the EMT-P to assess and manage those cardiac emergencies that result from coronary atherosclerosis, along with a number of conditions involving pathology of peripheral/central circulation. The interpretation of cardiac dysrhythmias receives much emphasis in this course. ACLS Provider certification may be included.

Total Credits 4

Total Hours 64

Types of Instruction

Instruction Type	Credits/Hours
Classroom Presentation	
On-Campus Lab	

Pre/Corequisites

Admission into the Paramedic Program. All Classes must be taken in sequence.

Institutional Core Competencies

Communication - Students will be able to demonstrate appropriate and effective interactions with others to achieve their personal, academic, and professional objectives.

Critical and Creative Thinking - Students will be able to demonstrate purposeful thinking with the goal of using a creative process for developing and building upon ideas and/or the goal of using a critical process for the analyzing and evaluating of ideas.

Course Competencies

1. Integrate pathophysiological principles to the assessment of a patient with cardiac complaints.

Learning Objectives

Synthesize patient history, assessment findings, and ECG analysis to form a field impression for the patient with cardiac complaints.
Based on the pathophysiology and clinical evaluation of the patient with cardiac complaints, list the anticipated clinical problems according to their life-threatening potential.
From the priority of clinical problems identified, state the management responsibilities for the patient with cardiac complaints.

2. Integrate physiological and pathophysiological principles to the assessment of cardiac monitoring.

Learning Objectives

Given an ECG, identify the arrhythmia.
Recognize the changes on the ECG that may reflect evidence of myocardial ischemia and injury.
Correlate abnormal ECG findings with clinical interpretation.
Identify the major mechanical, pharmacological and electrical therapeutic interventions according to current American Heart Association Guidelines.

3. Integrate pathophysiological principles and assessment findings to formulate a field impression and implement the treatment plan for the patient with cardiovascular disease.

Learning Objectives

Integrate pathophysiological principles into the assessment of a patient with cardiovascular disease.
Synthesize patient history, assessment findings, and ECG analysis to form a field impression for the patient with cardiovascular disease.
Identify the major mechanical, pharmacological and electrical therapeutic interventions according to current American Heart Association Guidelines.

4. Develop, execute, and evaluate a treatment plan based on field impression for the patient in need of a pacemaker.

Learning Objectives

Integrate pathophysiological principles to the assessment of a patient in need of a pacemaker.
Synthesize patient history, assessment findings, and ECG analysis to form a field impression for the patient in need of a pacemaker.
Identify the major mechanical, pharmacological and electrical therapeutic interventions according to current American Heart Association Guidelines.
Describe the drugs most commonly used to treat this condition in terms of therapeutic effect and dosages, routes of administration, side effects, and toxic effects.

5. Develop, execute, and evaluate a treatment plan based on the field impression for the patient with chest pain.

Learning Objectives

Based on the pathophysiology and clinical evaluation of the patient with chest pain, characterize the clinical problems according to their life-threatening potential.
Integrate pathophysiological principles to the assessment of a patient with chest pain.
Synthesize patient history, assessment findings, and ECG analysis to form a field impression for the patient with angina pectoris.
Identify the major mechanical, pharmacological and electrical therapeutic interventions according to current American Heart Association Guidelines.
Describe the drugs most commonly used to treat this condition in terms of therapeutic effect and dosages, routes of administration, side effects, and toxic effects.

6. Develop, execute, and evaluate a treatment plan based on the field impression for the suspected myocardial infarction patient.

Learning Objectives

Integrate pathophysiological principles to the assessment of a patient with a suspected myocardial infarction.
Synthesize patient history, assessment findings, and ECG analysis to form a field impression for the patient with a suspected myocardial infarction.
Identify the major mechanical, pharmacological and electrical therapeutic interventions according to current American Heart Association Guidelines.
Describe the drugs most commonly used to treat this condition in terms of therapeutic effect and dosages, routes of administration, side effects, and toxic effects.

7. Develop, execute, and evaluate a treatment plan based on the field impression for the heart failure patient.

Learning Objectives

Integrate pathophysiological principles to the assessment of the patient with heart failure.

Synthesize assessment findings and patient history information to form a field impression of the patient with heart failure.
Identify the major mechanical, pharmacological and electrical therapeutic interventions according to current American Heart Association Guidelines.
Describe the drugs most commonly used to treat this condition in terms of therapeutic effect and dosages, routes of administration, side effects, and toxic effects.

8. Develop, execute, and evaluate a treatment plan based on the field impression for the patient with cardiac tamponade.

Learning Objectives

Integrate pathophysiological principles to the assessment of a patient with cardiac tamponade.
Synthesize assessment findings and patient history information to form a field impression of the patient with cardiac tamponade.
Identify the major mechanical, pharmacological and electrical therapeutic interventions according to current American Heart Association Guidelines.
Describe the drugs most commonly used to treat this condition in terms of therapeutic effect and dosages, routes of administration, side effects, and toxic effects.

9. Develop, execute, and evaluate a treatment plan based on the field impression for the patient with a hypertensive emergency.

Learning Objectives

Integrate pathophysiological principles to the assessment of the patient with a hypertensive emergency.
Synthesize assessment findings and patient history information to form a field impression of the patient with a hypertensive emergency.
Identify the major mechanical, pharmacological and electrical therapeutic interventions according to current American Heart Association Guidelines.
Describe the drugs most commonly used to treat this condition in terms of therapeutic effect and dosages, routes of administration, side effects, and toxic effects.

10. Develop, execute, and evaluate a treatment plan based on the field impression for the patient with cardiogenic shock.

Learning Objectives

Integrate pathophysiological principles to the assessment of the patient with cardiogenic shock.
Synthesize assessment findings and patient history information to form a field impression of the patient with cardiogenic shock.
Identify the major mechanical, pharmacological and electrical therapeutic interventions according to current American Heart Association Guidelines.
Describe the drugs most commonly used to treat this condition in terms of therapeutic effect and dosages, routes of administration, side effects, and toxic effects.

11. Develop, execute, and evaluate a treatment plan based on the field impression for the patient with cardiac arrest.

Learning Objectives

Integrate the pathophysiological principles to the assessment of the patient with cardiac arrest.
Synthesize assessment findings to formulate a rapid intervention for a patient in cardiac arrest.
Synthesize assessment findings to formulate the termination of resuscitative efforts for a patient in cardiac arrest.
Identify the major mechanical, pharmacological and electrical therapeutic interventions according to current American Heart Association Guidelines.
Describe the drugs most commonly used to treat this condition in terms of therapeutic effect and dosages, routes of administration, side effects, and toxic effects.

12. Develop, execute, and evaluate a treatment plan based on the field impression for the patient with non-critical vascular disorders.

Learning Objectives

Integrate pathophysiological principles to the assessment and field management of a patient with vascular disorders.
Synthesize assessment findings and patient history to form a field impression for the patient with vascular disorders.

SCC Accessibility Statement

South Central College strives to make all learning experiences as accessible as possible. If you have a disability and need accommodations for access to this class, contact the Academic Support Center to request and discuss accommodations. North Mankato: Room B-132, (507) 389-7222; Faribault: Room A-116, (507) 332-7222.

Additional information and forms can be found at: www.southcentral.edu/disability

This material can be made available in alternative formats by contacting the Academic Support Center at 507-389-7222.