**Bossier Parish Community College**

**Master Syllabus**

**Course Prefix and Number:** EMTP 150

**Course title:** Advanced EMT

**Credit Hours:** 8

**Course corequisites:** Concurrent enrollment in EMTP 151.

**Course prerequisite:** Louisiana Licensed EMT and AHA BLS Certified

**Course Description:** This integrated lecture and laboratory course is designed to prepare the student with the knowledge and skills necessary to function competently as an Advanced Emergency Medical Technician. The course also prepares the student to sit for the National Registry Written Exam which is required to become an Advanced EMT in the State of Louisiana. The student will learn how to assess and treat patients with a variety of injuries or illnesses in the out-of-hospital environment.

**Grade Composition**

The AEMT program uses a weighted average to determine your final grade.

- Exams will make up 40% of your grade.
- Quizzes will make up 30% of your grade. This includes both in class and out of class quizzes.
- Assignments will make up 30% of your grade. This includes in class assignments and homework.

**Course Requirements:** To earn a grade of "C" or higher the student must earn 70% of the total points for the course and meet <u>all</u> of the following course requirements.

- Pass the comprehensive final exam
- Complete the BPCC AEMT Student Minimum Competencies.
- Pass the final practical exam.
- The course may be offered in an online or hybrid format. Students will still be required to come to campus to participate in orientation, some classroom activities and to take exams. **This is not an entirely online course.**

**Course Grading Scale**

A- 90% or more of total possible points and met all course requirements
B- 80-89% of total possible points and met all course requirements
C- 70-79% of total possible points and met all course requirements
D- 60-69% of total possible points and met all course requirements
F- less than 60% of total possible points or failure to meet any of the course requirements

**Learning Outcomes**:

At the end of this course, the student will:

A. operate with the roles of an advanced level provider of care and contributor to the EMS profession;
B. demonstrate the knowledge, skill and ability to administer medications safely;
C. demonstrate the knowledge, skill and ability to appropriately manage a patient's airway;
D. assess, manage, and stabilize patients of all ages and demographics with medical emergencies in the out-of-hospital setting;
E. assess, manage, and stabilize patients of all ages and demographics with trauma emergencies in the out-of-hospital setting;
F. assess, manage, and stabilize patients of all ages and demographics with special needs in the out-of-hospital setting; and
G. integrate knowledge of scene safety, personal safety, personal safety, hazardous materials awareness, rescue awareness, ground ambulance operations, air ambulances operations and incident management techniques into scene operations and patient care

To achieve the learning outcomes, the student will:

1. Demonstrate the knowledge required to function as part of an EMS system (A)
    a. List and the events that led up to the establishment of the EMS system in the United States.
    b. List and describe the components of a modern EMS system.
    c. List the roles and responsibilities of an AEMT.
    d. Describe the quality improvement process.
    e. Explain how the AEMT participates in the quality improvement process.
    f. Describe ways that an AEMT may ensure a patient's safety.
2. Demonstrate the basic knowledge of the role of research in the EMS profession (A)
    a. Describe the impact that research has on EMS care
    b. Describe the process and importance of data collection
    c. Describe the process and importance of evidenced-based decision making in the EMS profession
3. Demonstrate the knowledge ability to function safely in the role of AEMT and to ensure continued wellness during a career (A)
    a. Describe how an AEMT can stay safe at work.
    b. Explain standard safety precautions that an EMT should take.
    c. Demonstrate the ability to put on and remove personal protective equipment.
    d. Explain ways that an AEMT can manage stress from all causes including death and dying.
    e. Describe how an AEMT can prevent work-related injuries.
    f. Describe how an AEMT can prevent disease transmission.
    g. Describe steps that an AEMT can take to ensure wellness.
4. Demonstrate the knowledge, skill and ability to document patient encounters and other work-related situations. (A)
5. Demonstrate the knowledge, skill and ability to communicate within an EMS system. (A)
    a. Describe how to use radios to communicate with other EMS units and public safety responders.
    b. List the contents of a hospital radio report and handover report.
    c. List and describe techniques that can be used to facilitate clear communication within the EMS team.
6. Demonstrate the knowledge, skill and ability to communication with patients and their families. (A)
    a. List and describe factors that affect communication.

