

### Course Outline

**COURSE:** JFT 17                      **DIVISION:** 50                      **ALSO LISTED AS:**

**TERM EFFECTIVE:** Fall 2020                      **CURRICULUM APPROVAL DATE:** 10/13/2014

**SHORT TITLE:** EMERGENCY MED TECH

**LONG TITLE:** Emergency Medical Technician

<u>Units</u>	<u>Number of Weeks</u>	<u>Type</u>	<u>Contact Hours/Week</u>	<u>Total Contact Hours</u>
5	18	Lecture:	2.5	45
		Lab:	8	144
		Other:	0	0
		Total:	10.5	189

#### **COURSE DESCRIPTION:**

This course is designed to prepare students to render pre-hospital basic life support services, including cardiopulmonary resuscitation, with emphasis on field application, practices, and techniques vital to the interaction of EMT-I personnel with all levels of emergency medical personnel. **PREREQUISITE:** First Aid CPR Responder **ADVISORY:** Eligible for English 280 or English 1A

#### **PREREQUISITES:**

Completion of AH 32, as UG, with a grade of C or better.

#### **COREQUISITES:**

**CREDIT STATUS:** D - Credit - Degree Applicable

#### **GRADING MODES**

L - Standard Letter Grade

**REPEATABILITY:** N - Course may not be repeated

#### **SCHEDULE TYPES:**

02 - Lecture and/or discussion

03 - Lecture/Laboratory

04 - Laboratory/Studio/Activity

## **STUDENT LEARNING OUTCOMES:**

By the end of this course, a student should:

1. Describe the basic concepts of human anatomy and physiology.
2. Demonstrate several emergency care procedures under simulated conditions.
3. Apply fundamental knowledge of the emergency medical services (EMS) system, safety/well-being of the emergency medical technician (EMT), medical/legal, and ethical issues to the provision of emergency care.

## **CONTENT, STUDENT PERFORMANCE OBJECTIVES, OUT-OF-CLASS ASSIGNMENTS**

Curriculum Approval Date: 10/13/2014

Lecture Content:

Content:

- I. Introduction to Medical Care (9 hours)
  - a. Emergency medical services system
  - b. Roles and responsibilities of the EMT - Basic
- II. Workforce Safety and Wellness (9 hours)
  - a. Infectious Diseases
  - b. Personal protection equipment (PPE)
- III. Medical/Legal and Ethical Issues (9 hours)
  - a. Ethical responsibilities
  - b. Advance directives, consent, refusals
  - c. Organ donors
- IV. Communications and Documentation (9 hours)
  - a. Therapeutic communication
  - b. Documentation
    1. Recording patient findings
    2. Report writing
- V. Medical Terminology (9 hours)
  - a. The four components
  - b. Directional terms

Because of the integrated nature of the lab/lecture method of instruction, the content for both lecture and lab are infused in some subjects.

Lab Content:

- VI. The Human Body (6 hours)
  - a. Anatomy
  - b. Physiology
  - c. Pathophysiology
- VII. Life Span Development (2 hours)
  - a. Stages of Life
  - b. Infants
- VIII. Lifting and Moving Patients (3 hours)
  - a. Patient moving equipment
  - b. Technical skills
- IX. Patient Assessment (6 hours)
  - a. Assessment Findings
  - b. Scene Size-Up
  - c. Primary Assessment

