

Emergency Room Technology | One-Year Program Scope & Sequence

Year 1, Semester 1

ERT101 Emergency Room Technology I

(90 Days: 36 Class, 54 Lab, 60 % Lab)

Unit 1 (5 Days- 3 Class, 2 Lab)

History and Overview of Emergency Medicine:

- Research the components and roles of the EMS system
- Compare the training roles of different Health Care Providers
- History of EMS
- Describe the role of EMS in public Health
- Identify desired attributes of an EMT
- Explain the EMS communication System
- Identify AZ statutes and regulations in the EMS System
- Proper PPE and Scene Size Up
- Explain teamwork and communication
- Requirements of EMS at an emergency scene
- 6 major potential hazards

Professional Skills: 1.A-D, 2.A-C, 4.A-F, 8.A-I

Academic Standards: AZ.ELA.11-12.W.2 & W4,

AZ.ELA.11-12.SL.4, AZ.ELA.11-12.L.4, AZ.ELA. 11-12. RI. 10:

Work-based Learning: Career Literacy

CTSO Elect Officers

Technical Standard: 1.1-1.7, 6.1-6.5

Unit 2 (5 Days - 3 Class, 2 Lab)

Cardiopulmonary Resuscitation (CPR):

- Cardiopulmonary Resuscitation (CPR)
- Identify signs and symptoms of heart attack, cardiac arrest, with emphasis on early action to activate the emergency medical services (EMS) system.
- Perform one- and two-rescuer adult CPR.
- Manage a conscious and unconscious adult airway obstruction.
- Perform one-rescuer and two-rescuer infant and pediatric CPR.
- Manage a conscious and unconscious infant and pediatric airway obstruction.
- Deliver effective oxygenation and ventilation using a bag- valve-mask device.
- Perform automatic, external defibrillation as part of the resuscitation of the adult in cardiac arrest.
- Successfully completed the American Heart Association healthcare provider basic life support skills evaluation and written examination.

Professional Skills: 1.A-D, 2.A-C, 4.A-F, 8.A-I

Academic Standards: AZ.ELA.11-12.W.2 & W4,

AZ.ELA.11-12.SL.4, AZ.ELA.11-12.L.4, AZ.ELA.11-12.RI.10:

AZ.MA.5.NF.B.7, AZ.MA.6.RP.A.3, G-GMD.A.3

Work-based Learning: Simulated Lab Experience

CTSO: Chapter Meeting

Technical Standard: 8.3-4, 11.3

Certification: American Heart Association CPR Certification Exam

Unit 3 (30 Days- 10 Class, 20 Lab)

Anatomy and Functions of Body Systems:

- Describe the structure and functions of the following body systems:
 - o Musculoskeletal
 - o Respiratory
 - o Cardiovascular
 - o Nervous
 - o Reproductive
 - o Digestive
 - o Integumentary
 - o Endocrine
 - o Renal
- Describe the structure and function of the ears, nose, throat, and eyes
- Anatomy and Physiology and the difference between children and adults
- Understanding of prefixes, suffixes, and roots to determine the meaning of medical terms
- Explain acronyms and abbreviations used in EMS
- Anatomical and medical terms regarding positions and direction

Professional Skills: 1.A-D, 2.A-C, 4.A-F, 8.A-I

Academic Standards: AZ.ELA.11-12.W.2 & W4,

AZ.ELA.11-12.SL.4, AZ.ELA.11-12.L.4, AZ.ELA.11-12.RI.10:

AZ.MA.5.NF.B.7, AZ.MA.6.RP.A.3, G-GMD.A.3

Work-based Learning: Simulated Lab Experience

CTSO: Chapter Meeting

Technical Standard: 5.1-5.14

Unit 4 (20 Days - 10 Class, 10 Lab)

Patient Assessment:

- Distinguishing primary, secondary and history taking assessments
- Treatment modifications based on age
- Assessing a patient's baseline and vital signs
- Obtain the sample history and obtain OPQRST
- Perform a primary assessment for infant, child, and adult
- Perform a detailed, focused physical examination of the patient
- Identify situations that require ALS
- Explain important of recording changes and reassessing patients
- Demonstrate effective communication with patient, family and hospital

Professional Skills: 1.A-D, 2.A-C, 4.A-F, 8.A-I

Academic Standards: AZ.ELA.11-12.W.2 & W4,

AZ.ELA.11-12.SL.4, AZ.ELA.11-12.L.4, AZ.ELA.11-12.RI.10:

AZ.MA.5.NF.B.7, AZ.MA.6.RP.A.3, G-GMD.A.3

Work-based Learning: Simulated Lab Experience

Unit 5 (30 Days - 10 Class, 20 Lab)

Patient Management:

- Recognize signs and symptoms of respiratory emergencies
- Provide respiratory emergency care
- Recognize signs and symptoms of cardiac emergencies
- Provide cardiac emergency care
- Diabetic emergencies
- Poisoning Emergencies
- Drug and Alcohol Emergencies
- Psychiatric Conditions and Behaviors
- Identify and manage the following injuries:
 - Orthopedic
 - Soft Tissue
 - Trauma
 - Spinal
 - Nervous System
 - Environmental
 - Bleeding
- Manage Obstetric and gynecologic emergencies
- Describe and discuss complications of delivery
- Describe and discuss care for emergencies in pregnancy
- Describe and discuss care for gynecological emergencies
- Care after delivery for mom and baby
- Anatomical and physiological changes in pregnancy
- Anatomical and physiological differences between infants and children
- Recognizing common medical and trauma situations involving pediatric patients
- Abuse and neglect in children
- Discuss special challenges for pediatric patients

