

# EMERGENCY MEDICAL CARE (EMC)

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## **EMC 102. First Response Emergency Care. (4 Credits)**

I, II, A. Prerequisite or co-requisite: EMC 104. Emergency medical care techniques adhere to U.S. Department of Transportation curriculum for Emergency Medical Responder. Credit will not be awarded to students who have credit for HEA 202 or HEA 203. 2 Lec/2 Lab.

## **EMC 104. Healthcare Basic Life Support. (1 Credit)**

A. Basic cardiac life support skills for healthcare student or professional in accord with peer-reviewed American Heart Association (AHA) scientific guidelines. Course completion documentation when AHA requirements met. Maximum 6 enrollments for renewal. 0.25 Lec/0.75 Lab.

## **EMC 105. Survey of Medical Terminology. (1 Credit)**

A Cross-listed with CHS 105. Independent study, modular design paced by class meetings includes work roots, prefixes, suffixes, and general medical terms. Credit will not be awarded to students who have previously taken CHS 105 and MAS 200.

## **EMC 110. Emergency Medical Technician. (5 Credits)**

I, II, A. Prerequisite or Corequisite: EMC 104. Prehospital basic life support concepts, skills, and field clinical experience for entry level Emergency Medical Technician adhering to national curricula. Meets eligibility requirements for state certification and national registration examinations. 3 Lec/2 Lab.

## **EMC 110L. Introduction to Emergency Medical Care Laboratory. (2 Credits)**

A. Prerequisite or Corequisite: EMC 104 and EMC 110. Prehospital basic life support skills and field clinical experience for entry level Emergency Medical Technician-Basic adhering to national curricula. Meets eligibility requirements for state certification and national registration psychomotor examinations. 4 Lab.

## **EMC 115. Basic Clinical/Field Experience. (2 Credits)**

I, II, A. Prerequisite: departmental approval and Certified EMT-Basic. Minimum of 64 hours supervised hospital emergency department and prehospital emergency care ambulance clinical experience. Preceptor evaluates basic life support knowledge and skills.

## **EMC 130. Human Systems of Assessment. (3 Credits)**

A. Overview of human body and its systems as applied to rapid patient assessment and problem identification. Limited to certified paramedic students only.

## **EMC 200. Introduction to Prehospital Advanced Life Support. (2 Credits)**

II, A. Role and responsibilities of EMT-Paramedic, components of EMS systems, medical/legal considerations, and communications in advanced and basic life support settings.

## **EMC 205. Prehospital Management of OB/GYN Emergencies. (1 Credit)**

I, A. Pathophysiology and advanced level prehospital management of antepartum, parturition, postpartum, and gynecological emergencies. Assessment, care, and transportation of the neonate.

## **EMC 212. Crash Victim Auto Extrication. (1 Credit)**

I, A. Survey of vehicle extrication procedures for emergency medical personnel. Adheres to U.S. Department of Transportation content and objectives. 1 Lec/1 Lab.

## **EMC 215. Prehospital Management of Behavioral Emergencies. (1 Credit)**

I, A. Survey of vehicle extrication procedures for emergency medical personnel. Adheres to U.S. Department of Transportation content and objectives. 1 Lec/1 Lab.

## **EMC 225. Introduction to Pharmacology. (3 Credits)**

I, II, A. Introduction to classification, nature, and uses of medications. Pharmacological agents utilized in prehospital health care setting emphasized.

## **EMC 240. Introduction to Electrocardiography. (3 Credits)**

I, II, A. Cardiac anatomy, physiology, and electrophysiology related to ECG. Proficient ECG interpretation skills emphasized. EMC 270 EMTP: Theory/Practicum I.

## **EMC 300. Emergency Operations, and Behavioral Crisis. (3 Credits)**

Introduction to the emergency medical field. Topics include legal and ethical issues; infection control; disaster preparedness; and recognition and care of patients with behavioral emergencies. Credit will not be awarded to students who have credit for EMC 200 or EMC 215.

## **EMC 303. Introduction to Cardiology. (3 Credits)**

Introduction to prehospital electrocardiography and use and classification of pharmacological agents. Credit not awarded to students who have received credit for EMC 225 and EMC 240.

## **EMC 305. Prehospital Management of OB/GYN/Pediatric Emergency. (3 Credits)**

Pathophysiology and advanced level assessment and management of OB, GYN, and pediatric patients. Credit will not be awarded to students who have received credit for EMC 205.

## **EMC 310. Advanced Cardiology. (3 Credits)**

(2) II, A. Prerequisites and/or co-requisites: EMC 303 and EMC 335; or departmental approval. Advanced diagnostics, interventions, and management of cardiovascular emergencies to include cardiac resuscitation adhering to the standards of the American Heart Association. AHA ACLS Provider required for course completion. 2 Lec/2 Lab.

## **EMC 315. Pediatric Adv Life Support. (1 Credit)**

A. Assessment, recognition, and intervention for infant or child with cardiopulmonary arrest or shock. Adheres to American Heart Association and Academy of Pediatrics cognitive and performance standards. AHA PALS Provider evidence of course completion available.

## **EMC 320. Adv Life Support: Trauma. (3 Credits)**

II, A. Prerequisites: EMC 115, 240, BIO 171, 301. Prehospital management of complex patients with multiple systems failure secondary to trauma related pathologies.

## **EMC 335. Medical Emergencies I. (3 Credits)**

I, A. Prerequisites: EMC 240, BIO 171, 301, EMC 115, 225, and department approval. Pathophysiology and advanced level prehospital management of emergencies of the respiratory, cardiovascular, endocrine, nervous, gastrointestinal, genitourinary, and reproductive systems.