- d. History Taking
- e. Secondary Assessment
- f. Monitoring Devices
- g. Reassessment
- X. Airway Management (6 hours)
  - a. Airway anatomy
  - b. Airway Assessment
  - c. Respiration
  - b. Artificial Ventilation
  - d. Pathophysiology
- XI. Principles of Pharmacology (4 hours)
  - a. Medication Administration
  - b. Emergency Medications
- XII. Shock (2 hours)
  - a. Shock
  - b. Resuscitation
- XIII. Basic Life Support Resuscitation (4 hours)
  - a. Respiratory failure or arrest
  - b. Cardiac failure or arrest
  - c. CPR and AED
- XIV. Medical Overview (4 hours)
  - a. Medicine
  - b. Transport
  - c. Destination
  - d. Infectious disease management
- XV. Respiratory Emergencies (3 hours)
  - a. Anatomy
  - b. Signs and symptoms
  - c. Management
- XVI. Cardiovascular Emergencies (3 hours)
  - a. Medicine
  - b. Signs and symptoms
  - c. Assessment and management
- XVII. Neurological Emergencies (3 hours)
  - a. Medicine
  - b. Anatomy of brain and spinal cord
  - c. Assessment
  - d. Management
- XVIII. Gastrointestinal and Urologic Emergencies (3 hours)
  - a. Medicine
  - b. Abdominal and Gastrointestinal Disorders
  - c. Genitourinary / Renal
- XIX. Endocrine and Hematologic Emergencies (3 hours)
  - a. Medicine
  - b. Endocrine Disorders
  - c. Hematology
- XX. Immunologic Emergencies (3 hours)
  - a. Medicine

- b. Immunology
- c. Hypersensitivity disorders
- d. Anaphylactic reactions
- XXI. Toxicology (3 hours)
  - a. Medicine
  - b. Recognition and management
- XXII. Psychiatric Emergencies (3 hours)
  - a. Medicine
  - b. Recognition of Behaviors that pose a risk
  - c. Assessment and management
- XXIII. Gynecologic Emergencies (4 hours)
  - a. Medicine
  - b. Vaginal bleeding
  - c. sexual assault
  - d. Infections
  - e. Management
- XXIV. Trauma Overview (4 hours)
  - a. Rapid transport and destination issues
  - b. Multi-system trauma
  - c. Blast injuries
  - d. Management of the trauma patient
- XXV. Bleeding (3 hours)
  - a. Recognition and management of bleeding
  - b. Assessment and management
- XXVI. Soft-Tissue Injuries (2 hours)
  - a. Wounds
  - b. Burns
  - c. Chemicals in eyes or on skin
- XXVII. Face and Neck Injuries (6 hours)
  - a. Nosebleed
  - b. Spine trauma
  - c. Spine trauma
  - d. Facial fractures
  - e. Skull fractures
  - f. foreign bodies in the eyes
  - g. Dental trauma
- XXVIII. Head and Spine Injuries (6 hours)
  - a. Penetrating neck trauma
  - b. Laryngotracheal injuries
  - c. Spine trauma
  - d. Facial fractures
  - e. Skull fractures
  - f. Foreign bodies in eyes
  - g. Dental trauma
- XXIX. Chest Injuries (6 hours)
  - a. Blunt versus penetrating mechanisms
  - b. Hemothorax
  - c. Pneumothorax

- d. Cardiac tamponade
- e. Rib fractures
- f. Flail chest
- g. Commotio cordis

XXX. Abdominal and Genitourinary Injuries (4 hours)

- a. Evisceration
- b. Impaled Object
- c. Injuries to the external genitalia
- d. Vaginal bleeding due to trauma
- e. Sexual assault

XXXI. Orthopaedic Injuries (5 hours)

- a. Open fractures
- b. Closed fractures
- c. Dislocations
- d. Amputations
- e. Sprains/strains
- f. Pelvic fractures
- g. Amputations/replantation

XXXII. Environmental Emergencies (5 hours)

- a. Submersion incidents
- b. Temperature related illness
- c. Near drowning
- d. Bites and envenomations
- e. Dysbarism
- f. Electrical injury
- g. Radiation exposure

XXXIII. Obstetrics and Neonatal Care (6 hours)

- a. Normal Delivery
- b. Abnormal delivery
- c. Third trimester bleeding
- d. Spontaneous abortion/ miscarriage
- e. Ectopic pregnancy
- f. Preeclampsia/Eclampsia
- g. Neonatal care
- h. Trauma
- i. Special considerations in trauma