    b. Demonstrate effective interviewing techniques.
    c. Describe ways to deal with difficult patients.
    d. Compare and contrast communication strategies that can be used for patients of different ages, stages of development, needs and cultures.
7. Demonstrate the knowledge, skill and ability to function as an AEMT in the legal and regulatory environment that applies to EMS. (A)
    a. Explain how you would obtain consent to treat a patient.
    b. Explain how you would maintain the confidentiality of your patient.
    c. Describe how you would determine that an advanced directive is valid.
    d. Compare and contrast civil and criminal law.
    e. Describe mandatory reporting and when it is necessary to do so
8. Integrate knowledge of the anatomy and function of all human systems to the practice of EMS (A)
9. Apply anatomical medical terms and abbreviations in written and oral communication with colleagues and other health care professionals (A)
10. Apply knowledge of the pathophysiology of respiration and perfusion to assessment and management of patients (A,C)
11. Apply fundamental knowledge of life-span development to patient assessment and management (A)
12. Applies knowledge of the principles of the roles of EMS during public health emergencies (A)
13. Applies to patient assessment and management fundamental knowledge of the medications carried by the AEMT that may be administered to a patient during an emergency (A, B)
    a. Demonstrates an adequate understanding of the principles of pharmacology including medication safety, medication legislation, naming of drugs, drug classifications, storage and security, autonomic pharmacology, metabolism and excretion, mechanism of action, medication response relationships, medication interactions, and toxicity.
    b. Demonstrates an adequate understating of the principles of medication administration including routes of administration within the scope of practice of the AEMT
    c. Demonstrates an adequate understanding of the emergency medications within the scope of practice of the AEMT
14. Demonstrate the knowledge, skill and ability to administer medications to a simulated patient.
    a. Perform intravenous cannulation on a simulated patient while meeting the criteria on an approved skill sheet.
    b. Perform intramuscular medication administration on a simulated patient while meeting the criteria on an approved skill sheet.
    c. Perform subcutaneous medication administration on a simulated patient while meeting the criteria on an approved skill sheet.
    d. Perform intravenous bolus medication administration on a simulated patient while meeting the criteria on an approved skill sheet.
    e. Perform intraosseous cannulation on a simulated patient while meeting the criteria on an approved skill sheet.
    f. Perform inhaled medication administration on a simulated patient while meeting the criteria on an approved skill sheet.
    g. Perform intranasal medication administration on a simulated patient while meeting the criteria on an approved skill sheet.

h. Withdraw medication from an ampule.
i. Withdraw medication from a vial.
j. Utilize a prefilled syringe to inject a medication into a simulated patient.

