

**COURSE SYLLABUS**

**DIVISION:** Workforce Services

Revised: January 2015

**CURRICULUM IN WHICH COURSE IS TAUGHT:**

Emergency Medical Technician-Intermediate: Career Studies Certificate

**COURSE NUMBER AND TITLE:**

EMS 151- Introduction to Advanced Life Support (2 crs)

**CREDIT HOURS:** 2

**HOURS WEEK LECTURER:** 2

**HOURS WEEK LAB:** N/A

**LECTURE/LAB COMBINATION:** 2 (0)

**I. CATALOG DESCRIPTION:**

Focuses on the interpretation of basic electrocardiograms (ECG) and their significance. Includes an overview of anatomy and physiology of the cardiovascular system including structure, function and electrical conduction in the heart. Covers advanced concepts that build on the knowledge and skills of basic dysrhythmia determination and introduction to 12 lead ECG. Lecture 2 hours per week. 2 credits

**II. RELATIONSHIP OF THE COURSE TO CURRICULA OBJECTIVES IN WHICH IT IS TAUGHT.**

A curriculum objective is to give students a general overview of the requirements for Virginia Enhanced certification and begin the sequence for National Registry Intermediate and or Paramedic certification.

**III. REQUIRED BACKGROUND:**

General Admission to the College and current Virginia or National Registry EMT- Enhanced

**IV. COURSE CONTENT:**

- Cardiovascular Emergencies I – ECG Monitoring – Anatomy & Physiology
- Cardiovascular Emergencies II – Sinus and Atrial – ECG Monitoring
- Cardiovascular Emergencies II (AV & Ventricular Rhythms) Lab
- Cardiovascular Emergencies III – Sinus and Atrial Rhythms
- Cardiovascular Emergencies IV – Ventricular – Junctional/Ventricular Rhythms (Basic EKG Packet)
- Cardiovascular Emergencies V – Putting it All Together

**V. LEARNER OUTCOMES**

**VI. EVALUATION**

<p>At the completion of the course, the student will:</p> <p>Be able to explain cardiovascular system anatomy and physiology.</p>	<p>The course is delivered primarily utilizing classroom lecture and discussion. There is some demonstration and hands-on training in the classroom and laboratory with practical applications on selected class projects in the</p>
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<p>Be able to explain the electrophysiology of the heart.</p> <p>Be able to properly apply and interpret three and four lead ECGs Have an introductory knowledge of 12 lead ECG acquisition and interpretation.</p> <p>Be able to recognize and explain the clinical significance of a variety of rhythms to include: sinus, atrial, junctional, AV blocks, ventricular and pacemaker.</p>	<p>classroom setting.</p>
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**The course supports the following objectives:**

DCC Educational Objectives

1. Communication
2. Critical Thinking
3. Interpersonal Skills and Human Relations
4. Computational and Computer Skills
5. Understanding Culture and Society