

NOVA COLLEGE-WIDE COURSE CONTENT SUMMARY EMS 127 – AIRWAY, SHOCK AND RESUSCITATION (1 CR.)

Course Description

Introduces concepts associated with pre-hospital emergency care of the individual experiencing airway difficulty or in need of resuscitation or shock management.

Lecture 1 hour. Total 1 hour per week.

General Course Purpose

The purpose of this course is to introduce the novice student to the principles airway assessment and management, including resuscitation techniques and care of a patient in shock.

Course Prerequisites/Corequisites

Prerequisite: Current Virginia EMT and CPR certification as approved by the Virginia Office of EMS.

Corequisite: EMS 128.

Course Objectives

Upon completing the course, the student will be able to:

- a) Discuss the principles of airway assessment
- b) Compare and contrast types of airway management techniques
- c) Explain the physiology of respiration, ventilation, and oxygenation
- d) Recall the concepts of cardiopulmonary resuscitation (CPR)
- e) Differentiate types of shock
- f) Discuss care options related to shock resuscitation

Major Topics to be Included

- a) Airway Assessment
 - a. Review of airway anatomy
 - b. Techniques used to assess airway patency
 - c. Principles of anticipating difficult airways
- b) Airway Management
 - a. Review of airway management devices
 - b. Techniques used to manage airway patency
 - c. Endotracheal intubation
 - d. Nasotracheal intubation
- c) Physiology of Respiration, Ventilation and Oxygenation
 - a. Principles related to the mechanics of respiration, ventilation and oxygenation
 - b. Cellular respiration
 - c. Use of supplemental oxygen
 - d. Differences Between Normal and Positive Pressure Ventilation
- d) Cardiac Arrest and Resuscitation
 - a. Review of the CPR Guidelines for the adult, child, infant and neonatal patient
 - b. Principles of resuscitation
 - c. Concepts of post resuscitation care
- e) Shock
 - a. Concepts of tissue hypoperfusion
 - b. Categories of shock
 - c. Specific types of shock
 - d. Concepts in treating patients in shock
 - e. Consideration in the geriatric and pediatric populations

