# RARITAN VALLEY COMMUNITY COLLEGE ACADEMIC COURSE OUTLINE

### HLTH 104 – EMERGENCY MEDICAL TECHNICIAN

### I. Basic Course Information

A. Course Number and Title: HLTH 104 - Emergency Medical Technician

B. New or Modified Course: Modified

C. Date of Proposal: Semester: Year: Spring 2021

D. Effective Term: Fall 2021

E. Sponsoring Department: Health Science Education

F. Semester Credit Hours: 6

G. Weekly Contact Hours: Lecture: 4

Laboratory: 4

Out of class student work per week: 10

H. Prerequisites

Basic Life Support (BLS): CPR for Healthcare Providers completion card provided by the American Heart Association

I. Laboratory Fees: None

J. Name and Telephone Number or E-Mail Address of Department Chair and Divisional Dean at time of approval:

Chair- Linda Romaine, 908 526-1200 x8290, <u>Linda.Romaine@raritanval.edu</u> Dean – Sarah Imbriglio 908 526-1200 x8241, <u>Sarah.Imbriglio@raritanval.edu</u>

# **II. Catalog Description**

This course prepares candidates for certification as an Emergency Medical Technician according to the regulations set forth by the State of New Jersey in accordance with the United States Department of Transportation (DOT) National EMS Education Standards. Current Basic Life Support (BLS): CPR for Healthcare Providers completion card provided by the American Heart Association or equivalent must be presented to the Student Enrollment Center in order to register for the course, and presented to the instructor on the first day of class. Total scheduled class time is approximately 220 hours and may vary by student. The breakdown of the hours include: 190 classroom hours (70 hrs are practical), 18 (6 hour shifts) emergency room, 6 hours home care, and 6 hours daycare. In the structured

hospital clinical experience, in the emergency department, there is an optional observational experience with a paramedic unit. Eligible students who successfully complete this course will be offered endorsement to take the New Jersey State EMT written examination in order to obtain certification.

#### III. Statement of Course Need

- A. This course prepares students for the EMT certification. It will expose students to a variety of career paths such as emergency medical services, law enforcement, firematics/firefighting, emergency/disaster management and other health care professions.
- B. The practicum demonstration of skills competencies required for students by the State of New Jersey in accordance with the United States Department of Transportation (DOT) National EMS Education Standards will be demonstrated in the classroom for 70 hours practical time, 18 (6 hours shifts) emergency room, 6 hours home care, and 6 hours daycare.
- C. This course is not designed to transfer.

# IV. Place of Course in College Curriculum

- A. Free Elective
- B. This course does not serve as a General Education course.
- C. This course does not meet a specific program requirement at this time.
- D. To see course transferability: a) for New Jersey schools, go to the NJ Transfer website, <a href="www.njtransfer.org">www.njtransfer.org</a>; b) for all other colleges and universities, go to the individual websites.

#### V. Outline of Course Content

The EMT course is separated into nine units, which cover the different medical and traumatic injuries that an EMT would encounter. Each section contains both lecture and laboratory skills. As per New Jersey State Department of Health and Senior Services, Office of Emergency Medical Services regulations, all students must successfully pass each module before progressing to the next module.

- 1. Foundations
  - a. Introduction to Emergency Medical Care
  - b. The Well Being of the EMT
  - c. Medical, Legal, and Ethical Issues
  - d. Life Span Development
- 2. Medical Foundations
  - a. Medical Terminology
  - b. Anatomy & Physiology
  - c. Principles of Pathophysiology
- 3. Airway Management

- a. Airway Management
- b. Respiration and Artificial Ventilation
- 4. Patient Assessment
  - a. Lifting & Moving Patients
  - b. Scene Size-Up
  - c. The Primary Assessment
  - d. Vital Signs and Monitoring Devices
  - e. Assessment of the Trauma Patient
  - f. Assessment of the Medical Patient
  - g. Reassessment
  - h. Critical Thinking & Decision Making
  - i. Communication and Documentation
- 5. Medical Emergencies
  - a. Pharmacology
  - b. Respiratory Emergencies
  - c. Cardiovascular Emergencies
  - d. Diabetic Emergencies and Altered Mental Status
  - e. Allergic Reaction
  - f. Poisoning and Overdose Emergencies
  - g. Abdominal Emergencies
  - h. Behavioral and Psychiatric Emergencies and Suicide
  - i. Hematologic and Renal Emergencies
- 6. Traumatic Emergencies
  - a. Bleeding and Shock
  - b. Soft-Tissue Trauma
  - c. Chest and Abdominal Trauma
  - d. Musculoskeletal Trauma
  - e. Trauma to the Head, Neck and Spine
  - f. Multisystem Trauma
  - g. Environmental Emergencies
- 7. Special Populations
  - a. Obstetric and Gynecologic Emergencies
  - b. Pediatric Emergencies
  - c. Geriatric Emergencies
  - d. Special Needs Emergencies
- 8. Operations
  - a. EMS Operations
  - b. Hazardous Materials
  - c. Multiple Casualty Incidents
  - d. Incident Management
  - e. Highway Safety and Vehicle Extrication
  - f. EMS Response to Terrorism
- 9. Final Review and Final Testing
  - a. Didactic Review
  - b. Skills Review
  - c. Final Written Evaluation

