EMT-130L: EMT BASIC PRACTICAL LAB

Cuyahoga Community College

Viewing: EMT-130L : EMT Basic Practical Lab

Board of Trustees:
2011-09-22

Academic Term:
Fall 2020

Subject Code
EMT - Emergency Medical Technology

Course Number:
130L

Title:
EMT Basic Practical Lab

Catalog Description:
This course provides the simulation labs and directed practice to complete the requirements for National Registry of EMTs (NREMT) EMT-Basic certification. This is the primary requirement for State of Ohio EMT Basic Certification.

Credit Hour(s):
1

Lab Hour(s):
1.5

Other Hour(s):
.5

Other Hour Details:
37.5 Hours of directed practice performed in program approved external sites

Requisites

Prerequisite and Corequisite
EMT-1302 Emergency Medical Technician - Basic, or concurrent enrollment.

Outcomes

Course Outcome(s):
Exhibit professional, ethical and compassionate behavior when interacting with diverse groups of patients and their families, healthcare professionals, and community members.

Objective(s):
1. Differentiate the roles, responsibilities and profession of the Emergency Medical Technician (EMT), Emergency Medical Responder, Advanced EMT, and Paramedic.
2. Determine the chain of command and reporting structure of Emergency Medical Services (EMS) service.
3. Identify the roles of people at emergency scenes, including patient, family member, caretaker and bystander.
4. Describe the importance to the receiving facility staff of the patient care report.

Course Outcome(s):
Use tactical management, critical thinking and ethical decision making skills to lead and operate an Emergency Medical Services (EMS) Unit.

Objective(s):
1. Distinguish the important Medical/Legal and ethical issues and circumstances encountered in EMS, including consent, criminal/civil law, confidentiality, and ethical conflicts.
2. Recognize the phases of the EMS run.

3. Discuss the selection of the appropriate receiving facility.

Course Outcome(s):

Identify current and potential hazards and perform duties maintaining a safe work environment for themselves, co-workers, patients and bystanders.

Objective(s):

1. Maintain a safe work environment for the EMT, co-workers, the patient, and bystanders by utilizing occupational safety, and injury prevention techniques.
2. Employ operational roles and responsibilities to ensure personal, patient, and bystander safety.

Course Outcome(s):

Identify stress within one's self and co-workers and use appropriate stress management techniques to ensure physical and emotional health.

Objective(s):

1. Practice and encouraging others to practice, stress reduction, and general wellness techniques.
2. Utilize stress reduction techniques when working with patients and bystanders.

Course Outcome(s):

Use correct medical terminology when communicating with healthcare professionals regarding patient conditions and to completely and accurately document patient care information that meets federal, state and organizational requirements.

Objective(s):

1. Practice proper communication techniques, using proper methods and terms, when communicating verbally, in writing, in an electronic record, or by phone, cell phone or two-way radio, with doctors, nurses, other EMS professionals, the patient, bystanders, and others.
2. Demonstrate therapeutic communications techniques with patients.

Course Outcome(s):

Apply knowledge of anatomy, physiology, medicolegal and ethical issues, basic patient assessment skills, and basic medical equipment to identify mechanism of injury or nature of illness to determine therapeutic modalities for the medical and trauma patient and establish the priority of interventions needed to improve the patient’s outcome within the EMT Basic level’s scope of practice.

Objective(s):

1. Evaluate the patient's condition using a fundamental understanding of anatomy, physiology, and pathophisiology as it applies to the body systems.
2. Analyze scene information and patient assessment findings (scene size-up, primary and secondary assessment, patient history, reassessment) to guide emergency management.

Course Outcome(s):

Demonstrate skill proficiency in pre-hospital assessments and treatments using basic medical techniques and equipment available within the EMT Basic level’s scope of practice.

Objective(s):

1. Administer medications utilized in emergency situations to patients within the EMT scope of practice.
2. Establish and maintain the patient's airway and manage respiration/ventilation within the EMT scope of practice.
3. Demonstrate basic emergency care and transportation based on assessment findings for an acutely ill patient.
4. Demonstrate basic emergency care and transportation based on assessment findings for an acutely injured patient.
5. Demonstrate basic emergency care and transportation based on assessment findings for a patient with special needs.

Course Outcome(s):

Prepare to sit for the National Registry of Emergency Medical Technician(NREMT) Basic Exam.

