COURSE NO. AND TITLE: PSM 104 Cardiac Care

I. FSM MISSION STATEMENT

The mission of the Public Safety Management Program (PSM) is to provide you, the Public Safety professional with highly trained and qualified instructors within the various fields of study in the PSM program. We are committed to the enhancement and advancement of Public Safety professionals through higher education.

II. COURSE DESCRIPTION:
Integrates assessments findings with principles of epidemiology and pathophysiology to formulate a filed impression and implement a comprehensive treatment/disposition plan for a patient with a medical complaint.

III. PREREQUISITE

All students must, in addition to SIU requirements, possess a valid CPR card for Healthcare Providers and Illinois EMT-B License through the entire time enrolled. If student possesses a valid NREMT license they must obtain an IL Basic License by week one of this class. It will be valid for 4 years or until student completes the Paramedic Exam.

A basic A& P class and Medical Terminology class is strongly recommended prior to beginning the Paramedic Classes.

IV. REQUIRED TEXTBOOK:

Nancy Caroline’s Emergency Care in the Streets Premier Package
ISBN-13 9781284038316

BIBLIOGRAPHY:

Once the online account is created the above book will be used throughout the series. Supplemental books will be introduced as recommended or required throughout the series of courses. The above is the only requirement for PSM 101.
V. COURSE OBJECTIVES:

Each student will:

1. Describe risk factors related to cardiovascular disease.
2. Understand the basic structure and function of the cardiovascular system.
3. Identify the major normal and abnormal heart sounds.
4. Describe the cardiac cycle, including diastole and systole.
5. Identify the various types of blood vessels.
6. Explain how the heart functions as a pump, including the concepts of cardiac output, stroke volume, heart rate, and ejection fraction.
7. Understand how electrical conduction activity occurs within the heart.
8. Understand how the autonomic nervous system controls the functioning of the heart.
9. Identify the various classes of drugs that influence the sympathetic nervous system.
10. Understand how the sympathetic nervous system regulates blood pressure.
11. Explain patient assessment procedures for cardiovascular problems, including scene size-up, primary assessment, history taking, secondary assessment, and reassessment.
12. Recognize the medications commonly prescribed to patients with cardiovascular diseases.
13. Describe the placement of leads and electrodes in 3-lead ECG monitoring.
15. Understand how to determine heart rate.
16. Describe the placement of 12-lead ECG leads.
17. Describe the placement of 15- and 18-lead ECG leads.
18. Understand how to interpret 12-lead ECG findings, including atrial, junctional, and ventricular rhythms.
19. Recognize normal sinus rhythm, and list the various types of cardiac dysrhythmias.
20. Discuss manual defibrillation, cardioversion, and transcutaneous pacing as techniques for managing cardiac emergencies.
**Skills Objectives**

1. Demonstrate how to assess and provide emergency medical care for a patient with chest pain or discomfort.
2. Demonstrate how to perform cardiac monitoring.
3. Demonstrate how to acquire a 12-lead ECG.
4. Demonstrate how to perform manual defibrillation.
5. Demonstrate how to perform defibrillation with an AED.