15. Apply knowledge of general anatomy and physiology to patient assessment and management in order to assure a patent airway, adequate mechanical ventilation and respiration for patients of all ages (A, B)
    a. Insert a supraglottic airway into a simulated patient while meeting the criteria on an approved skill sheet
    b. Demonstrate knowledge of airway management, airway assessment, and techniques of assuring a patent airway
    c. Demonstrate knowledge, skill, and ability to manage a pediatric patient in respiratory compromise while meeting the criteria on an approved skill sheet
    d. Demonstrate knowledge of the anatomy, physiology and pathophysiology of the respiratory system, including pulmonary ventilation, oxygenation, internal, external, and cellular respiration, assessment and management of adequate and inadequate respiration
    e. Demonstrate knowledge and skill of supplemental oxygen therapy
    f. Demonstrate knowledge of the assessment and management of adequate and inadequate ventilation, artificial ventilation, minute ventilation, alveolar ventilation, and the effect of artificial ventilation on cardiac output.
16. Apply scene information and patient assessment findings to guide emergency management. (A, G)
    a. Demonstrate knowledge of a scene size-up including scene safety and scene management
    b. Demonstrate knowledge of performing a primary assessment for all patient situations, including: initial general impression, level of consciousness, ABCs, identifying life threats, assessment of vital functions, and integration of treatment/procedures needed to preserve life
    c. Demonstrate knowledge of taking a patient's history, including: determining and investigating the chief complaint, mechanism of injury/nature of illness, past medical history, associate signs and symptoms, and pertinent negatives.
    d. Demonstrate knowledge of performing a secondary assessment for all patient situations, including: performing a rapid full body scan, a focused assessment of pain, assessment of vital signs, techniques of physical exam of the respiratory, cardiovascular, neurological, and musculoskeletal system.
    e. Demonstrate knowledge of obtaining and using information from patient monitoring devices including (but not limited to) pulse oximetry and non-invasive blood pressure
    f. Demonstrate knowledge of how and when to perform a reassessment for all patient situations
17. Apply fundamental knowledge to provide basic and selected advanced emergency care and transportation based on assessment findings for an acutely ill patient (A, C)
    a. Perform an assessment on a simulated adult medical patient while meeting the criteria on an approved skill sheet
    b. Demonstrate knowledge of pathophysiology, recognition, assessment and management of a medical complaint including transport mode, destination decisions, and the medical complaint.
    c. Demonstrate knowledge of the anatomy and physiology, pathophysiology, recognition, assessment and management of strokes/transient ischemic attacks, seizures, status epilepticus, headache and decreased level of responsiveness.
    d. Demonstrate knowledge of the anatomy and physiology, pathophysiology, recognition, assessment and management of shock associated with abdominal emergencies, acute and

chronic gastrointestinal hemorrhage, peritonitis, ulcerative diseases, and gastrointestinal bleeding.

e. Demonstrate knowledge of the anatomy and physiology, pathophysiology, recognition, assessment and management of hypersensitivity disorders and emergencies, as well as allergic and anaphylactic reactions.
f. Demonstrate knowledge of the anatomy and physiology, pathophysiology, recognition, assessment and management of a patient who may have an infectious disease and how to decontaminate an ambulance and equipment after treating a patient with a possible infectious disease, including HIV, Hepatitis B, antibiotic-resistant infections, and current infectious diseases prevalent in the community.
g. Demonstrate knowledge of the anatomy and physiology, pathophysiology, recognition, assessment and management of acute diabetic emergencies
h. Demonstrate knowledge of the anatomy and physiology, pathophysiology, recognition, assessment and management of acute psychosis, suicidal/risk, agitated delirium; the basic principles the mental health system and behaviors that pose a risk to the AEMT, the patient, and others.
i. Demonstrate knowledge of the anatomy and physiology, pathophysiology, recognition, assessment and management of acute coronary syndrome (angina pectoris, myocardial infarction), acute aortic aneurysm/dissection, thromboembolism, heart failure, hypertensive emergencies, chest pain and cardiac arrest
j. Demonstrate knowledge of the anatomy and physiology, pathophysiology, recognition, assessment and management of acute toxicological emergencies, carbon monoxide poisoning, merge agent poisoning, inhaled poisons, ingested poisons, injected poisons, absorbed poisons, alcohol intoxication, and opiate overdoses, and withdrawal.
k. Demonstrate knowledge of the anatomy and physiology, pathophysiology, recognition, assessment and management of respiratory emergencies that affect the upper and lower airway, epiglottitis, spontaneous pneumothorax, pulmonary edema, asthma, chronic obstructive pulmonary disease, environmental/industrial exposure, toxic gas, pertussis, cystic fibrosis, pulmonary embolism, pneumonia, and viral respiratory infections.
l. Demonstrate knowledge of the anatomy and physiology, pathophysiology, recognition, assessment and management of sickle cell crisis and clotting disorders
m. Demonstrate knowledge of the anatomy and physiology, pathophysiology, recognition, assessment and management of complications related to renal dialysis, urinary catheter management, kidney stones, blood pressure assessment in hemodialysis patients.
n. Demonstrate knowledge of the anatomy and physiology, pathophysiology, recognition, assessment and management of shock associated with vaginal bleeding, sexual assault, and gynecologic infections
o. Demonstrate knowledge of the anatomy and physiology, pathophysiology, recognition, assessment and management of non-traumatic fractures
p. Demonstrate knowledge of the anatomy and physiology, pathophysiology, recognition, assessment and management of epistaxis

