

**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