

# HEAL 100: EMERGENCY MEDICAL SERVICES CAREER PREPARATION

## Citrus College Course Outline of Record

Heading	Value
Effective Term:	Fall 2023
Credits:	3
Total Contact Hours:	90
Lecture Hours :	36
Lab Hours:	54
Hours Arranged:	0
Outside of Class Hours:	72
Total Student Learning Hours:	162
Strongly Recommended:	ENGL 101.
Transferable to CSU:	No
Transferable to UC:	No
Grading Method:	Standard Letter

## Catalog Course Description

Health Sciences 100 is designed to provide the student with the knowledge and skills necessary to begin an entry-level career in Emergency Medical Services (EMS) and other allied health-related fields of patient care. This course provides beginning concepts of preparatory sciences directly related to the care of sick and injured persons. It also covers the basic knowledge and skills necessary for American Heart Association (AHA) cardiopulmonary resuscitation (CPR) certification. Successful completion of this course is required for enrollment into the Emergency Medical Technician Basic Program. Material fee. 36 lecture hours, 54 lab hours.

## Course Objectives

- Describe the ethical responsibilities of EMS and other healthcare providers
- Describe the locations and gross functions of all body systems
- Identify the signs and symptoms of common medical emergencies related to various body systems
- Describe the signs and symptoms of common communicable diseases encountered in various health care settings
- Demonstrate the appropriate techniques for employing personal protective equipment to reduce the risk for acquiring a communicable disease
- Discuss the significance of the Emergency Medical Services system
- Demonstrate the various appropriate techniques of resuscitation for the neonate, infant, child, and adult patient
- Discuss the various emotional reactions an EMS provider may encounter during the care of sick or injured persons

## Major Course Content

1. General Introduction to Emergency Medical Services (EMS)
  - a. Overview of course
  - b. Emergency Medical Services system

- c. Various roles of EMS providers
  - d. Historical perspectives
2. Health Care Ethics
    - a. Discussion of applicable terminology
    - b. Legal framework of prehospital practice
    - c. Scenario-based situational discussion
  3. Well-Being of EMS Providers
    - a. Patient responses to stressful situations
    - b. Identification of patient stress and management of assaultive behavior
    - c. Identification and management of EMS job-related stress
  4. Orientation to Human Body
    - a. Surface anatomy
    - b. Body systems
    - c. Gross musculoskeletal anatomy
    - d. Gross anatomy and physiology of cardiovascular system
    - e. Gross anatomy and physiology of respiratory system
    - f. Gross anatomy and physiology of nervous system
  5. Medical Emergencies
    - a. Signs and symptoms of various cardiovascular medical emergencies
    - b. Signs and symptoms of various respiratory medical emergencies
    - c. Signs and symptoms of various neurological medical emergencies
  6. Trauma Emergencies
    - a. Signs and symptoms of traumatic emergencies
    - b. Signs and symptoms of hypo perfusion emergencies
    - c. Signs and symptoms of musculoskeletal trauma
  7. Communicable Diseases
    - a. Bacterial pathogens common in prehospital setting
    - b. Viral pathogens common in prehospital setting
    - c. Common signs and symptoms associated with various communicable diseases
    - d. Appropriate prevention techniques for reducing the risk of acquiring a communicable disease
  8. Cardiopulmonary Resuscitation
    - a. Management of neonatal cardiac and respiratory emergencies
    - b. Management of pediatric cardiac and respiratory emergencies
    - c. Management of adult cardiac and respiratory emergencies
    - d. Utilization of various barrier devices

## Lab Content

1. Anatomy and Physiology
  - a. Surface anatomy
  - b. Body systems
  - c. Structures of the body
2. Body Substance Isolation (BSI)
  - a. Personal Protective Equipment (PPE)
  - b. Hygiene
  - c. Communicable disease
3. Cardio Pulmonary Resuscitation (CPR)
  - a. Signs and symptoms of cardiac arrest
  - b. Operation of automatic external defibrillator (AED)
4. Shock

- a. Development of shock
  - b. Types of shock
  - c. Treatment of shock
- 5. Childbirth
  - a. Stages of labor
  - b. Preparing for delivery
  - c. Normal delivery
- 6. Caring for newborn
  - a. Assessment of children
  - b. Managing specific medical problems
- 7. Musculoskeletal Injuries
  - a. Appendicular Skeleton
  - b. Management of specific injuries
- 8. Severe Bleeding
  - a. Assessment of capillary, veins, artery bleeding
  - b. Management of bleeding

## **Suggested Reading Other Than Required Textbook**

Various internet articles that will be assigned.

## **Examples of Required Writing Assignments**

1. Students will write and complete a patient care report (PCR).
2. Students will write a resume and a three, five and ten year career goal report.
3. Students will describe and write a report on how errors on PCR's should be corrected.
4. Students will write a PCR based on simulated patient contacts.
5. Students will describe and write how to handle patients who refuse treatment and transport on scene.

## **Examples of Outside Assignments**

1. Students will interview a current or former EMS professional asking questions that relate to the advantages and disadvantages of a career in EMS, starting salaries, and benefits.
2. Students will obtain an American Heart Association (AHA) Health Care Provider CPR certification card.
3. Students will obtain a California Hazardous Materials Awareness Certification card.

## **Instruction Type(s)**

Lab, Lecture, Online Education Lab, Online Education Lecture