

**Northwest Arkansas Community College  
Division of Health  
Paramedic Science Program**

**Discipline Code**

EMTP

**Course Number**

1062

**Course Title**

Emergency Cardiac Care Lecture

**Catalog Description**

Students will be taught advanced cardiac care including, advanced cardiac life support according to the American Heart Association, emergency cardiac drug identification

**Prerequisite**

Admission into the Paramedic Program by the Program Admission Committee with passing grades from previous course material covered in the paramedic program

**Credit Hours**

2 credit hours

**Contact hours**

32 contact hours

**Load hours**

2 load hours

**Semesters Offered**

Fall

**ACTS Equivalent**

This course typically does not transfer

**Grade Mode**

A-F

**Learning Outcomes**

1. Manage 10 core Cases through small-group case-based teaching.

2. Learn and practice key skills in BLS and ACLS
3. Manage first ten minutes of sudden, witnessed ventricular fibrillation.
4. Know and perform the primary ABCD survey
5. Know and perform a secondary ABCD survey
6. Know and perform the ACLS algorithms as stated in the 10 core cases.
7. Know and apply the "Periarrest" Algorithms
8. Know and apply how to run the code – directing others during a resuscitation attempt
9. Airway maintenance: Provide supplemental oxygen, open airway, maintain the open airway, recognize airway obstruction, ventilate patient, provide advanced ventilation, provide definitive airway control, provide primary and secondary confirmation of tracheal tube placement.
10. Provide transcutaneous pacing operate and AED, and a conventional monitor/defibrillator to safely and effectively deliver shocks to Ventricular fibrillation and other rhythms.
11. Effectively perform synchronized electrical cardioversion for unstable V-Tach with a conventional monitor/defibrillator.
12. Safely and effectively use stand-alone transcutaneous pacemakers and the pacing mode in conventional defibrillators to pace a patient.
13. Identify the characteristics of normal sinus rhythm.
14. When shown and ECG tracing, identify the rhythm, site of origin, possible causes, clinical significance, and prehospital management that is indicated.
15. Describe prehospital assessment and management of patients with selected cardiovascular disorders based on knowledge of the Pathophysiology of the illness.
16. List indications, contraindications, and prehospital considerations when using selected cardiac interventions, including basic life support, monitor-defibrillators, defibrillation, implantable cardio-defibrillators, synchronized cardioversion, and transcutaneous cardiac pacing.
17. List indication, contraindications, dose, and mechanism of action for pharmacological agents used in the management of cardiovascular disorders.
18. Identify appropriate actions that should be taken in the pre-hospital setting to terminate resuscitation.
19. Identify risk factors and prevention strategies associated with cardiovascular disease.
20. Describe the normal physiology of the heart
21. Discuss electrophysiology as it relates to the normal electrical and mechanical events in the cardiac cycle
22. Outline the activity of each component of the electrical conduction system of the heart.
23. Outline the appropriate assessment of a patient who may be experiencing a cardiovascular disorder.
24. Describe basic monitoring techniques that permit electrocardiogram interpretation.
25. Explain the relationship of the ECG tracing to the heart's electrical activity.
26. Describe, in sequence, the steps in ECG interpretation.
27. Identify the characteristics of normal sinus rhythm.
28. When shown and ECG tracing, identify the rhythm, site of origin, possible causes, clinical significance, and prehospital management that is indicated.
29. Describe prehospital assessment and management of patients with

selected cardiovascular disorders based on knowledge of the Pathophysiology of the illness.

30. .List indications, contraindications, and prehospital considerations when using selected cardiac interventions, including basic life support, monitor-defibrillators, defibrillation, implantable cardio-defibrillators, synchronized cardioversion, and transcutaneous cardiac pacing.
31. List indication, contraindications, dose, and mechanism of action for pharmacological agents used in the management of cardiovascular disorders.
32. Identify appropriate actions that should be taken in the pre-hospital setting to terminate resuscitation.

### **General Education Outcomes Supported**

Students develop higher order thinking skills.

Students can employ a variety of sources to locate, evaluate, and use Information.

### **Standard Practices**

#### **Learning Activities:**

On line recorded Lecture, in class lecture over pertinent material that students are not understanding from the lecture.

#### **Assessment:**

Students will be given quizzes over material covered, as well as written exams on dysrhythmias and algorhythms.