EMERGENCY MEDICAL CARE
(EMMC)

Courses

EMMC 217. Community Emergency Response Team I. 1 Unit.
Theory and practice of the community emergency response team role.
Addresses disaster preparedness, fire suppression, disaster medical care,
search and rescue, crisis psychology, response to terrorism, and team
organization and administration. Requires completion of skills laboratory.

EMMC 301. Pathophysiology in Emergency Care I. 3 Units.
Develops understanding of human anatomy and physiology to integrate
pathophysiology, disease mechanisms, and dysfunction within an
emergency medicine framework. Emphasizes integration of organ
systems ranging from cardiac, vascular, respiratory, gastrointestinal,
and genitourinary; along with specific mechanisms—such as injury,
inflammation, and infection—that highlight pathology in medical patients.

EMMC 302. Pathophysiology in Emergency Care II. 3 Units.
Advances knowledge and integration of pathophysiology within
emergency medicine by adding additional organ systems and approaches
to disease mechanisms. Emphasizes integration of neurology, endocrine,
musculoskeletal, and multisystem areas with a focus on injury and
inflammation in trauma patients.

EMMC 303. Pathophysiology in Emergency Care III. 2 Units.
Focuses on critical thinking, conceptual knowledge, and application of
the foundational principles of pathophysiology. Emphasizes recognition
of common disease states, integration of the disease mechanisms and
process, and presentation of case reflections to summarize pathology in
patients presenting with medical or traumatic complaints.

EMMC 308. Pharmacology. 3 Units.
General overview of pharmacology, including pharmacokinetics,
pharmacodynamics, and therapeutics of drugs. Basic definitions, sources
of information, classification of drugs, and principles and mechanisms of
drug actions. Emphasizes prehospital drug categories.

EMMC 314. ECG Interpretation and Analysis. 2 Units.
Develops basic ECG interpretation skills. Focuses on anatomy and
physiology, underlying pathophysiology, and basic rhythm recognition.
Overview of related treatments. Emphasizes skills needed by bedside
practitioner to differentiate between benign and life-threatening
arrhythmias.

EMMC 315. Cardiology. 3 Units.
Assists the health care provider to develop assessment skills and
increase knowledge of medical management of the patient with
acute and chronic cardiovascular disorders. Focuses on anatomy and
physiology, underlying pathophysiology, advanced history taking and
physical assessment, cardiovascular pharmacology, electrical modalities,
cardiac diagnostic testing, and current research. Emphasizes the
emergency care of patients with myocardial infarction and trauma to the
cardiovascular system. Assignment includes interaction with cardiac
patients and observation of diagnostic studies in the clinical setting.

EMMC 316. 12-Lead ECG Interpretation. 2 Units.
Designed for health care providers who are familiar with basic ECG
monitoring and are seeking to learn principles of application and
interpretation of the 12-lead system. Emphasizes recognition of the acute
myocardial infarction. Additional topics include identifying axis deviation,
acute ischemic conditions, electrolyte imbalances, bundle-branch
block, and infarct impostors. Practical application of information to
bedside care of cardiac patients, emphasizing patient assessment, data
collection, and use of the 12-lead to guide rapid intervention. Certificate
issued upon successful completion of the course.

EMMC 317. Community Emergency Response Team Development and
Instruction. 2 Units.
Development of sustainable community emergency response team
(CERT) programs. Review of core CERT knowledge and competencies,
and instructional techniques in disaster preparedness, fire suppression,
disaster medical care, search and rescue, crisis psychology, response
to terrorism, and team organization and administration. Discussion of
adult learning theories and skills instruction. Meets federal/state criteria
to become a CERT trainer. Prerequisite: EMMC 217 or equivalent CERT
Basic certification.

EMMC 325. Current Issues in Emergency Medical Care. 2 Units.
Seminar-style discussion on current issues and controversies in
emergency medicine. May include topics such as prehospital use of
thrombolytic therapy; managed care; primary-care, advanced scope
paramedic practice, etc.

EMMC 331. Theories of Emergency Medical Services I. 3 Units.
Introduces prehospital medical services. Roles and responsibilities of
paramedics and EMTs. EMS systems design, constraints, and operating
problems. EMS environment and scene issues. Medical-legal issues.
History and current state of prehospital care and medical oversight.

EMMC 332. Theories of Emergency Medical Services II. 3 Units.
Investigates the dimensions of emergency medical services. Influence of
environment on oxygen delivery. Develops paradigms for EMS. Decision
making in the constrained environment. Stress models and role theories.
Discusses EMS as sequential environments from public health to critical
care.

