EMST240
Paramedic Foundations
6 Credits : 2 lecture hours and 6 lab hours

Community College of Baltimore County
Common Course Outline

Description

EMST 240 – Paramedic Foundations: introduces students to the foundational knowledge and skills that will enhance their understanding of the roles and responsibilities of a professional paramedic. Students perform intravenous therapies, medication administration, airway management, history and physical examinations, and other advanced life support therapies. This coursework will prepare the student for the intense academic nature and tactile-kinesthetic proficiency required for national and state licensure requirements.

Pre-requisites: Admission to the Emergency Medical Services Technology Program
Co-requisites: EMST 212, EMST 213

Overall Course Objectives

Upon completion of this course, students will be able to:

1. relate comprehensive knowledge of the Emergency Medical Services (EMS) system, safety/well-being of the paramedic, and medical/legal issues intended to improve the health of EMS personnel, patient, and the community;
2. implement therapeutic communication with patients in a manner that achieves a positive outcome;
3. integrate fundamental knowledge of principles of public health and epidemiology including public health emergencies, health promotion, and illness/injury prevention to advance community health initiatives;
4. explain foundational medical terms in written and oral communication;
5. translate anatomic and medical term abbreviations in written and oral communications;
6. integrate a complex depth and comprehensive breadth of knowledge of the anatomy and physiology of all human systems;
7. integrate a comprehensive knowledge of pathophysiology of major human systems;
8. integrate comprehensive knowledge of life span development;
9. integrate scene and patient assessment findings with knowledge of epidemiology and pathophysiology to form a field impression;
10. integrate complex knowledge of anatomy, physiology, and pathophysiology into the assessment to develop and implement a treatment plan with the goal of ensuring a patent airway, adequate mechanical ventilation, and respiration for patients of all ages;
11. use the principles of pharmacology to select, measure, and prepare various forms of medication for delivery to patients;
12. correlate knowledge of pharmacology and medication administration principles to deliver medication to patients using various methods and devices;

13. perform life-saving critical interventions for the treatment of priority medical and trauma emergencies;
14. interpret electrocardiograms in 3-lead and 12-lead formats; and
15. advocate for integration of best practices to promote positive outcomes using current evidence-based medicine.

Major Topics

I. EMS systems
II. Wellness and safety
III. Research and evidence-based practices
IV. Documentation of patient care
V. Communication technology and processes
VI. Anatomy and pathophysiology
VII. Principles of pharmacology
VIII. Comprehensive patient history and physical examination
IX. Medication administration
X. Electrocardiogram acquisition and interpretation
XI. Advanced patient care skills
    a. Peripheral venous access (intravenous/intraosseous (IV/IO))
    b. Airway management
        i. Endotracheal intubation
        ii. Supraglottic airways
        iii. Surgical airways
        iv. CPAP/BIPAP
    c. Needle thoracostomy
    d. Medication administration
        i. Intramuscular/subcutaneously
        ii. Intranasal
        iii. Sublingual
        iv. Buccal
        v. Transdermal
        vi. IV/IO
        vii. Rectal
        viii. Nebulized

Course Requirements

Grading will be determined by the individual faculty member, but shall include the following, at minimum:

- Lab portfolio requirements as outlined by the U.S. Department of Transportation, National Registry of Emergency Medical Technicians (NREMT), and the Commission for Accreditation of Allied Health Education Programs (CAAHEP) Committee on Accreditation of Education Programs for the Emergency Medical Services Professions (CoAEMSP)
- Assignments including one academic writing assignment and one group project
- Instructor student evaluation grade that includes attendance, participation, and affective ratings
- Five topic quizzes
- Three module examinations
- Skills competency exam in cadaver lab participation

- Final cognitive examination

Written assignments and research projects: Students are required to use appropriate academic resources in their research and cite sources according to the style selected by their professor.

Other Course Information

This course is delivered once per cohort in sequence as required by national accreditation and licensing entities.

Date Revised: 10/19/2021