Emergency Medical Sciences++

Associate in Applied Science

Minimum of 72 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.

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

Course Sequence

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<tr>
<th>Course ID</th>
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<th>Credits</th>
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Course Grouping

Major Courses: (45 credit hours) Emergency Medical Sciences: [D](C)EMS 1035; (C)EMS 1113; (C)EMS 2013; (C)EMS 1041; (C)EMS 1051; (C)EMS 1115; (C)EMS 1124; (C)EMS 1134; (C)EMS 2145; (C)EMS 2154; (C)EMS 2161; (C)EMS 2171; (C)EMS 2174; (C)EMS 2182; (C)EMS 2192

General Education Courses: (18 credit hours); Political Science: POLSC 1113; History: HIST 1483 or HIST 1493; Psychology: PSY 1113; English: ENGL 1113; ENGL 1213; Any approved OCCC general education math, biology, chemistry, or foreign language course; or COM 1123 Interpersonal Communications; Com 2213 Intro to Public Speaking, CS 1103 Introduction to Computers and Applications, PSY 2403 Developmental Psychology, POLSC 2113 Introduction to State and Local Government, SOC 1113 Introduction to Child Development, SOC 2023 Social Problems, or SOC 2213 Minorities, Ethnicity and Cultural Diversity

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 requires a minimum of a "C" grade to qualify as a course prerequisite and to qualify the student for licensure.

[D] This course has a clinical component that requires purchase of medical liability insurance, a physical, a clinical uniform, and an OSBI background investigation 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.

Drug Testing: Drug testings is required for all students in the Division of Health Professions. Each student must have a random drug test prior to the first clinical assignment. The fee will be paid with the tuition and other fees for the semester in the program where actual clinical assignments begin. Random drug tests will be done on a predetermined date. Any break in continuous enrollment will require an additional random test.
Special Admissions Procedures:
Background Checks: Due to clinical agency requirements, the Division of Health Professions requires an extensive nationwide Background Report which includes, but is not limited to, Oklahoma State Bureau of Investigation (OSBI) background searches for sex offender, violent offender, and criminal history. The student is responsible for the cost of the Background Report, which must be paid by credit card or money order only. Clinical agency representative(s) review the reports that have any criminal history (or “hits on the designated areas of concern”). The facility alone can accept or deny clinical access to a student. If a student is denied access to clinical sites, he/she will be unable to successfully complete the course or the program. Any break in continuous enrollment will require another complete Background Report.
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, 1361 Park Street, Clearwater, FL 33756, 727-210-2350,
www.caahep.org
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 test score. 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

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 1035 - PARAMEDIC CARE I Introduction and Patient Assessment
Prerequisites: Prerequisite: BIO 1314 Human Anatomy and Physiology I; Pre or corequisite: BIO 1414 Human Anatomy and Physiology II Corequisite: EMS 1041 EMS Fieldwork I

5 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, 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.

EMS 1041 - EMS Fieldwork I
Prerequisites: Corequisite: EMS 1035 Paramedic Care I

Credit: 1
The student will successfully complete required supervised hours and competencies in approved clinical andprehospital sites as determined by the OSDH, CAAHEP/CoAEMSP, and the program. The purpose of fieldwork is to allow the application of learned principles in the delivery of patient care.

EMS 1051 - EMS Fieldwork II
Prerequisites: Corequisite: EMS 1115 Paramedic Care IIA & EMS 1134 Paramedic Care IIB

Credit: 1
The student will successfully complete required supervised hours and competencies in approved clinical andprehospital sites as determined by the OSDH, CAAHEP/CoAEMSP, and the program. The purpose of fieldwork is to allow the application of learned principles in the delivery of patient care.

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 1115 - Paramedic Care IIA Trauma Emergencies
Prerequisites: Prerequisite: EMS 1035 Paramedic Care I; Corequisite: EMS 1134 Paramedic Care IIB; EMS 1124 Pharmacology; EMS 1051 EMS Fieldwork II

Credit: 5
Paramedic Care IIA is a study of all age groups of advanced assessment, pathophysiology, and management of trauma emergencies 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 airway management, respiratory and artificial ventilation, circulatory support, hemorrhage, all etiologies of shock, and resuscitation, and chest, abdominal, genitourinary, orthopedic, soft tissue, head, neck, face, nervous system, environmental and multi system trauma and to apply standards of paramedic practice.

EMS 1124 - Pharmacology
Prerequisites: Prerequisite: EMS 1035 Paramedic Care I Introduction and Patient Assessment
Credit: 4
Pharmacology introduces the student to the the principles of pharmacology, medication administration, major medication classes, and emergency medications. The student will be expected to accept accountability for personal learning and performance which reflects a comprehensive understanding of pharmacokinetics, pharmacodynamics, routes of administration, names, indications, contraindications, complications, mechanism of actions, side effects, interactions, dosages, and ability to apply knowledge and skills to determine appropriate pharmacological management within the paramedic scope of practice. Drug dosage calculations will be an integral part of this course.