18. Apply a fundamental knowledge to provide basic and selected advanced emergency care and transportation based on assessment findings for a patient in shock, respiratory failure or arrest, cardiac failure or arrest and post-resuscitation management. (A, B, C, D, E, F, G)

a. Demonstrate the knowledge, skill and ability to manage a simulated cardiac arrest patient while meeting the criteria on an approved skill sheet
b. Demonstrate the knowledge, skill and ability to interpret an electrocardiographic tracing and use that interpretation to guide appropriate management of a simulated patient.

19. Apply fundamental knowledge to provide basic and selected advanced emergency care and transportation based on assessment findings for an acutely injured patient (A, E)
    a. Perform an assessment on a simulated adult trauma patient while meeting the criteria on an approved skill sheet
    b. Demonstrate knowledge of pathophysiology, assessment and management of a trauma complaint including transport mode, destination decisions, and the trauma complaint.
    c. Demonstrate knowledge of the pathophysiology, recognition, assessment and management of hemorrhage/bleeding, including fluid resuscitation.
    d. Manage a patient with arterial bleeding while meeting the criteria on an approved skill sheet
    e. Demonstrate knowledge of the pathophysiology, recognition, assessment and management of blunt vs penetrating trauma mechanisms, hemothorax, pneumothorax (open, simple, tension), cardiac tamponade, rib fractures, flail chest, commotio cordis, impaled objects, open chest wounds, traumatic aortic disruption, pulmonary contusion, blunt cardiac injury, and traumatic asphyxia.
    f. Demonstrate knowledge of the pathophysiology, recognition, assessment and management of blunt vs penetrating mechanisms, evisceration, impaled object, solid and hollow organs, vascular injury, retroperitoneal injury, injuries to the external genitalia, vaginal bleeding due to trauma, and sexual assault.
    g. Demonstrate knowledge of the pathophysiology, recognition, assessment and management of open fractures, closed fractures, dislocations, sprains, strains, pelvic fractures, compartment syndrome and amputations/replantation.
        i. Apply a splint to a simulated patient with a closed fracture while meeting the criteria on an approved skill sheet
        ii. Apply a splint to a simulated patient with a dislocated joint while meeting the criteria on an approved skill sheet
    h. Demonstrate knowledge of the pathophysiology, recognition, assessment and management of wounds (avulsions, bite wounds, lacerations, puncture wounds, and incisions), burns (chemical, electrical, thermal and radiation), Crush syndrome, and chemicals in the eyes and on the skin
    i. Demonstrate knowledge of the pathophysiology, recognition, assessment and management of penetrating neck trauma, laryngeotracheal injuries, life threats, spinal trauma, facial fractures, skull fractures, foreign bodies in the eye and dental trauma.
    j. Demonstrate knowledge of the pathophysiology, recognition, assessment and management of traumatic brain injuries and spinal cord injuries
    k. Demonstrate knowledge of the pathophysiology, recognition, assessment and management of trauma in pregnant, pediatric, geriatric and cognitively impaired patients.
    l. Demonstrate knowledge of the pathophysiology, recognition, assessment and management of submersion incidents, temperature-related illness, near-drowning, bites and envenomations, dysbarism (high-altitude, diving injuries), electrical injury, and radiation exposure.
    m. Demonstrate a fundamental knowledge of the pathophysiology, recognition, assessment and management of multi-system trauma and blast injuries.

