

Emergency Medical Sciences++

Associate in Applied Science

Minimum of 71 credit hours

Making fast, life-saving decisions is probably the most important thing an emergency medical technician (EMT) paramedic can do. If you want to help those who are hurt or in need, have an interest in the health care industry and are a quick, critical thinker, you might consider a career in the emergency medical sciences. Oklahoma City Community College offers an associate degree in applied science in emergency medical sciences, which leads graduates immediately into the job market and prepares them for the National Registry paramedic exam. This degree is offered both traditionally and in an online hybrid format for those who live far from campus or who have work and family obligations. Entry into this program requires successful completion of EMS 1019 or equivalent or National Registry Certification as an EMT or Advanced EMT.

Courses identified by "C" within a program curriculum pattern must be completed with a grade of "C" or better by students majoring in this program.

Course Sequence

Course ID	Course Name	Credits	Type	Min Gd
Suggested Entry Semester				
EMS 1019	Emergency Medical Technology	9	Major	C
BIO 1314	Human Anatomy and Physiology I	4	Support	C
SCL 1001	Success in College and Life	1	Life Skills	
Suggested Freshman 1st Semester				
EMS 1314	Paramedic Care I, Introduction to Paramedicine	4	Major	C
EMS 1324	Paramedic Care II, Trauma Emergencies	4	Major	C
BIO 1414	Human Anatomy and Physiology II	4	Support	C
ENGL 1113	English Composition I	3	Gen Ed	
Suggested Freshman 2nd Semester				
EMS 1334	Paramedic Care III, Medical Emergencies I	4	Major	C
EMS 2044	Paramedic Care IV, Medical Emergencies II	4	Major	C
EMS 1113	ECG Interpretation and Procedures	3	Major	C
MATH 1483	Functions and Modeling*	OR	Gen Ed	
MATH 1503	Contemporary Mathematics	3	Gen Ed	
Suggested Sophomore 1st Semester				
EMS 2054	Paramedic Care V, OB and Pediatric Emergencies	4	Major	C
EMS 2064	Paramedic Care VI, Special Populations	4	Major	C
ENGL 1213	English Composition II	3	Gen Ed	
POLSC 1113	American Federal Government	3	Gen Ed	
Suggested Sophomore 2nd Semester				
EMS 2274	EMS Leadership	4	Major	C
EMS 2284	Paramedic Practicum	4	Major	C
HIST 1483	U.S. History to 1877	OR	Gen Ed	
HIST 1493	U.S. History 1877 to Present	3	Gen Ed	
PSY 1113	General Psychology	3	Gen Ed	

Course Grouping

Major Courses: (44 credit hours) Emergency Medical Sciences: *(C)EMS 1019; (C)EMS 1113; (C)EMS 1314; (C)EMS 1324; (C)EMS 1334; (C)EMS 2044; (C)EMS 2054; (C)EMS 2064; (C)EMS 2274; (C)EMS 2284.

General Education Courses: (18 credit hours); Political Science: POLSC 1113; History: HIST 1483 or HIST 1493; Psychology: PSY 1113; English: ENGL 1113; ENGL 1213; Math: MATH 1483 or MATH 1503.

Pre-requisites: EMS 1019 or equivalent or National Registry Certification as an EMT or Advanced EMT prior to entering Paramedic courses.

Life Skills Courses: (1 credit hour) Life Skills: SCL 1001

Support Courses: (8 credit hours) (C)BIO 1314; (C)BIO 1414

All major courses as well as BIO 1314 and BIO 1414 require a minimum of a "C" grade to qualify as a course prerequisite and to qualify the student for licensure.

**This course has a clinical component that requires purchase of medical liability insurance, clinical uniform, drug testing and a National background check including a sex offender search.

Program Notes

Notes: This Technical and Occupational program is designed to prepare students to enter the job force following completion. See Technical and Occupational Programs in the general information section of the catalog.

Criteria available in division office.

++Special Admissions Procedures:

All Health Professions students are required to submit a nationwide background and pre-placement drug testing prior to clinical/fieldwork. More information will be distributed upon acceptance into your respected program.

Credentialing: The ability to sit for the licensure exam, to meet the eligibility requirements to practice as a Paramedic will be approved or denied by the National Registry of EMT's based on criminal history. It is the responsibility of the student to contact the National Registry of EMT's and determine eligibility. It is strongly recommended that this be done prior to enrollment in the program.

