

EMERGENCY MEDICAL SERVICES (EMS)

EMS-255 Emergency Medical Technician I (4)

Provides emergency medical care information at an Emergency Medical Technician (EMT) level as outlined by the National Emergency Medical Services Education standards. Introduces basic emergency care concepts in a preparatory module, including fundamental knowledge of the EMS system, safety/well-being of the EMT and medical/legal and ethical issues to the provision of emergency care. Requires HIPAA, Infection Control and Mandatory Reporting for child/adult training for health care providers. Offers American Heart Association Basic Life Support certification with successful completion. Arts & Sciences Elective Code: B

Hours per week: 4.0 lecture

EMS-300 Advanced Emergency Medical Technician (8)

Prepares students for the National Registry practical and written examinations for State of Iowa certification. Focuses on prehospital emergency care fundamentals, and advanced airway and cardiac management skills. Requires 72 hours of clinical internship at hospitals, ambulance services or fire departments. Arts & Sciences Elective Code: B; Comments: Current certification in CPR for health care providers and active EMT certification are required

Hours per week: 6.0 lecture, 1.0 lab, 4.5 clinical

Prerequisite: Take EMS-255. Take EMS-350. Take EMS-365.

EMS-350 Emergency Medical Technician II (3.5)

Continues EMS-255. Introduces shock and resuscitation, patient assessment, care and transportation of the acutely ill trauma patient, special patient populations and EMS operations. Focuses on Geriatric Education for EMS (GEMS), Hazmat Awareness and Incident Command. Requires demonstration of proficiency for skills within the scope of practice for patients of all ages. Arts & Sciences Elective Code: B

Hours per week: 3.0 lecture, 1.0 lab

Corequisite: Take EMS-255. Take EMS-365.

EMS-365 Emergency Medical Technician II Clinical (1)

Provides emergency medical assessment, care and transportation of acutely ill or injured patients of all ages. Develops proficiency in previously learned skills for direct patient care in selected clinical settings. Requires participation in and documentation of patient contacts and field experience approved by the medical director and the EMS program director. Requires demonstration of competency in skills for patients of all ages within the scope of practice. Arts & Sciences Elective Code: B

Hours per week: 3.0 clinical

Corequisite: Take EMS-255. Take EMS-350.

EMS-601 Paramedic Operations (3)

Provides an overview of EMS operations, including EMS systems, safety, research, documentation, communications, medicolegal, ethics, MCI, incident management, air medical, rescue, and HazMat. Includes an introduction to pharmacology. Arts & Sciences Elective Code: B

Hours per week: 3.0 lecture

Prerequisite: Minimum C- in EMS-255. Minimum C- in EMS-350. Minimum C- in EMS-365.

Corequisite: Take EMS-602. Take EMS-656.

EMS-602 Cardiorespiratory Preparation (3.5)

Provides the didactic and lab components of essential paramedic skills, including IV/med administration, airway management, respiration & ventilation, needle decompression, needle cric, patient assessments, and basic EKG/12-lead interpretation. Arts & Sciences Elective Code: B

Hours per week: 2.25 lecture, 2.5 lab

Corequisite: Take EMS-601. Take EMS-656.

EMS-641 Introduction to Paramedicine (3)

Provides an overview of paramedic roles and responsibilities and the emergency medical service system. Includes discussion of medicolegal and ethical issues in EMS, agents of trauma and disease, and career opportunities for paramedics. Provides discussion and demonstration of proper documentation in EMS, emergency vehicle operations, and non-patient care aspects of EMS. Arts & Sciences Elective Code: B; Comments: Need to hold a current EMT-B Iowa Certification

Hours per week: 3.0 lecture

Prerequisite: Take EMS-255. Take EMS-350. Take EMS-365.

EMS-642 Pharmacology for Paramedicine (3)

Provides an introduction to drug classifications, mechanism of action and metabolism. Discusses indications, contraindications, dosages, routes of administration and side effects of drugs administered by the paramedic. Arts & Sciences Elective Code: B

Hours per week: 3.0 lecture

Prerequisite: Take BIO-168. Take MAT-772.

EMS-643 Cardiorespiratory Paramedicine (3)

Provides lecture, discussion and case-based teaching in the pathophysiology, recognition, and advanced life support of cardiovascular and respiratory emergencies and shock. Arts & Sciences Elective Code: B

Hours per week: 3.0 lecture

Prerequisite: Take EMS-641. Take EMS-642.