#### d. Final Skills Evaluation

# **VI. General Education and Course Learning Outcomes**

# A. General Education Learning Outcomes:

# At the completion of the course, students will be able to:

- 1. Find and critically evaluate emergency medical information. (GE-IL)\*
- 2. Communicate effectively in an emergency situation. (GE-NJ 1)
- 3. Accurately assess an emergency situation and respond appropriately. (GE-NJ 1)\*

\*Embedded Critical Thinking

# **B.** Course Learning Outcomes:

### At the completion of the course, students will be able to:

- 1. Assess the nature and seriousness of the patient's condition and/ or extent of injuries to assess requirements for emergency medical care
- 2. Perform pre-hospital field techniques and appropriate emergency medical care based on assessment findings of the patient's condition
- 3. Demonstrate in classroom lecture & skills lab the phases of rescue and extrication, radio communication and proper transport techniques
- 4. Manage respiratory and cardiac disorders and demonstrate skills related to oxygen therapy and airway management during lab skills scenarios
- 5. Correlate the neurological and musculoskeletal system anatomy to an on-thescene patient assessment and plan the appropriate use of immobilization devices
- 6. Anticipate the on-the-scene management of obstetrics emergencies with complications and demonstrate the skills of delivery of an infant during skill lab scenarios
- 7. Define behavioral emergencies and anticipate the scene management of patients and families during skills lab scenarios to support safety to self and others
- 8. Manage scenarios involving open and closed soft tissue injuries of the eye, neck, abdomen and genitalia
- 9. Define the efficacy, side effects, contraindications and dosing of medications administered by the EMT and the techniques for the administration of; Nitroglycerin Tablets, Metered Dose Inhaler, Oral Glucose, Epinephrine Autoinjector and Aspirin in the emergent setting
- 10. Develop competencies in order to function effectively in basic life support and emergency care in the pre-hospital arena (New Jersey State Department of Health and Emergency Medical Technician (EMT) Education Standards)
- 11. Demonstrate the psychomotor skills and behaviors based on the New Jersey State Department of Health and Emergency Medical Technician (EMT) education standards New Jersey State Department of Health and Emergency Medical Technician (EMT) Education Standards)

12. Perform safely and effectively the expectations of the job description of the EMT (New Jersey State Department of Health and Emergency Medical Technician (EMT) Education Standards)

### **C.** Assessment Instruments

- 1. Skills Demonstrations/Laboratory Products
- 2. Online Assignment Evaluation
- 3. Written and Practical Exams

#### VII. Grade Determinants

- A. Written Exams
- B. Laboratory Skills Practicum
- C. Mandatory Attendance at Clinical Observation
- D. Mandatory Attendance at All Units per State Regulations

Given the goals and outcomes described above, LIST the primary formats, modes, and methods for teaching and learning that may be used in the course:

- A. lecture/discussion
- B. small-group work
- C. computer-assisted instruction
- D. guest speakers
- E. laboratory
- F. student oral presentations
- G. simulation/role playing
- H. student collaboration
- I. independent study
- J. Clinical observation including 10 hours in a hospital emergency department or 5 hours in an emergency department and 5 hours in a mobile intensive care un

### **VIII. Texts and Materials**

A. Textbook and online LMS access key bundled:

Pollak, A. (2009-2010). *Emergency: Care and transportation of the sick and injured*. (10th ed. ed.). Sudbury MA: Jones and Barlett Publishers.

(Please Note: The course outline is intended only as a guide to course content and resources. Do not purchase textbooks based on this outline. The RVCC Bookstore is the sole resource for the most up-to-date information about textbooks.)

### IX. Resources

A. Handouts from the New Jersey State Department of Health and Emergency Medical Services (EMS)