Accredited by: The Oklahoma City Community College EMS program is accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions (CoAEMSP).

Commission on Accreditation of Allied Health Education Programs, 25400 U.S. Highway 19 North, Suite 158, Clearwater, FL 33763, 727-210-2350, www.caahep.org

Degree Program Course Descriptions

BIO 1314 - Human Anatomy and Physiology I

Prerequisites: ENGL 0203 or adequate placement score or by meeting determined placement measures; MATH 0103 or adequate math placement. An adequate biology placement test score or BIO 0123 or a college-level biological science class.

4 Credits Through a systematic study of the structure and function of the human body, its cells, tissues, organs and systems, the student will identify and describe basic anatomical structures and fundamental physiological processes that occur in health and disease for the major body systems. Laboratory work which requires dissection is an integral and required part of the course.

BIO 1414 - Human Anatomy and Physiology II

Prerequisites: BIO 1314 with a grade of "C" or higher

4 Credits With Human Anatomy & Physiology I as a foundation, the student will advance his or her study of the structure and function of the human body and will identify and describe more detailed anatomical structures and more comprehensive physiological processes that occur in health through a systematic survey of the major body systems. Laboratory work which requires dissection is an integral and required part of the course.

EMS 1019 - Emergency Medical Technology

Prerequisites: ENGL 0203, adequate placement score, or by meeting determined placement measures

9 Credits The student will be able to do the following by describing the role of the Emergency Medical Technician in an emergency medical services system: perform patient assessment on patients with traumatic injuries and patients with medical emergencies, manage a multi-casualty incident including triage, correctly manage traumatic injuries to the body and its systems, as well as medical emergencies of varying types and causes, perform lifting and moving techniques and light extrication. The student will summarize and interpret legal responsibilities of safe ambulance operations; evaluate psychological and physical factors affecting safe emergency vehicle operations, incident command, hazardous materials incidents, crime scene awareness, rescue awareness. The student will demonstrate techniques for gaining access to the patient, disentanglement, patient movement, and recognize and manage situations posing threats to patients, EMT's or bystanders. This course includes, principles of safely operating a ground ambulance, and current required

NIMS and Hazardous Materials training. Additionally, the student will describe current EMS law as it applies to the EMT. A field and hospital practicum are an integral part of the course, for which liability insurance, a student uniform, and a physical, including certain immunizations, are required.

EMS 1113 - ECG Interpretation and Procedures

Prerequisites: ENGL 0203, adequate placement score, or by meeting determined placement measures

3 Credits ECG Interpretation introduces the student to the electrical conduction system of the heart and basic ECG interpretation of cardiac rhythms and dysrhythmias and procedures related to the management of these dysrhythmias. The student will be expected to accept accountability for personal learning and performance which reflects a fundamental understanding of basic ECG interpretation, 12 lead interpretation including identification of acute myocardial infarction, application and acquisition of 12 lead ECG, defibrillation, cardioversion and transcutaneous pacing. This course is designed for paramedic students, nursing students, graduate nurses, CCU monitor technicians and other healthcare providers who require ECG interpretation skills.

EMS 1314 - Paramedic Care I, Introduction to Paramedicine

Prerequisites: EMS 1019; or National Registry of EMT certification (EMT, AEMT or EMT-I); Pre or Corequisite: BIO 1314 Human Anatomy and Physiology I.

4 Credits Paramedic Care I introduces the student to basic EMS knowledge, life span development, an advanced level patient assessment, clinical reasoning, and the components of safe quality care. The student will be expected to accept accountability for personal learning and performance which reflects a fundamental understanding of EMS history and a complex understanding of EMS systems, roles, responsibilities, professionalism of EMS personnel, of quality improvement, patient, public and workforce safety, workforce wellness, documentation, communication, patient assessment, and research principles including ethics, legalities, and standards of paramedic practice. Includes Laboratory and Clinical Shifts.