EMS-644 Paramedic Clinical I (3)

Provides opportunities for observation and supervised participation in the delivery of advanced life support in pre-hospital and emergency department settings. Arts & Sciences Elective Code: B

Hours per week: 9.0 clinical

Prerequisite: Take EMS-641. Take EMS-642.

EMS-645 Paramedic I (2.5)

Provides scenario-based teaching and student practice in techniques of assessment and management of patients with cardiovascular and respiratory emergencies. This course includes ACLS certification. Arts & Sciences Elective Code: B

Hours per week: 0.5 lecture, 4.0 lab

Prerequisite: Take EMS-641. Take EMS-642.

EMS-646 Paramedic Clinical II (4)

Provides opportunities for observation and supervised practice of patient assessment and management in various settings. Arts & Sciences Elective Code: B

Hours per week: 12.0 clinical

Prerequisite: Take EMS-644.

EMS-647 Paramedic II (3.5)

Provides demonstration and scenario-based practice of assessment and management of trauma, medical, psychological, pediatric, geriatric and obstetric patients. Includes PALS and PHTLS certification. Arts & Sciences Elective Code: B

Hours per week: 1.0 lecture, 5.0 lab

Prerequisite: Take EMS-645.

EMS-648 Special Patient Populations in Emergency Medical Services (4)

Provides lecture-discussion and case-based teaching of EMS, assessment and management of emergencies specific to pediatric, geriatric, disabled and obstetric patient populations. Arts & Sciences Elective Code: B

Hours per week: 4.0 lecture

Prerequisite: Take EMS-643.

EMS-649 Trauma and Environmental Emergencies (4)

Provides lecture-discussion and case-based teaching in the kinematics of trauma, pathophysiology of shock and trauma, and techniques of trauma management. Discussion of identification and management of environmental emergencies including heat and cold, barotrauma, altitude, radiation, hazardous materials and drowning emergencies. Includes PEPP certification. Arts & Sciences Elective Code: B

Hours per week: 4.0 lecture

Prerequisite: Take EMS-643.

EMS-650 Medical and Psychological Emergencies (4)

Lecture and case-based teaching in the pathophysiology, recognition and advanced life support assessment and management of emergencies involving the nervous, endocrine, renal, and gastrointestinal systems. Assessment and intervention in psychological emergencies. Includes AMLS certification. Arts & Sciences Elective Code: B

Hours per week: 4.0 lecture

Prerequisite: Take EMS-643. Take EMS-648.

EMS-651 Paramedic Fieldwork (4)

Provides opportunities for guided paramedic practice and evaluation in the pre-hospital setting. Students are expected to achieve increasing independence as paramedic level practitioners. The student must complete a prescribed number of patient contacts as team leader. Arts & Sciences Elective Code: B

Hours per week: 12.0 clinical

Prerequisite: Take EMS-646.

EMS-653 Paramedic III (1)

Provides an opportunity for scenario-based skill and assessment practice in biweekly lab sessions that prepare the student for the NREMT paramedic practical examination for certification. Arts & Sciences Elective Code: B

Hours per week: 2.0 lab

Prerequisite: Take EMS-647.

Corequisite: Take EMS-650. Take EMS-651. Take EMS-652.

EMS-656 Clinical Introduction (1)

Provides opportunities for observation and supervised participation in the delivery of medications in the pharmacy setting. Deepens understanding of fire department operations. Arts & Sciences Elective Code: B

Hours per week: 3.0 clinical

Corequisite: Take EMS-601. Take EMS-602.

EMS-657 Paramedic Clinical III (3)

Provides an opportunity for guided paramedic practice and evaluation in hospital clinical environments. Arts & Sciences Elective Code: B

Hours per week: 9.0 clinical

Prerequisite: Take EMS-646.

Corequisite: Take EMS-650. Take EMS-651. Take EMS-653.

EMS-658 Cardiorespiratory Emergencies (4)

Provides didactic and psychomotor components of cardiology, shock, and pulmonology. Includes pertinent A&P, pathophysiology, and pharmacology for each body system presented. Arts & Sciences Elective Code: B

Hours per week: 3.0 lecture, 2.0 lab

Prerequisite: Minimum C- in EMS-656.

Corequisite: Take EMS-813. Take EMS-659.

EMS-659 Paramedic Clinical I (4)

Provides the opportunity to observe and participate in skills performance and patient assessments in both a prehospital and hospital/clinic environment. Arts & Sciences Elective Code: B

Hours per week: 12.0 clinical

Prerequisite: Minimum C- in EMS-656.

