Emergency Medical Technology/Technician (EMS)

EMS 118 (EMS 116) Emergency Medical Technician
9 semester hours
Prerequisite: Admission to EMS Program
  (Lec 6 hrs, Lab 9 hrs)
This course is required to apply for certification as an Emergency Medical Technician. This course provides students with insights into the theory and application of concepts related to the profession of emergency medical services. Specific topics include: EMS preparatory, airway maintenance, patient assessment, management of trauma patients, management of medical patients, treating infants and children, and various EMS operations. This course is based on the NHTSA National Emergency Medical Services Education Standards.

EMS 119 (EMS 117) Emergency Medical Technician Clinical
1 semester hour
Prerequisite: Admission to EMS Program
  Cln 3 hrs)
This course is required to apply for certification as an EMT. This course provides students with clinical education experiences to enhance knowledge and skills learned in the EMS 118, Emergency Medical Technician Theory and Lab. This course helps students prepare for the National Registry Exam.

EMS 155 Advanced Emergency Medical Technician
8 semester hours
Prerequisite: Admission to the EMS Program and a valid Alabama EMT License or finished an accredited EMT course within 30 days of the first day of class.
  (Lec 5 hrs, Lab 6 hrs)
This course is required to apply for certification as an Advanced Emergency Medical Technician (AEMT). This course introduces the theory and application of concepts related to the profession of the AEMT. The primary focus of the AEMT is to provide basic and limited advanced emergency medical care and transportation for critical and emergent patients who access the emergency medical system. This individual possesses the basic knowledge and skills necessary to provide patient care and transportation. Topics include: extending the knowledge of the EMT to a more complex breadth and depth, intravenous access and fluid therapy, medication administration, blind insertion airway devices, as well as the advanced assessment and management of various medical illnesses and traumatic injuries. This course is based on the NHTSA National Emergency Medical Services Education Standards. Requires licensure or eligibility for licensure at the EMT level and EMS 156 must be taken as a corequisite.

EMS 156 Advanced Emergency Medical Technician Clinical
2 semester hours
Prerequisite: Admission to the EMS Program and a valid Alabama EMT License or finished an accredited EMT course within 30 days of the first day of class.
  (Cln 6 hrs)
This course is required to apply for certification as an Advanced Emergency Medical Technician (AEMT). This course provides students with clinical education experiences to enhance knowledge and skills learned in EMS 155. This course helps prepare students for the National Registry AEMT Exam. The student will have the opportunity to use the basic and advanced skills of the AEMT in the clinical and field settings under the direct supervision of licensed healthcare professionals. Requires licensure or eligibility for licensure at the EMT level and EMS 155 must be taken as a corequisite.

EMS 189 (EMP 189) Applied Anatomy and Physiology for the Paramedic
4 semester hours
Prerequisite: Enrolled at JSCC
  (Lec 4 hrs)
Note: EMS 189 or BIO 201 is a prerequisite for the first Paramedic course.
This course introduces human anatomy and physiology and includes concepts related to basic chemistry; fluid, electrolyte, and acid-base balance; functions of cells, tissues, organs, and systems; pathophysiology; and associated medical terminology. Emphasis is placed on applying content to signs, symptoms, and treatments; and situations commonly seen by paramedics. Upon course completion, students should be able to demonstrate a basic understanding of the structure and function of the human body.
EMS 240 (EMP 191 & EMP 192) Paramedic Operations
2 semester hours
Prerequisite: EMS 189 or BIO 201 and a valid Alabama Advanced EMT License or finished an accredited Advanced EMT course within 30 days of the first day of class.
(Lec 1 hr, Lab 2 hrs)
This course focuses on the operational knowledge and skills needed for safe and effective patient care within the paramedic's scope of practice. Content areas include: research, paramedic roles and responsibilities, well-being of the paramedic, illness and injury prevention, medical-legal-ethical issues, therapeutic communications, medical terminology, life span development, ambulance operations, medical incident command, rescue awareness and operations, hazardous materials incidents, crime scene awareness, and Alabama EMS laws and rules.

EMS 241 (EMP 199 & EMP 203) Paramedic Cardiology
3 semester hours
Prerequisite: EMS 189 or BIO 201 and a valid Alabama Advanced EMT License or finished an accredited Advanced EMT course within 30 days of the first day of class.
(Lec 2 hrs, Lab 2 hrs)
This course introduces the cardiovascular system, cardiovascular electrophysiology, and electrocardiographic monitoring. This course further relates pathophysiology and assessment findings to the formulation of field impressions and implementation of treatment plans for specific cardiovascular conditions. Content areas include: cardiovascular anatomy and physiology, cardiovascular electrophysiology, electrocardiographic monitoring, rhythm analysis, and prehospital 12-lead electrocardiogram monitoring and interpretation, assessment of the cardiovascular patient, pathophysiology of cardiovascular disease and techniques of management including appropriate pharmacologic agents and electrical therapy.

EMS 242 (EMP 193) Paramedic Patient Assessment
3 credit hours
Prerequisite: EMS 189 or Bio 201 and a valid Alabama Advanced EMT License or finished an accredited Advanced EMT course within 30 days of the first day of class.
(Lec 2 hrs, Lab 2 hrs)
This course provides the knowledge and skills needed to perform a comprehensive patient assessment, make initial management decisions, and to communicate assessment findings and patient care verbally and in writing. Content areas include: airway management, history taking, techniques of the physical examination, patient assessment, clinical decision making, communications, documentation, and assessment based management.