EMS 1324 - Paramedic Care II, Trauma Emergencies

Prerequisites: Pre or Corequisite: EMS 1314 Paramedic Care I

4 Credits Paramedic Care II is a study of all age groups, of advanced assessment, pathophysiology, and management of

trauma emergencies. Course to include clinical reasoning and the development of treatment plans. The student will be expected to accept accountability for personal learning and performance which reflects a complex understanding of circulatory support, hemorrhage, all etiologies of shock, resuscitation, chest, abdominal, genitourinary, orthopedic, soft tissue, head, neck, face, nervous system, environmental and multi system trauma, and to apply standards of paramedic practice. Includes Laboratory and Clinical Shifts.

EMS 1334 - Paramedic Care III, Medical Emergencies I

Prerequisites: EMS 1324 Paramedic Care II, Trauma Emergencies; Pre or Corequisite: BIO 1414 Human Anatomy and Physiology II, EMS 1113 ECG Interpretation.

4 Credits Paramedic Care III, Medical Emergencies I is a study of adult epidemiology, psychosocial impact, pathophysiology, presentation, prognosis, and management of medical emergencies. Course to include clinical reasoning and the development of treatment plans. The student will be expected to accept accountability for personal learning and performance which reflects a complex understanding and ability to apply knowledge and skills to neurological emergencies; allergies and anaphylaxis; abdominal and gastrointestinal disorders; immunological, endocrinological, toxicological, hematological, genitourinological, renal, non-traumatic musculoskeletal, behavioral and psychiatric disorders; infectious diseases; and the application of standards of paramedic practice. Includes Laboratory and Clinical Shifts.

EMS 2044 - Paramedic Care IV, Medical Emergencies II

Prerequisites: EMS 1324 Paramedic Care II; Pre or Corequisite: BIO 1414 Human Anatomy and Physiology II, EMS 1113 ECG Interpretation.

4 Credits Paramedic Care IV is a study and practical application of adult epidemiology, psychosocial impact, pathophysiology, and management of respiratory and cardiovascular emergencies. Course to include clinical reasoning and the development of treatment plans. The student will be expected to accept accountability for personal learning and performance which reflects a complex understanding and ability to apply knowledge and skills in scenario based education to respiratory and cardiovascular emergencies and apply standards of paramedic practice. Advanced Cardiac Life Support certification, Laboratory and Clinical Shifts included.

EMS 2054 - Paramedic Care V, OB and Pediatric Emergencies

Prerequisites: EMS 2044 Paramedic Care IV, Medical Emergencies II; Corequisite: EMS 2064

4 Credits Paramedic Care V is a study of neonatal and pediatric conditions and emergencies including epidemiology, psychosocial impact, anatomy, physiology, pathophysiology, presentation, prognosis, and management. Course to include clinical reasoning and the development of treatment plans. The student will be expected to accept accountability for personal learning and performance which reflects a complex understanding and ability to apply knowledge and skills in common neonatal and pediatric disorders and emergencies including respiratory, cardiovascular, shock and resuscitation, technology dependent, chronic illness emergencies, abuse, neglect, and poverty using the application of standards of paramedic practice. Includes Pediatric Advanced Life Support certification, Laboratory and Clinical Shifts included.

EMS 2064 - Paramedic Care VI, Special Populations

Prerequisites: EMS 2044 Paramedic Care IV

4 Credits Paramedic Care IV is a study of common disorders and emergencies in the geriatric, bariatric, and patients with special challenges including epidemiology, psychosocial impact, anatomy, physiology, pathophysiology, presentation, prognosis, and management. Course to include clinical reasoning and the development of treatment plans. The student will be expected to accept accountability for personal learning and performance which reflects a complex understanding and ability to apply knowledge and skills in emergencies affecting special populations including polypharmacological impacts, chronic illness, abuse, neglect, poverty, and the terminally ill using the application of standards of paramedic practice. Laboratory and Clinical Shifts included.

EMS 2274 - EMS Leadership

Prerequisites: EMS 2064 Paramedic Care VI, Co-requisite: EMS 2284 Paramedic Practicum

4 Credits EMS Leadership is the capstone course integrating all didactic knowledge, psychomotor skills, affective behavior and clinical instruction throughout the program to demonstrate entry level paramedic competency and apply clinical decision making. The student will be expected to accept accountability for personal learning and performance which reflects a complex understanding and the ability to apply knowledge and skills in clinical decision making. The course includes EMS Operations in which the student will demonstrate techniques for gaining access to the patient, disentanglement, patient movement,

preparation for transport, recognition of situations posing threats to patients, paramedics or bystanders, and describe correct management of these situations. This course includes crew resource management principles, principles of safely operating a ground ambulance, and current required NIMS and Hazardous Materials Awareness training.