Objective(s):

1. Describe the processes and procedures to achieve NREMT Basic certification and State of Ohio EMT Basic certification.
2. Complete practical component of NREMT Basic certification exam.

Methods of Evaluation:

1. Observation of student performance according to National Registry standards on skills sheets
2. Observations documented on clinical documents
3. Successful performance of targeted number of procedures

Course Content Outline:

1. Concepts
    a. Pathophysiology
        i. Composition of ambient air
        ii. Patency of the airway
        iii. Respiratory compromise
        iv. Alteration in regulation of respiration due to medical or traumatic conditions
        v. Ventilation/perfusion ratio and mismatch
        vi. Perfusion and shock
        vii. Microcirculation
        viii. Blood pressure
        ix. Alternation of cell metabolism
        i. Life span development
            1. Infancy, birth to one year
            2. Toddler, one to three years; Preschooler, three to five years
            3. School age, six to twelve years
            4. Adolescence, 13 to 18 years
            5. Early adulthood, 20 to 40 years
            6. Middle adulthood, 41 to 60 years
            7. Late adulthood, 61 years and older
    b. Public Health
        i. Basic principles of public health
    c. Pharmacology
        i. Principles of pharmacology
        ii. Medication administration
        iii. Emergency medications
    d. Airway Management, respiration, and artificial ventilation
        i. Airway managment
        ii. Respirations
        iii. Artificial Ventilation
    e. Patient Assessment
        i. Scene size up
        ii. Primary assessment
        iii. History taking
        iv. Secondary assessment
        v. Monitoring devices
        vi. Reassessment
    f. Medicine
        i. Medical overview
        ii. Neurology
        iii. Abdominal and gastrointestinal disorders
        iv. Immunology
        v. Infectious disease
        vi. Endocrine disorders
        vii. Psychiatric
        viii. Cardiovascular
        ix. Toxicology
        x. Respiratory
        xi. Hematology
        xii. Genitourinary/Renal
        xiii. Gynecology
        xiv. Non traumatic musculoskeletal disorders
        xv. Diseases of the eyes, ears, nose and throat

g. Shock and resuscitation
    i. Ethical issues in resuscitation
    ii. Anatomy and physiology review
    iii. Respiratory failure
    iv. Respiratory arrest
    v. Cardiac arrest
    vi. Resuscitation
    vii. Automated External Defibrillator (AED)
    viii. Shock, poor perfusion
h. Trauma
    i. Trauma overview
    ii. Bleeding
    iii. Chest trauma
    iv. Abdominal and genitourinary trauma
    v. Orthopedic trauma
    vi. Soft tissue trauma
    vii. Head, Face, Neck, and Spine Trauma
    viii. Nervous system trauma
    ix. Special consideration in trauma
    x. Environmental emergencies
    xi. Multisystems trauma
i. Special patient populations
    i. Obstetrics
    ii. Neonatal care
    iii. Pediatrics
    iv. Geriatrics
    v. Patients with special challenges
j. EMS Operations
    i. Safely operating a ground ambulance
    ii. Incident management
    iii. Multiple casualty incidents(MCI)
    iv. Air medical
    v. Vehicle extrication
    vi. Hazardous materials awareness
    vii. MCI due to terrorism and disaster

2. Skills
    a. Documentation
    b. Techniques for assuring a patent airway
    c. Oxygen therapy and ventilation
    d. Epinephrine autoinjector
    e. Metered dose inhaler
    f. Small volume nebulizer
    g. Splinting
3. Issues
    a. Research
        i. Ethics of research on patients
        ii. Lack of research in EMS issues
    b. Documentation
        i. Falsification of documentation
    c. Ethical conflicts
        i. Futility of care
        ii. Allocation of limited resources
        iii. Professional misconduct
        iv. Economic triage
    d. Special populations

Resources

Mistovich, Joseph. *Prehospital Emergency Care.* 10th. Upper Saddle River: Prentiss Hall, 2013.

National Registry of EMT (NREMT). *2009 National EMS Practice Analysis.* NREMT, 2010.

EMT Program Staff. *EMT Basic Clinical Manual.* {ts '2016-12-31 00:00:00'}.

Resources Other

National Registry of EMT Basic Skills Evaluation Forms

Instructional Services

CTAN Number:

Career Technical Assurance Guide CTEMS002 (2 of 2 courses, both must be taken)

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