Course Syllabus

Department: Physical Education and Integrated Health

Date: April 8, 2014

I. Course Prefix and Number: EMCR 305

   Course Name: Advanced Emergency Medical Technician-Refresher

   Credit Hours and Contact Hours: 2 credit hours and 3 contact hours

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

   This course is designed for individuals who have been certified by the NYS Department of Health as an Advanced Emergency Medical Technician for the purpose of maintaining their competency in providing emergency medical care. The content reviews the concepts and materials covered in the Advanced Emergency Medical Technician – Original course. After successful completion of this course, students are eligible to take the NYS DOH Bureau of Emergency Medical Services certification exam. Recertification is required every three (3) years. Persons will only be able to receive college credit for this course once.

   Prerequisite: Proof of certification as a NYS Advanced Emergency Medical Technician

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

   This course is for the Advanced Emergency Medical Technician seeking recertification.

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 review the following learning outcomes as outlined in the Advanced Emergency Medical Technician – Original Course:

   * 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  
- [x] oral communications  
- [x] reading  
- [x] mathematics  
- [x] critical thinking  
- [ ] computer literacy  
- [ ] 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.

<table>
<thead>
<tr>
<th>List identified College Learning Outcomes(s)</th>
<th>Specific assessment measure(s)</th>
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<tbody>
<tr>
<td>Oral Communications</td>
<td>Classroom and Lab scenarios, quizzes and exams. Hospital and Ride Clinical Evaluations. NYS/National Registry Practical and Written Exams.</td>
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<tr>
<td>Reading</td>
<td>Classroom quizzes and exams. Lab practice. Hospital and ride clinical evaluations. NYS/National Registry Practical and Written Exams.</td>
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<tr>
<td>Mathematics</td>
<td>Medication math and administration through</td>
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<tr>
<td>Critical Thinking</td>
<td>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.</td>
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<tr>
<td>Ethics/Values</td>
<td>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.</td>
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</tbody>
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### 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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