EMS 2284 - Paramedic Practicum

Prerequisites: EMS 2064 Paramedic Care VI, Corequisite: EMS 2274 EMS Leadership

4 Credits The Paramedic Practicum is an essential part of the Paramedic Program. The student will successfully complete required supervised hours and competencies in approved clinical and prehospital sites as determined by the OSDH, CAAHEP/CoAEMSP and the program. The purpose of the Paramedic Practicum is to allow the application of learned principles in the delivery of patient care and gain a basic understanding of supervisory roles in EMS. An internship and Medical Director evaluation are an integral part of this course.

ENGL 1113 - English Composition I

Prerequisites: ENGL 0203, adequate placement score, or by meeting determined placement measures

3 Credits The student will write well-developed compositions which demonstrate the principles of unity, coherence, and organization and which contain specific details and vivid language. The students will locate library material and incorporate researched materials into compositions.

ENGL 1213 - English Composition II

Prerequisites: ENGL 1103 or ENGL 1113 taken within the last year, with strong encouragement for immediate continuation.

3 Credits In this advanced writing course, students will create essays that explore and evaluate a variety of issues and perspectives suggested by fiction, poetry, drama, essays, and other types of cultural texts. Students will refine and augment the writing techniques they learned in ENGL 1113 or ENGL 1103 to develop well-reasoned, well-structured arguments in a clear, fluid, and engaging prose style.

HIST 1483 - U.S. History to 1877

Prerequisites: ENGL 0203, adequate placement score, or by meeting determined placement measures

3 Credits After analyzing events in American history from 1400 to 1877 in such areas as revolution, geographic and social mobility, political reform, government precedents and war, students will be able to identify patterns of present day mobility, describe governmental operations in their society and help resolve conflict in society based on the student's search for change, precedents, and conflict

in the American past. A general education requirement.

HIST 1493 - U.S. History 1877 to Present

Prerequisites: ENGL 0203, adequate placement score, or by meeting determined placement measures

3 Credits After analyzing events in American history from 1877 to the present in such areas as geographic and social mobility, political reform, government precedents and war, students will be able to identify patterns of present day mobility, describe governmental operations in their society and help resolve conflict in society based on the student's search for change, precedents, and conflict in the American past. A general education requirement.

MATH 1483 - Functions and Modeling*

Prerequisites: MATH 0313 or adequate math placement; ENGL 0203, adequate placement score, or by meeting determined placement measures

3 Credits The student will demonstrate: an understanding of the general concepts of relation and function and specifically of polynomial, rational, exponential and logarithmic functions; the ability to solve systems of equations by utilizing matrices and determinants; and, the ability to solve practical problems using algebraic and digital techniques. *Pending OSRHE approval

MATH 1503 - Contemporary Mathematics

Prerequisites: MATH 0313 or adequate math placement. Pre or Co-requisite ENGL 1113 or ENGL 1103

3 Credits A study of the mathematics needed for critical evaluation of quantitative information and arguments (including logic, critical appraisal of graphs and tables); use of simple mathematical models, and an introduction to elementary statistics. This course satisfies the computer proficiency requirement.

POLSC 1113 - American Federal Government

Prerequisites: ENGL 0203, adequate placement score, or by meeting determined placement measures

3 Credits A study of the principles, structure, processes and functions of the United States federal government.

PSY 1113 - General Psychology

Prerequisites: ENGL 0203, adequate placement score, or by meeting determined placement measures

3 Credits A survey of the major areas of study in psychology such as motivation, learning, physiology, personality, social

psychology, abnormal behavior, perception, memory, cognition/thought, and treatment.

SCL 1001 - Success in College and Life

Prerequisites: ENGL 0106 or adequate reading/writing assessment scores

1 Credit Students will learn best practices for academic, career, and personal success. Students will discover their individual strengths, interests, and values to create a personalized plan; select and utilize resources that are applicable to their growth and success; and engage as active and responsible members of the academic community. This course should be taken during a student's first semester of college work at Oklahoma City Community College and is a required course in degree plans to satisfy the Life Skills requirement.