EMMC 389. Junior Seminars. 0.5,1 Units.
Discusses issues of professionalism and career development in the
whole person context; written, oral, and electronic communication;
writing and research skills; use of computer resources.

EMMC 425. Instruction and Curriculum Design in Emergency Services. 3
Units.
Methods of effective instruction and curriculum design for adult learners.
Discusses classroom-management techniques and instructional
presentation in public education, in-service and continuing education,
college classroom, clinical teaching, conferences, and individual
guidance. Applies curriculum design theories to development of
instructional units and objectives, evaluation procedures, and
assessment tools. Introduces learning-experience design, appropriate
technology selection, learner-centered handout/syllabus development,
and cultivation of respect for diversity in learning.
EMMC 429. Psychosocial Models and Interventions. 3 Units.
Major models of stress, crisis, and psychological trauma; and how they relate to health-care providers. Psychosocial reactions and responses of populations, individuals, and care providers to societal disruption and trauma, medical emergencies, and death and dying. Applies principles for suicide intervention, critical incident debriefings, and death notification. Roles of psychiatrists, psychologists, social workers, family therapists, and chaplains. Methods of providing temporary, adequate psychological care for individuals in psychosocial crisis.

EMMC 435. Disasters, WMD, and Terrorism. 3 Units.

EMMC 436. Trauma and Surgical Care. 3 Units.

EMMC 445. Perinatal and Pediatric Care. 3 Units.
Emergency evaluation and care of the perinatal and pediatric patient. Cardiac, gastrointestinal, hematologic, renal, and metabolic conditions and treatment. Discusses appropriate versus inappropriate child development and behavior, including developmental stages, temperaments, feeding disorders, sleep disorders, mentally challenged, and attention deficit. Psychosocial aspects of pediatric, child, and adolescent psychiatric disorders.

EMMC 446. Physical Diagnosis. 3 Units.

EMMC 447. Geriatrics and Aging. 3 Units.
A forum for discussing current trends in aging and for identifying the needs of an older population. Discusses psychological and social changes in the older adult. Physiologic process of aging and the medical considerations unique to age. Management of geriatric trauma, medical emergencies, and the impact of chronic diseases. Establishing a social response to aging and viable health-care delivery models for older adults.

EMMC 448. Advanced Physical Diagnosis and Critical Care. 3 Units.

EMMC 451. Health Care Management for Prehospital Providers. 2 Units.
Basic principles of management and how they relate to EMS systems. Federal, state, and local authority for EMS delivery and services, resources for and constraints of EMS systems, relationship to and impact on public safety and health care-delivery systems, interface of public and private organizations, current and future issues.

EMMC 452. Seminars in EMS Management I. 2 Units.
Management theories applied to EMS management and practice. Public/private sector integration, public/media relations, government relations, stress management, management/leadership-skills development, decision making, performance improvement.

EMMC 453. Seminars in EMS Management II. 2 Units.

EMMC 464. Ethics and Leadership in Emergency Services. 2 Units.
Examines the theory and conceptual framework to view and practice ethical leadership as a collective enterprise. Explores emerging paradigms of leadership. Clarifies and contrasts differing approaches to leadership and leadership development. Compares and contrasts the situational approach of the processes of administration, management, and leadership. Utilizes learner-designated activities to develop a personal philosophy of leadership, assess individual characteristics, and relate those strengths to a leadership situation.

EMMC 471. Senior Project I. 2 Units.
Project developed, implemented, and evaluated by students for in-depth experience in area of choice. May include research; community projects; and/or education, management, or clinical affiliations. Students work under direct supervision of assigned faculty mentor.

EMMC 472. Senior Project II. 2 Units.
Continues project developed in EMMC 471.

EMMC 484. Legal Issues in Health Care. 2 Units.
Introduces the legal system as it pertains to health-care professionals. Concepts of malpractice, litigation, consent for and refusal of medical treatment, advanced directives, and patient confidentiality. Discusses employment issues, including discrimination and sexual harassment. Develops health and safety programs per OSHA regulations, risk management, legal issues in vehicle operations and equipment, and EMS and law-enforcement interactions.

EMMC 489. Senior Seminars. 1 Unit.
Discusses issues of scholarship, professionalism, portfolio development and refinement, short- and long-term goal setting, and development of resume/curriculum vitae.

EMMC 498. Special Topics. 1-4 Units.
Special topics in emergency medical care.

EMMC 499. Special Topics Laboratory/Clinical Practicum. 1-8 Units.
Special topics in emergency medical care laboratory and clinical practicum.