## **EMC 336. Case Management. (1 Credit)**

I, II, A. Prerequisite or Co-requisite: EMC335 and 342 or departmental approval. Hands-on advanced case management of medical and trauma emergencies using low and high-fidelity patient care simulation.

## **EMC 340. Advanced Life Support: Medical Emergencies. (3 Credits)**

II, A. Prerequisite: EMC 335. Pathophysiology and advanced level prehospital management of emergencies involving anaphylaxis, toxicology, alcoholism, drug abuse, infectious diseases, environmental hazards, and pediatric and geriatric patients.

## **EMC 341. Case Management. (1 Credit)**

I, II, A. Co-requisite: EMC 340 and 352 or departmental approval. Advanced case management of medical and trauma emergencies requiring critical thinking, oral critical thinking, practical and didactic assessment.

**EMC 342. Advanced Clinical I. (3 Credits)**

I, A. Corequisite: EMC 335. Integration of basic and advanced life support concepts and psychomotor skills in patient care situations developed through supervised assignments in various clinical settings and through simulation.

**EMC 342L. Advanced Clinical I Lab. (0 Credits)**

Integration of basic and advanced life support concepts for psychomotor skills in patient care situations developed through supervised assignments in various clinical settings and simulation.

**EMC 349. Co-op or Appl Lrn: Em Med Care. (0.5-8 Credits)**

I, II, A. Work in placements related to academic studies. A minimum of 80 hours of employment is required for each semester credit hour.

**EMC 349A. Cooperative Study: Emergency Medical Care. (0.5-8 Credits)**

**EMC 349B. Cooperative Study: Emergency Medical Care. (0.5-8 Credits)**

Work in placements related to academic studies.

**EMC 352. Advanced Clinical II. (3 Credits)**

II, A. Prerequisite: EMC 342. Corequisites: EMC 320, 340 and 352L.

Hospital assignments allow continued development and application of cognitive and psychomotor skills in critical situations. Autonomous decision-making skills developed under supervision through increased participation in patient care.

**EMC 352L. Advanced Clinical II Lab. (0 Credits)**

(0) Pre-requisite: EMC 342. Co-requisite: EMC 340 and EMC 352. Clinical assignments allow continued development and application of cognitive and psychomotor skills in critical situations. Autonomous decision-making and critical thinking skills in clinical situations developed under supervision through increased participation in patient care.

**EMC 360. Advanced Field Internship. (2 Credits)**

A. Prerequisites: EMC 205, 212, 215, 310, 320, and 352. Minimum 120 hours supervised experience on paramedic ambulance. Progresses from advanced emergency care delivery observation to beginning team member responsibilities.

**EMC 362. Advanced Field Internship II. (4 Credits)**

A. Prerequisite or Corequisite: EMC 200, 205, 215, and 360. Continuation of supervised experience on advanced life support ambulance. Assumes team member role with progression to team leader. Minimum advanced internship experience requires 75 ALS Contacts.

**EMC 380. Advanced Prehospital Theory Medical. (4 Credits)**

A. Prerequisites: Kentucky Certified EMT-Paramedic and admission to EMC major. Foundation course for paramedic students which focuses on pathophysiological basis for prehospital interventions and management. Includes in-depth history and assessment skills.

**EMC 382. Adv Prehospital Theory-Trauma. (4 Credits)**

A. Prerequisites: Kentucky Certified EMT-Paramedic and admission to EMC major. Foundation course for paramedic students which focuses on pathophysiological basis for prehospital interventions and management in trauma settings. Includes in-depth history and assessment skills.

**EMC 389. Topical Seminar.\_\_\_\_\_. (1-3 Credits)**

I, II, A. Prerequisite or Co-requisite: EMC 320, 335 and 342 or departmental approval. Development and presentation of research in contemporary methods, techniques, practices, and devices in the field. May be retaken under different topics to a maximum of 12 hours.

**EMC 400. Emergency Care Systems Management. (3 Credits)**

I, II, A. Prerequisites: ENG 300 or FSE 200. EMS systems design and typical agency divisions, including operations, communications, training and customer service. Projects focus on system design, training and efficiency.

**EMC 420. Emergency Services Design and Budget. (3 Credits)**

A. Prerequisite or Co-requisite: ENG 300 (or FSE 200) or departmental approval. Identify and compare issues with staffing, operations, communications, training and mission with various EMS systems models. Develop and revise sample budgets for EMS systems.

**EMC 430. Legal and Ethical Aspects of Emergency Services. (3 Credits)**

A. Prerequisite: departmental approval. Examine and apply moral and ethical decisions made in emergency services. Issues of diversity, expanded health care settings, aging population, and others will be explored.

**EMC 440. EMS Instruction. (3 Credits)**

A. Prerequisite: departmental approval. Introduction to the principles involved in EMS adult learning. Roles issues, domains of learning, and instruction models will be emphasized. Organization and planning for the EMS community including diverse learning populations and regulations.

**EMC 450. Disaster Medical Operations. (3 Credits)**

A. Emergency medical communications, cooperation and support in response to a natural or human-made disaster. Planning, delivery and recovery of medical systems by various local, state and federal agencies and the private sector.

**EMC 480. Topics in Emergency Medicine. (3 Credits)**

I, II, A. Investigation into the pathophysiology of traumatic and medical emergencies which applies to the latest trends in recognition and management.

**EMC 489. Introduction to Research Methods. (3 Credits)**

A. Prerequisites: ENG 300 or FSE 300, and FSE 200. Introduction to basic research methods for professionals in emergency services and public agency practitioners and educators. This includes foundational principles of statistical analyses and application, as well as human subjects protections.