

### Course Outline

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

**TERM EFFECTIVE:** Summer 2024                      **CURRICULUM APPROVAL DATE:** 04/09/2024

**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
		<b>Total:</b>	<b>10.5</b>	<b>189</b>

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Out of Class Hrs:                      90.00

Total Learning Hrs:                279.00

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**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 Professional Rescuers.

**PREREQUISITES:**

**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 and identify terminology relevant to the assessment and maintenance of the human body's vital functions.
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.

**COURSE OBJECTIVES:**

By the end of this course, a student should:

1. Complete a thorough patient assessment including: scene size-up, primary assessment, vital signs, assessment, reassessment, communication with dispatch and accurate documentation to assist in determining appropriate medical care for various injuries or illnesses.

**COURSE CONTENT:**

Curriculum Approval Date: 04/09/2024

**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.

## **COURSE CONTENT (CONTINUED):**

### **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

**COURSE CONTENT (CONTINUED):**

**[Lab Content CONTINUED]**

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

**COURSE CONTENT (CONTINUED):**

**[Lab Content CONTINUED]**

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

**COURSE CONTENT (CONTINUED):**

**[Lab Content CONTINUED]**

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

**COURSE CONTENT (CONTINUED):**

**[Lab Content CONTINUED]**

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 deficiency / 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

Evaluation Percent 25

Evaluation Description

Written patient assessments

Written reports

Final written exam 80% or greater

Skill demonstrations

Evaluation Percent 50

Evaluation Description

Class Performance/s;

Field Work;

Performance Exams

Objective examinations

Evaluation Percent 25

Evaluation Description

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

**REPRESENTATIVE TEXTBOOKS:**

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

ISBN: 9781284080179

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

12 Grade



**ARTICULATION and CERTIFICATE INFORMATION**

Associate Degree:

CSU GE:

IGETC:

CSU TRANSFER:

Transferable CSU, effective 201370

Not Transferable

UC TRANSFER:

Not Transferable

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