COURSE INFORMATION FORM

DISCIPLINE
Emergency Medical Services

COURSE TITLE
Cardiology

CR.HR  3.0  LECT HR.  3.0  LAB HR  CLIN/INTERN HR.  CLOCK HR.

CATALOG DESCRIPTION
This course provides an in depth review of cardiac anatomy and physiology. Students will gain knowledge in advanced cardiac assessment, electrocardiographic monitoring, and appropriate patient management techniques.

PREREQUISITES
HLSC 108 or BIOL 109 or BIOL 110 and BIOL 210, EMS 154, 159, 168, 176, 192 with a grade of C or better.

EXPECTED STUDENT OUTCOMES IN THE COURSE (ESO)
Upon completion of this course, the student will be able to:

1. Describe the anatomy and physiology of the heart.
2. Demonstrate assessment techniques for patients experiencing cardiovascular emergencies.
3. Demonstrate appropriate management and treatment for patients experiencing cardiovascular emergencies.
4. Identify electrocardiographic evidence of ischemia, injury, and infarction.
5. Demonstrate proper electrocardiographic monitoring and interpretation.

GENERAL EDUCATION OUTCOMES (ESO)
Specify which general education outcomes, if any, are substantially addressed by the course. Numbers in parentheses identify the Expected Student Outcomes linked to the specific General Education Outcome.

Outcomes  ESO
PROGRAM-LEVEL OUTCOMES

CAREER AND TECHNICAL EDUCATION PROGRAM OUTCOMES
Specify which Career and Technical program outcomes, if any, are substantially addressed by the course by completing the “Career and Technical Education template” to show the relationship between course and program outcomes to assessment measures.

1. Effectively communicates as an EMS professional.
2. Demonstrates professional behaviors associated with a prehospital professional.
3. Demonstrates the ability to competently deliver prehospital emergency medical care.
4. Demonstrates an understanding of basic emergency medical systems.

CLASS-LEVEL ASSESSMENT MEASURES
Student accomplishment of expected student outcomes may be assessed using the following measures. (Identify which measures are used to assess which outcomes.)

1. Written Examinations (1-5)
Individual instructors may order this outline as fits the needs of their individual courses. In addition, they may place more emphasis on some areas than on others. What is assured is that this particular list is covered in the course. Other topics may be added to a course as the instructor sees fit, and as time and interest allow. An *asterisk can be used to mark an item as optional.

I. Introduction to Cardiology
   A. Cardiac Anatomy
   B. Cardiac Physiology

II. Pathophysiology
   A. Atherosclerosis
   B. Hypertension
   C. Congestive Heart Failure
   D. Myocardial Infarction
   E. Vascular Disorders
   F. Thromboembolism
   G. Acute Coronary Syndrome
   H. Non-Traumatic Cardiac Tamponade
   I. Cardiogenic Shock
   J. Congenital Abnormalities
   K. Infectious Diseases of the Heart

III. Electrocardiographic Monitoring
   A. Cardiac Rhythm Disturbances
   B. 12-Lead ECG

IV. Patient Management
   A. Cardiac Pharmacologic Agents
   B. Dysrhythmia Management
   C. Myocardial Infarction Management
   D. Dysrhythmia Management