Corequisite: Take EMS-658. Take EMS-813.

EMS-691 Medical Emergencies I (3.75)

Provides the didactic and lab components of medical emergencies related to neurology, endocrinology, GI/GU, and psychological emergencies. Includes pertinent A&P, pathophysiology, and pharmacology for each body system presented. Arts & Sciences Elective Code: B
Hours per week: 3.0 lecture, 1.5 lab

Prerequisite: Minimum C- in EMS-659.

Corequisite: Take EMS-692. Take EMS-693. Take EMS-696.

EMS-692 Medical Emergencies II (3.75)

Provides the didactic and lab components of medical emergencies related to immune system, infectious diseases, hematology, toxicology, musculoskeletal, and ENT. Includes pertinent A&P, pathophysiology, and pharmacology for each body system presented. Includes discussion of special challenges and home care considerations. Arts & Sciences Elective Code: B
Hours per week: 3.0 lecture, 1.5 lab

Prerequisite: Minimum C- in EMS-659.

Corequisite: Take EMS-691. Take EMS-693. Take EMS-696.

EMS-693 Gynecology/OB/Neonatology (2.5)

Provides the didactic and lab components of medical emergencies related to gynecology, obstetrics, and neonatology. Includes pertinent A&P, pathophysiology, and pharmacology for each body system presented. Includes Neonatal Resuscitation Program. Arts & Sciences Elective Code: B
Hours per week: 2.0 lecture, 1.0 lab

Prerequisite: Minimum C- in EMS-659.

Corequisite: Take EMS-691. Take EMS-692. Take EMS-696.

EMS-696 Paramedic Clinical II (4)

Provides the opportunity to observe and participate in skills performance and patient assessments in both a prehospital and hospital/clinic environment. Arts & Sciences Elective Code: B
Hours per week: 12.0 clinical

Prerequisite: Minimum C- in EMS-659.

Corequisite: Take EMS-691. Take EMS-692. Take EMS-693.

EMS-697 Trauma Emergencies (3.5)

Provides the didactic and psychomotor components of trauma emergencies. Includes pertinent A&P, pathophysiology, and pharmacology. Arts & Sciences Elective Code: B
Hours per week: 2.7 lecture, 1.6 lab

Prerequisite: Minimum C- in EMS-696.

Corequisite: Take EMS-822. Take EMS-701. Take EMS-698. Take EMS-699.

EMS-698 Paramedic Clinical III (3)

Provides the opportunity to observe and participate in skills performance and patient assessments in both the prehospital and hospital/clinic environment, with a focus on transitioning into the role of Team Leader. Arts & Sciences Elective Code: B
Hours per week: 9.0 clinical

Prerequisite: Minimum C- in EMS-696.

Corequisite: Take EMS-697. Take EMS-822. Take EMS-701. Take EMS-699.

EMS-699 Paramedic Capstone (3)

Provides the opportunity to apply skills and knowledge learned throughout the Paramedic curriculum in the role as Team Leader. Arts & Sciences Elective Code: B
Hours per week: 9.0 clinical

Prerequisite: Minimum C- in EMS-696.

Corequisite: Take EMS-697. Take EMS-822. Take EMS-701. Take EMS-698.

EMS-701 Paramedic Test Prep (1.5)

Provides a review of knowledge and test-taking skills to prepare for the NREMT Paramedic exams. Includes Pediatric Education for the Prehospital Provider. Arts & Sciences Elective Code: B
Hours per week: 1.5 lecture

Prerequisite: Minimum C- in EMS-696.

Corequisite: Take EMS-697. Take EMS-822. Take EMS-698. Take EMS-699.

EMS-813 ACLS & PALS (1.5)

Includes both the didactic and psychomotor components of the American Heart Association's Advanced Cardiac Life Support and Pediatric Advanced Life Support courses. Arts & Sciences Elective Code: B
Hours per week: 1.2 lecture, 0.6 lab

Corequisite: Take EMS-658. Take EMS-659.

EMS-822 PHTLS & AMLS (1.5)

Includes both the didactic and psychomotor components of the NAEMT Prehospital Trauma Life Support and Advanced Medical Life Support courses. Arts & Sciences Elective Code: B
Hours per week: 1.0 lecture, 1.0 lab

Prerequisite: Minimum C- in EMS-696.

Corequisite: Take EMS-697. Take EMS-701. Take EMS-698. Take EMS-699.