EMS 1134 - Paramedic Care IIB Advanced EMS Skills
Prerequisites: Prerequisite: Paramedic Care IIB is the practical application of pediatric, adult and geriatric advanced assessment, pathophysiology, and management of trauma emergencies 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 of advanced airway management, respiration and artificial ventilation, circulatory access and support, hemorrhage control, and advanced skills related to all etiologies of shock and resuscitation, and demonstrate standards of paramedic practice. Includes Laboratory.

EMS 2013 - EMS OPERATIONS
Prerequisites: Corequisite - EMS 1018 Basic Emergency Medical Technology
Credit: 3
The student will summarize and interpret legal responsibilities of safe ambulance operations in Oklahoma; evaluate psychological and physical factors affecting safe emergency vehicle operations. The student will discuss medical incident command, hazardous materials incidents, crime scene awareness, rescue awareness, & operations, and ground crew training. The student will demonstrate techniques for gaining access to the patient, disentanglement, patient movement, and preparation for transport and recognize...
situations posing threats to patients, EMT’s 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 HAZWOPER training.

EMS 2145 - Paramedic Care IIIA
Respiratory and Cardiovascular Emergencies
Prerequisites: Prerequisite: EMS 1115 Paramedic Care IIA & EMS 1134 Paramedic Care IIB; EMS 1124 Pharmacology
Corequisite: EMS 2154 Paramedic Care IIB; EMS 2161 EMS Fieldwork III
Credit 5 Paramedic Care IIIA is a study and practical application of adult epidemiology, psychosocial impact, pathophysiology, and management of respiratory and cardiovascular emergencies 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 and laboratory included.

EMS 2154 - Paramedic Care IIB
Medical Emergencies
Prerequisites: Credit 4 Paramedic Care IIB is a study of adult epidemiology, psychosocial impact, pathophysiology, presentation, prognosis and management of medical emergencies 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. Includes laboratory.

EMS 2161 - EMS Fieldwork III
Prerequisites: Corequisite: EMS 2145 Paramedic Care IIIA & EMS 2154 EMS Paramedic Care IIB
Credit 1 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 fieldwork is to allow the application of learned principles in the delivery of patient care.

EMS 2171 - EMS Fieldwork IV
Prerequisites: Corequisite: EMS 2174 Paramedic Care IVA, EMS 2192 Paramedic Care IVB, EMS 2182 EMS Leadership
Credit 1 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 fieldwork IV 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 fieldwork.

EMS 2174 - Paramedic Care IVA
Neonatal & Pediatric Emergencies
Prerequisites: Credit 4 Paramedic Care IVA is a study of neonatal and pediatric conditions and emergencies including epidemiology, psychosocial impact, anatomy, physiology, pathophysiology, presentation, prognosis and management 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, and chronic illness emergencies, abuse, neglect, and poverty using the application of standards of paramedic practice. Includes Pediatric Advanced Life Support certification and laboratory.

EMS 2182 - EMS Leadership
Prerequisites: Corequisites: EMS 2174 Paramedic Care IVA & EMS 2192 Paramedic Care IVB
Credit 2 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 the paramedic clinical internship, includes a leadership experience and emphasizes decision making.

EMS 2192 - Paramedic Care IVB
Emergencies in Special Populations
Prerequisites: Prerequisite: EMS 2145 Paramedic Care IIIA Corequisite: EMS 2174 Paramedic Care IVA; EMS 2182 EMS Leadership; EMS 2171 EMS Fieldwork IV
Credit 2 Paramedic Care IVB 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 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. Includes laboratory.

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.

FA GEN - FACULTY APPROVED GENERAL EDUCATION ELECTIVE
Prerequisites:
3 Credits Faculty approved General Education elective

HIST 1483 - U.S. HISTORY TO THE CIVIL WAR
Prerequisites: ENGL 0203, adequate placement score, or by meeting determined placement measures
3 Credits After analyzing events in American history from 1400 to 1870 in such areas as revolution, geographic and social mobility, political reform, government precedents and war, the student will be able to identify patterns of present day mobility, describe governmental operations in his society and...
help resolve conflict in society based on the
students search for change, precedents, and
conflict in the American past.

**HIST 1493 - U.S. HISTORY SINCE THE
CIVIL WAR**
*Prerequisites: ENGL 0203, adequate
placement score, or by meeting determined
placement measures*
3 Credits After analyzing events in American
history from 1870 to the present in such
areas as political reform, industrialization,
urbanization, ethnic acculturation and war,
the student will be able to identify meaningful
changes in his society, identify equal rights
in that society, and help resolve conflict in
this society based on the students search
for change, equal rights and conflicts in the
American past.

**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 - INTRODUCTION TO
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.