

**J. Sargeant Reynolds Community College
Course Content Summary**

Course Prefix and Number: EMS 127

Credits: 1

Course Title: Airway, Shock and Resuscitation

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

Prerequisite: Current Virginia EMT and CPR certification as approved by the Virginia Office of EMS. Co-requisite: EMS 128. Lecture 1 hour per week.

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

Course Prerequisites and Co-requisites:

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

Co-requisite: EMS 128

Student Learning Outcomes:

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; and
- f. Discuss care options related to shock resuscitation.

Major Topics to Be Included:

- a. Airway Assessment
 - Review of airway anatomy
 - Techniques used to assess airway patency
 - Principles of anticipating difficult airways
- b. Airway Management
 - Review of airway management devices
 - Techniques used to manage airway patency
 - Endotracheal intubation
 - Nasotracheal intubation
- c. Physiology of Respiration, Ventilation, and Oxygenation
 - Principles related to the mechanics of respiration, ventilation, and oxygenation
 - Cellular respiration
 - Use of supplemental oxygen
 - Differences between normal and positive pressure ventilation

- d. Cardiac Arrest and Resuscitation
 - Review of the CPR guidelines for the adult, child, infant, and neonatal patient
 - Principles of resuscitation
 - Concepts of post-resuscitation care

- e. Shock
 - Concepts of tissue hypoperfusion
 - Categories of shock
 - Specific types of shock
 - Concepts in treating patients in shock
 - Considerations in the geriatric and pediatric populations

Date Created/Updated (Month, Day, and Year): September 21, 2018