EMS 243 (EMP 194) Paramedic Pharmacology
1 semester hour
Prerequisite: EMS 189 or BIO 201 and a valid Alabama Advanced EMT License or finished an accredited Advanced EMT course within 30 days of the first day of class.
(Lab 2 hrs)
This course introduces basic pharmacological agents and concepts, with an emphasis on drug classifications and the knowledge and skills required for safe, effective medication administration. Content areas include: general principles of pharmacology and pharmacologic pathophysiology; venous and intraosseous access techniques, the metric and apothecary system; computation of dosage and solution problems, administration of pharmacologic agents; and nasogastric tube placement.

EMS 244 (EMP 197) Paramedic Clinical I
1 semester hour
Prerequisite: EMS 189 or BIO 201 and a valid Alabama Advanced EMT License or finished an accredited Advanced EMT course within 30 days of the first day of class.
(Cln 3 hrs)
This course is directed toward the application of knowledge and skills developed in didactic and skills laboratory experiences to the clinical setting. Theory and skills are applied to a variety of patient situations in the clinical setting, with a focus on patient assessment and management, advanced airway management, electro-therapy, I.V./I.O. initiation and medication administration.

EMS 245 (EMP 198) Paramedic Medical Emergencies
EMS 246 (EMP 196) Paramedic Trauma Management
3 semester hours
Prerequisite: EMS 189 or BIO 201 and a valid Alabama Advanced EMT License or finished an accredited Advanced EMT course within 30 days of the first day of class.
(Lec 2 hrs, Lab 2 hrs)
This course relates pathophysiology and assessment findings to the formulation of field impressions and implementation of treatment plans for trauma patients. Content areas include: the pathophysiology, assessment, and management of trauma as related to: trauma systems; mechanisms of injury; hemorrhage and shock; soft tissue injuries; burns; and head, facial, spinal, thoracic, abdominal, and musculoskeletal trauma.

EMS 247 (EMP 201) Paramedic Special Population
2 semester hours
Prerequisite: EMS 189 or BIO 201 and a valid Alabama Advanced EMT License or finished an accredited Advanced EMT course within 30 days of the first day of class.
(Lec 1 hr, Lab 2 hrs)
This course relates pathophysiology and assessment findings to the formulation of field impressions and implementation of treatment plans for trauma patients. Content areas include: endocrinology, allergies and anaphylaxis, behavioral/psychiatric conditions, gynecology, obstetrics, neonatology, pediatrics, and geriatrics. In the clinical setting, theory and skills are applied to a variety of medical situations across the life span of the patient, with a focus on communication with and management of cardiac, acute care, psychiatric/behavioral, obstetrical, newborn, pediatric, geriatric, and acute interventions for chronic care patients, and patients with special challenges.

EMS 248 (EMP 202) Paramedic Clinical II
3 semester hours
Prerequisite: EMS 189 or BIO 201 and a valid Alabama Advanced EMT License or finished an accredited Advanced EMT course within 30 days of the first day of class.
(Cln 9 hrs)
This course is directed toward the application of knowledge and skills developed in didactic and skills laboratory experiences to the clinical setting. Theory and skills are applied to a variety of medical situations across the life span of the patient, with a focus on communication with and management of cardiac, acute care, psychiatric/behavioral, obstetrical, newborn, pediatric, geriatric, and acute interventions for chronic care patients, and patients with special challenges.

EMS 253 Paramedic Transition to the Workforce
2 semester hours
Prerequisite: EMS 189 or BIO 201 and a valid Alabama Advanced EMT License or finished an accredited Advanced EMT course within 30 days of the first day of class.
(Lec 1 hr, Lab 2 hrs)
This course is designed to meet additional state and local educational requirements for paramedic practice. Content may include: prehospital protocols, transfer medications, topics in critical care and transport, systems presentation, and/or national standard certification courses as dictated by local needs or state requirement.

EMS 254 (EMP 205) Advanced Competencies for the Paramedic
2 semester hours
Prerequisite: Prerequisite: EMS 189 or BIO 201 and a valid Alabama Advanced EMT License or finished an accredited Advanced EMT course within 30 days of the first day of class.
(Lec 1 hr, Lab 2 hrs)
This course is designed to assist students in preparation for the paramedic licensure examination. Emphasis is placed on validation of knowledge and skills through didactic review, skills lab performance, and/or computer simulation and practice testing. Upon course completion, students should be sufficiently prepared to sit for the paramedic licensure examination.
EMS 255 (EMP 206) Paramedic Field Preceptorship
5 semester hours
Prerequisite: EMS 189 or BIO 201 and a valid Alabama Advanced EMT License or finished an accredited Advanced EMT course within 30 days of the first day of class.
(Cln 15 hrs)
This course provides field experiences in the prehospital setting with advanced life support EMS units. Under the direct supervision of a field preceptor, students synthesize cognitive knowledge and skills developed in the skills laboratory and hospital clinical to provide safe and effective patient care in the pre-hospital environment. Upon course completion, students should have refined and validated their patient care practices to provide safe and effective patient care over a broad spectrum of patient situations and complaints.

EMS 256 (EMP 207) Paramedic Team Leadership
1 semester hour
Prerequisite: EMS 189 or BIO 201 and a valid Alabama Advanced EMT License or finished an accredited Advanced EMT course within 30 days of the first day of class.
(Cln 3 hrs)
This course is designed to evaluate students’ ability to integrate didactic, psychomotor skills, clinical, and field internship instruction to serve as a competent entry-level paramedic. This final evaluative (rather than instructional) course focuses on students’ professional attributes and integrative competence in clinical decision-making and team leadership in the pre-hospital setting. Upon course completion, students should have demonstrated adequate knowledge and skills, professional attitudes and attributes, clinical decision-making and team leadership abilities to effectively function as a competent entry-level paramedic.