Professional Skills: 1.A-D, 2.A-C, 4.A-F, 8.A-I

Academic Standards: AZ.ELA.11-12.W.2 & W4,
AZ.ELA.11-12.SL.4, AZ.ELA.11-12.L.4, AZ.ELA.11-12.RI.10:
AZ.MA.5.NF.B.7, AZ.MA.6.RP.A.3, G-GMD.A.3

Work-based Learning: Simulated Lab Experience

CTSO: Chapter Meeting

Technical Standard: 8.1-8.11, 9.1-9.8, 10.1-10.9, 11.1-11.6

Year 1, Semester 2

ERT102 - Emergency Room Technology II
(90 Days: 44 Class, 46 Lab, 51% Lab)

Unit 6 (5 Days - 3 Class, 2 Lab)

Health Care Provider Well-being:

- Identify cases with emotional stress that affect the health care provider
- Identify typical stress symptoms for healthcare providers and others
- Discuss how to recognize and manage stress
- Discuss the physical well-being of the health care provider
- Coping with death and dying
- Infection control
- Proper lifting and moving patients

Professional Skills: 1.A-D, 2.A-C, 4.A-F, 8.A-I

Academic Standards: AZ.ELA.11-12.W.2 & W4,
AZ.ELA.11-12.SL.4, AZ.ELA.11-12.L.4, AZ.ELA.11-12.RI.10:
AZ.MA.5.NF.B.7, AZ.MA.6.RP.A.3, G-GMD.A.3

Work-based Learning:

Technical Standard: 2.1-2.8

Unit 7 (45 Days - 20 Class, 25 Lab)

Pharmacology and Phlebotomy:

- Medication cross-check procedures
- Explain the steps of using an autoinjection
- Explain the five rights of medical administration, including complications or errors
- Identify special considerations and administration of medications with access to resources
- Identify drugs and the scope of practice for drugs
- Verify patient identity and explain the venipuncture procedure to ensure safety and comfort
- Select an appropriate vein and apply a tourniquet to aid vein visibility
- Cleanse the puncture site using proper antiseptic technique
- Collect the required blood samples
Properly label and handle specimens

Professional Skills: 1.A-D, 2.A-C, 4.A-F, 8.A-I

Academic Standards: AZ.ELA.11-12.W.2 & W4,
AZ.ELA.11-12.SL.4, AZ.ELA.11-12.L.4, AZ.ELA.11-12.RI.10:
AZ.MA.5.NF.B.7, AZ.MA.6.RP.A.3, G-GMD.A.3

Work-based Learning: Simulated Lab Experience

CTSO: Chapter Meeting

Technical Standard: 4.1-4.7

Unit 8 (10 Days - 8 Class, 2 Lab)

Legal and Ethical Issues:

- Identify the code for EMS practitioners
- Identify the three technical principals and EMS providers should follow
- Define and give examples of patient consent
- Discuss Legal Issues associated with required documentation

- Explain the importance of patient confidentiality

Professional Skills: 1.A-D, 2.A-C, 4.A-F, 8.A-I

Academic Standards: AZ.ELA.11-12.W.2 & W4,
AZ.ELA.11-12.SL.4, AZ.ELA.11-12.L.4, AZ.ELA.11-12.RI.10:
AZ.MA.5.NF.B.7, AZ.MA.6.RP.A.3, G-GMD.A.3

Work-based Learning: Simulated Lab Experience

CTSO: Chapter Meeting

Technical Standard: 3.1-3.9

Unit 9 (10 Days - 5 Class, 5 Lab)

EMS Operations:

- Recognize and discuss safe ambulance operations
- Describe the required equipment
- Describe the responsibilities of transferring a patient
- Discuss risks and responsibilities of the health care provider
- Describe different responses to emergency incidents

Professional Skills: 1.A-D, 2.A-C, 4.A-F, 8.A-I

Academic Standards: AZ.ELA.11-12.W.2 & W4,
AZ.ELA.11-12.SL.4, AZ.ELA.11-12.L.4, AZ.ELA.11-12.RI.10:
AZ.MA.5.NF.B.7, AZ.MA.6.RP.A.3, G-GMD.A.3

Work-based Learning: Simulated Lab Experience

CTSO: State Conference

Technical Standard: 12.1-12.11

Unit 10 (20 Days - 8 Class, 12 Lab)

EMS Preparation and Examination:

- Full practice and implementation of the practical examination for state and national certification

Professional Skills: 1.A-D, 2.A-C, 4.A-F, 8.A-I

Academic Standards: AZ.ELA.11-12.W.2 & W4,
AZ.ELA.11-12.SL.4, AZ.ELA.11-12.L.4, AZ.ELA.11-12.RI.10:
AZ.MA.5.NF.B.7, AZ.MA.6.RP.A.3, G-GMD.A.3

Work-based Learning: Simulated Lab Experience

CTSO: Chapter Meeting

Technical Standard: All Standards

National Registry of Emergency Medical Technicians (NREMT)

ADE Technical Skills Assessment