XXXIV. Pediatric Emergencies (6 hours)

- a. Patients with special challenges
- b. Upper airway obstruction
- c. Lower airway reactive disease
- d. Respiratory distress
- e. Shock
- f. Seizures
- g. Sudden infant death syndrome
- h. Trauma

XXXV. Geriatric Emergencies (6 hours)

- a. Impact of age-related changes on assessment and care
- b. Cardiovascular diseases

- c. Respiratory diseases
- d. Neurological diseases
- e. Endocrine disease
- f. Dementia
- g. Patients with special challenges
- h. Trauma

XXXVI. Patients with special challenges (6 hours)

- a. Abuse
- b. Neglect
- c. Homelessness
- d. Poverty
- e. Bariatrics
- f. Technology dependent
- g. Tracheostomy care/dysfunction
- h. Home care
- i. Sensory deficit / loss
- j. Developmental disability

XXXVII. Transport Operations (2 hours)

- a. Ambulance
- b. Air Medical
- c. Medicine
- d. Infectious Diseases

XXXVIII. Vehicle Extrication and Special Rescue (2 hours)

- a. Safe vehicle extrication
- b. Use of hand held tools

XXXIX. Incident Management (6 hours)

- a. Incident management system
- b. Triage principles
- c. Resource management
- d. Triage
- e. Hazardous materials awareness

XL. Terrorism Response and Disaster Management (2 hours)

- a. EMS Operations
- b. Mass-Casualty Incidents do to Terrorism and Disaster

XLI. A Team Approach to Health Care (2 hours)

- a. Continuum of care
- b. Advantages of a team
- c. Rescue management
- d. Critical elements necessary to ensure effective transfer of patient

**METHODS OF INSTRUCTION:**

Class discussion, skills demonstration, skills test, written test

**OUT OF CLASS ASSIGNMENTS:**

Required Outside Hours: 30

Assignment Description:

Writing assignments: Each student or group of students write one or two paragraphs on one illness and one injury that could directly affect this a chosen organ/structure. What would they expect to see?

Required Outside Hours: 30

Assignment Description: After a distribution of a body diagram drawn on an 8.5 ? 11-inch piece of paper. Using a prepared list of terms (such as directional terms), have students write the number of the term on the corresponding area of the diagram.

Required Outside Hours: 30

Assignment Description:

Provide each student with a research article based on a neurologic disease in the infant, child, or adult population. The student should read the article and write a one-paragraph summary to present to the class during this topic discussion.

**METHODS OF EVALUATION:**

Writing assignments

Percent of total grade: 25.00 %

Written patient assessments Written reports Final written exam 80% or greater

Skill demonstrations

Percent of total grade: 50.00 %

Class Performance/s; Field Work; Performance Exams

Objective examinations

Percent of total grade: 25.00 %

Objective Final Exam to be graded by instructor using AAOS standards.

**Recommended Representative Textbooks**

AAOS ( American Academy of Orthopedic Surgeons) . Emergency Care & Transport of sick and Injured . Jones and Bartlett Learning ,2020.

Students also have access to the Emergency Care & Transport of sick and Injured Portal for student lab manual access.

ISBN: 9781284080179

Reading Level of Text, Grade: 12

**ARTICULATION and CERTIFICATE INFORMATION**

Associate Degree:

CSU GE:

IGETC:

CSU TRANSFER:

Transferable CSU, effective 201370

UC TRANSFER:

Not Transferable

**SUPPLEMENTAL DATA:**

Basic Skills: N

Classification: Y

Noncredit Category: Y

Cooperative Education:

Program Status: 1 Program Applicable

Special Class Status: N

CAN:

CAN Sequence:

CSU Crosswalk Course Department:

CSU Crosswalk Course Number:

Prior to College Level: Y

Non Credit Enhanced Funding: N

Funding Agency Code: Y

In-Service: N

Occupational Course: C

Maximum Hours:

Minimum Hours:

Course Control Number: CCC000566612

Sports/Physical Education Course: N

Taxonomy of Program: 213300