

Course Syllabus

Department: Physical Education and Integrated Health

Date: April 8, 2014

I. Course Prefix and Number: EMCR 300

Course Name: Advanced Emergency Medical Technician-Original

Credit Hours and Contact Hours: 4 credit hours and 4 contact hours

Catalog Description including pre- and co-requisites: *supporting data required for grade prerequisite of 'C' or higher.*

This course is a more complex course designed for professional rescuers who are interested in expanding and building on their knowledge and skills in the pre-hospital setting. The primary focus of the Advanced Emergency Medical Technician is to provide basic and limited advanced emergency medical care and transportation for critical and emergent patients who access the emergency medical system. This individual possesses the basic knowledge and skills necessary to provide patient care and transportation. Advanced Emergency Medical Technicians function as part of a comprehensive EMS response, under medical oversight. Advanced Emergency Medical Technicians perform interventions with the basic and advanced equipment typically found on an ambulance. The Advanced Emergency Medical Technician is a link from the scene to the emergency health care system.

The Advanced Emergency Medical Technician's scope of practice includes basic, limited advanced and pharmacological interventions to reduce the morbidity and mortality associated with acute out-of-hospital medical and traumatic emergencies. Emergency care is based on assessment findings. Additionally, Advanced Emergency Medical Technicians provide care to minimize secondary injury and provide comfort to the patient and family while transporting the patient to an emergency care facility.

Competencies include early recognition, assessment, treatment of the patient and use of advanced airway management and intravenous infusions, defibrillation and designated pharmacological interventions.

Prerequisite: Must hold current NYS Emergency Medical Technician certification and maintain that certification throughout this entire course.

Relationship to Academic Programs and Curriculum including SUNY Gen Ed designation if applicable:

This course is for the Basic Emergency Medical Technician who is looking to advance his/her skills and not yet ready to advance to the paramedic level.

II. Course Student Learning Outcomes: *State the student learning outcome(s) for the course (e.g. Student will be able to identify...)*

The student will:

- *understand and apply comprehensive knowledge of EMS systems, safety/well -being of the advanced EMT: and medical/legal and ethical issues, which is intended to improve the health of EMS personnel, patients and the community.
- *demonstrate knowledge of the anatomy and physiology of all human systems.
- *recognize comprehensive anatomical and medical terminology and abbreviations into the written and oral communications with colleagues and other health care professionals.
- *demonstrate comprehensive knowledge of major human systems.
- *understand and apply knowledge of life span development.
- *apply fundamental knowledge of principles of public health and epidemiology including public health emergencies, health promotion, and illness and injury prevention.
- *Apply knowledge of anatomy, physiology, and pathophysiology into the assessment to development and implement a treatment plan with the goal of assuring a patent airway, adequate mechanical ventilation, and respiration for patients of all ages.
- *Identify scene and patient assessment findings with knowledge of epidemiology and pathophysiology to form a field impression through clinical reasoning and formulate a treatment plan.
- *Implement a comprehensive treatment/disposition plan for a patient with a cardiac/medical complaint within the scope of practice of an AEMT.
- *Implement a comprehensive treatment/disposition plan for a patient with a medical complaint, special needs.
- *Demonstrate and interpret comprehensive knowledge of causes and pathophysiology into the management of cardiac arrest and peri-arrest states within the scope of an AEMT.
- *Identify and manage comprehensive knowledge of the causes and pathophysiology into the management of shock, respiratory failure or arrest with an emphasis on early intervention to prevent arrest.
- *Interpret and apply assessment findings with principles of epidemiology and pathophysiology to formulate a field impression to implement a comprehensive treatment/disposition plan for an acutely injured patient.
- *Demonstrate and apply knowledge of operational roles and responsibilities to ensure safe patient, public and personnel safety.

College Learning Outcomes Addressed by the Course: *(check each College Learning Outcome addressed by the Student Learning Outcomes)*

writing

computer literacy

oral communications

reading

mathematics

critical thinking

ethics/values

citizenship

global concerns

information resources

III. Assessment Measures (Summarize how the college and student learning outcomes will be assessed): For each identified outcome checked, please provide the specific assessment measure.

List identified College Learning Outcomes(s)	Specific assessment measure(s)
Oral Communications	Classroom and Lab scenarios, quizzes and exams. Hospital and Ride Clinical Evaluations. NYS/National Registry Practical and Written Exams.
Reading	Classroom quizzes and exams. Lab practice. Hospital and ride clinical evaluations. NYS/National Registry Practical and Written Exams.
Mathematics	Medication math and administration through classroom lab practice, quizzes and exams. Hospital and Ride clinical Evaluations. NYS/National Registry Practical and Written Exams
Critical Thinking	Through classroom quizzes and exams. Classroom lab scenarios. Lab scenarios on Sinman and Sinbaby. Hospital and Ride Clinical Evaluations. NYS/National Practical and Written Exams.
Ethics/Values	Understanding of ethics/values will be discussed during the classroom setting. Comprehensive will Be done through quizzes, modular and final exams, as well as through the students' hospital and field ride time.

IV. Instructional Materials and Methods

Types of Course Materials:

Textbooks, Various EMS Equipment – i.e. airway manikins, various intubation equipment, ventilators, stethoscopes, blood pressure cuffs, etc. Cadaver Labs. Various Medications.

Sinman and Sinbaby, Cardiac Monitors, Simulators

Methods of Instruction (e.g. Lecture, Lab, Seminar ...):

Lecture, Classroom labs, Cadaver Labs, Medication Labs, IV Labs, Hospital Clinicals – Shadow in the Emergency Department/ Phlebotomy/Respiratory Therapy/ICU and clinical time with ALS Ambulance Agencies.

V. General Outline of Topics Covered:

EMS Systems
EMS Research
Workforce Safety and Wellness
EMS Documentation
EMS System Communications
Therapeutic Communications
Medical/Legal and Ethics
Anatomy and Physiology
Medical Terminology
Life Span Development
Public Health
Principles of Pharmacology
Medical Administration
Emergency Medications
Airway Management
Respiration and Artificial Ventilations
Scene Size Up
Primary Assessment
History Taking
Secondary Assessment
Monitoring Devices
Reassessment
Medical Overview
Anatomy of the Cardiovascular System
Physiology of the Cardiovascular System
Electrophysiology of the Cardiovascular System
Primary survey for cardiovascular assessment
History and physical/SAMPLE format
Secondary survey for cardiovascular assessment
Acute Myocardial Infarction/Angina
Heart Failure
Hypertensive Emergencies
Cardiogenic Shock
Cardiac Arrest
Vascular Disorders

Aortic Aneurysm/Dissection
Coronary Artery Disease
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