20. Apply fundamental knowledge to provide basic and selected advanced emergency care and transportation based on assessment findings for a patient with special needs (A,F)
    a. Demonstrate knowledge of the pathophysiology, recognition, assessment and management of normal pregnancy and complications of pregnancy including management of normal deliveries, abnormal deliveries (nuchal cord, prolapsed cord, breech delivery), third trimester bleeding (placenta previa, abrupt placenta), spontaneous abortion/miscarriage, ectopic pregnancy, and pre-eclampsia and eclampsia.
    b. Demonstrate knowledge of the pathophysiology, recognition, assessment and management of a newborn and neonatal resuscitation.
    c. Demonstrate knowledge of the pathophysiology, recognition, age-related assessment and age-related modified management of pediatric-specific major diseases and injuries, such as upper airway obstruction, lower airway reactive disease, respiratory distress/failure/arrest, shock, seizures, sudden infant death syndrome and gastrointestinal disease.
    d. Demonstrate knowledge of the pathophysiology, recognition, age-related assessment and age-related modified management of geriatric-specific major diseases and injuries, such as cardiovascular diseases, respiratory diseases, neurological diseases, endocrine diseases, Alzheimer's and dementia, and fluid administration in the elderly
    e. Demonstrate knowledge of recognizing, reporting and the healthcare implications of abuse, neglect, homelessness, poverty, bariatrics, technology dependent, hospice/terminally ill, tracheostomy care/dysfunction, homecare, sensory deficits/loss, and developmental disability.
21. Apply fundamental knowledge of operational roles and responsibilities to ensure safe patient, public and personal safety. (A,G)
    a. Demonstrate a fundamental knowledge of the risks and responsibilities of emergency response and transport
    b. Demonstrate a fundamental knowledge of establishing and working within the incident management system
    c. Demonstrate a fundamental knowledge of triage principles (performing, re-triage, destination decisions, and post-traumatic and cumulative stress) and resource management
    d. Demonstrate a fundamental knowledge of safe air medical operations and the criteria for utilizing air medical response
    e. Demonstrate a fundamental knowledge of safe vehicle extraction and use of simple hand tools
    f. Demonstrate a fundamental knowledge of the risks and responsibilities of operating in a cold zone at a hazardous material or other special event
    g. Demonstrate a fundamental knowledge of operating on the scene of a natural or man-made disaster.

**Attendance Policy:** The college attendance policy, which is available at http:///www.bpcc.edu/catalog/current/academicpolicies.html, allows that "more restrictive attendance requirements may apply to some specialized classes such as laboratory, activity, and clinical courses because of the nature of those courses." The attendance policy of the Paramedic program is described in the Paramedic Clinical Handbook.

**Course Fees:** This course is accompanied with an additional non-refundable fee for supplemental materials, laboratory supplies, certification exams and/or clinical fees.

**Nondiscrimination Statement**

Bossier Parish Community College does not discriminate on the basis of race, color, national origin, gender, age, religion, qualified disability, marital status, veteran's status, or sexual orientation in admission to its programs, services, or activities, in access to them, in treatment of individuals, or in any aspect of its operations. Bossier Parish Community College does not discriminate in its hiring or employment practices.

**COORDINATOR FOR SECTION 504 AND ADA**

Angie Cao, Student and Disability Services Specialist
Disability Services, F254, 6220 East Texas Street, Bossier City, LA 71111
318-678-6511
acao@bpcc.edu
Hours: 8:00 a.m. – 4:30 p.m. Monday – Friday, excluding Holidays and weekends.

**EQUITY/COMPLIANCE COORDINATOR**

Teri Bashara, Director of Human Resources
Human Resources Office, A-105
6220 East Texas Street
Bossier City, LA 71111
Phone: 318-678-6056
Hours: 8:00 a.m. – 4:30 p.m. Monday – Friday, excluding holidays and weekends.

Reviewed by J. Anderson May 2022