

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

**Course Prefix and Number:** EMS 112

**Credits:** 4

**Course Title:** Emergency Medical Technician I

**Course Description:** Prepares student for certification as a Virginia and/or National Registry EMT. Focuses on all aspects of pre-hospital basic life support as defined by the Virginia Office of Emergency Medical Services curriculum for Emergency Medical Technician. Lecture 3 hours. Laboratory 2 hours. Total 5 hours per week.

**General Course Purpose:** This course, along with EMS 113 and 120, is meant for students wishing to serve in positions within Public Safety (Police, Fire, and EMS). It also serves as a basis to proceed to Paramedic and other positions in medicine. Upon successfully completing EMS 112 with an overall grade average of at least 80, the student will be able to enroll in EMS 113 and EMS 120.

**Course Prerequisites and Co-requisites:**

The enrolled student:

1. Be proficient in reading, writing and speaking the English language in order to clearly communicate with a patient, family, or bystander to determine a chief complaint, nature of illness, or mechanism of injury; assess signs and symptoms; and interpret protocols.
2. Be a minimum of 16 years of age at the beginning date of the certification program. If less than 18 years of age, the student must provide the EMT instructor or the EMS educational coordinator with a completed parental permission form as approved by the Office of EMS with the signature of a parent or guardian supporting enrollment in the course.
3. Have no physical or mental impairment that would render the student or provider unable to perform all practical skills required for that level of certification, including the ability to function and communicate independently and perform patient care, physical assessments, and treatments.
4. Hold current certification in an approved course in cardio-pulmonary resuscitation (CPR) at the beginning date of the program. This certification must also be current at the time of state testing. The current courses which are accepted by the Virginia Office of E.M.S. to meet these standards are:
  - American Heart Association - Basic Cardiac Life Support - "Healthcare Provider"
  - American Red Cross - "CPR/AED for the Professional Rescuer and Healthcare Provider" or CPR/AED for Lifeguards
  - American Safety and Health Institute – "CPR-PRO"
  - Emergency Care and Safety Institute "Professional Rescuer"/"Healthcare Provider CPR & AED"
  - EMS Safety Services, Inc. – CPR/AED for Professional Rescuers
  - Military Training Network – Healthcare Provider
  - National Safety Council – "Healthcare and Professional Rescuer"
  - ProCPR – "Healthcare Provider" [Click here for APPROVED CARD SAMPLE](#)

**Course Objectives:**

Upon completion of this course, the student will be able to

- a. Identify major anatomical structures within the human body;
- b. Use correct medical terminology when communicating to other medical professionals;
- c. Understand within the EMT's scope of knowledge disease and shock pathophysiology;
- d. Understand the life span development of newborns, infants, toddlers, preschoolers, school age children, adolescences, adults, and geriatric age adults;
- e. Understand the anatomy of the airway in all age groups;
- f. Provide for an adequate and open airway using manual methods and airway adjuncts;
- g. Provide oxygen using the appropriate administration devices;
- h. Assess both a medical and trauma patient;
- i. Understand and administer medications approved for the EMT under the supervision and approval of online medical control;
- j. Understand the pathophysiology of medical emergencies affecting the respiratory system, cardiovascular system, neurological system, digestive system, genitourinary system, and gynecological system;
- k. Understand basic trauma emergencies including
  1. Toxicology
  2. Environmental emergencies
  3. Psychiatric and behavioral emergencies
  4. Submersion and diving emergencies
- l. Understand the trauma patient and the trauma triage system, including bleeding and soft tissue Injuries;
- m. Demonstrate how to control bleeding, including use of a tourniquet; and
- n. Identify and treat burns.

**Major Topics to Be Included:**

- a. Preparatory/Public Health
- b. Anatomy and Physiology
- c. Medical Terminology
- d. Pathophysiology
- e. Life Span Development
- f. Airway Management, Artificial Ventilation, and Oxygen Administration
- g. Patient Assessment
- h. Pharmacology
- i. Shock and Resuscitation
- j. Medical Emergencies
- k. Trauma (Part I)

**Effective Date of Course Content Summary:** January 1, 2014