

# EMERGENCY HEALTH SERVICES (EHS)

## Explanation of Course Numbers

- Courses in the 1000s are primarily introductory undergraduate courses
- Those in the 2000s to 4000s are upper-level undergraduate courses that also may be taken for graduate credit with permission and additional work assigned
- Those in the 6000s and 8000s are for master's, doctoral, and professional-level students
- The 6000s are open to advanced undergraduate students with approval of the instructor and the dean or advising office

### **EHS 1002. CPR and First Aid. 1 Credit.**

Development of the proper techniques of cardiopulmonary resuscitation and first aid. Nationally recognized certification provided.

### **EHS 1025. Introduction to Prehospital Care. 2 Credits.**

Concepts of prehospital care, including terminology, basic emergency care, communication, and anatomy and physiology for emergency care; first aid and Basic Life Support (BLS) training. Restricted to students in the health sciences program. Prerequisites: HSCI 1101, HSCI 1102 and HSCI 1103.

### **EHS 1040. Emergency Medical Tech-Basic. 3 Credits.**

EMT-Basic knowledge and skills. Includes basic life support, patient assessment, bleeding control, bandaging and splinting. Successful completion makes student eligible to sit for National Registry certification exam.

### **EHS 1041. EMT - Basic Lab. 1 Credit.**

Application and practice of EMT-Basic skills.

### **EHS 1044. EMT - Basic Recertification. 3 Credits.**

Prepares students to recertify as a National Registry EMT-Basic. Includes an "EMT Refresher" class and continuing education program. Laboratory fee.

### **EHS 1058. EMT Instructor Development. 2 Credits.**

Students develop and deliver didactic and skill instruction. Students participate in the day-to-day teaching and management in an EMT-Basic program.

### **EHS 1101. Introduction to Emergency Health Services I. 2 Credits.**

Introduction to concepts of emergency health services; medical emergency management in a prehospital environment and EMS operations. Criminal background check required. Prerequisite: EHS 1025.

### **EHS 1102. Introduction to Emergency Health Services II. 2 Credits.**

Continuation of topics introduced in EHS 1101, including managing medical emergencies, trauma emergencies, and working with special patient populations. Restricted to students in emergency health services program. Prerequisites: EHS 1025 and EHS 1101.

### **EHS 2104. Legal Aspects in Emergency Management. 3 Credits.**

Legal issues in the delivery of emergency medical services, including abandonment, malpractice, negligence, patient consent, the Freedom of Information and Privacy Acts, the Good Samaritan law, protocol deviation, record keeping, patient refusal of services, and medical control. Emergency medicine legislation and recent court decisions. Prerequisite: HSCI 2103.

### **EHS 2105. Drug Addiction and Pain Management in the Emergency Health Services. 1 Credit.**

The science of addiction and pain with a focus on management and intervention strategies used in the provision of emergency health services in the prehospital setting. Prerequisites: EHS 1040 and EHS 1041.

### **EHS 2107. Theory and Practice of Research in a Clinical Setting. 4 Credits.**

Fundamentals of clinical research methods, design, and analysis related to emergency medicine.

### **EHS 2108. Emergency Medicine Clinical Scribe. 3 Credits.**

Fundamentals of emergency medicine clinical practice through documentation and management of clinical information. Students participate as members of an emergency medicine team and explore topics related to emergency health care, e.g., practical human anatomy, medical terminology, diagnosis, patient care, medical records, and practice management.

### **EHS 2109. Infectious Diseases and Bioterrorism. 3 Credits.**

Examination of the basic principles of epidemiology, the growing problem of emerging infectious diseases, the threat of biological warfare, and emergency preparedness planning and response for large-scale biological events. Restricted to students in the health sciences program or with the instructor's permission. Recommended background: 4 credits in courses in the areas of biology or anatomy and physiology; or HSCI 2102.

### **EHS 2110. Emergency Department Critical Care Assessment and Procedures. 4 Credits.**

Expansion of EMT-Basic knowledge and skills for independent performance as a hospital technician; emphasis on the Emergency Department and Intensive Care Units.

### **EHS 2131. History Taking and Physical Examination. 2 Credits.**

Conducting an assessment of patients' health care needs and providing basic care during the patient intake process. Restricted to students in SMHS. Prerequisites: HSCI 1101, HSCI 1102 and HSCI 1103.

### **EHS 2160. Disaster Response Planning and Management. 3 Credits.**

Planning for and management of mass-casualty incidents in the pre-hospital and hospital environments for all risks (attack, man-made, and natural), including development of response plans, triage, medical evacuation procedures, communications, roles of government and the private sector, terrorism, pandemics and epidemics, and medical care for mass gatherings. Restricted to students in the health sciences program or with the instructor's permission.

**EHS 2161. Principles of Hazardous Materials and CBRNE Incident Management. 3 Credits.**

Examination of hazardous materials and their risks, including chemical, biological, radiological, nuclear, and explosives (CBRNE). Identification of hazardous materials and related problems, precautions in approaching the contaminated patient, protective clothing, decontamination, and management of selected hazards, and countermeasures. Restricted to students in the health sciences program or with the instructor's permission. Recommended background: 4 credits in courses in biology or anatomy and physiology; or HSCI 2102.

**EHS 2162. Introduction to the Principles of Tactical Medicine. 4 Credits.**

The basics of tactical emergency medicine, such as acute care in tactical combat situations and medical operations support of tactical teams.

**EHS 2166. Current Topics. 1 Credit.**

Review of the current literature to identify clinical, operational, educational, and administrative issues important in the leadership of EMS.

**EHS 2211. Introduction to Telemedicine. 3 Credits.**

An introduction to the ethical, legal, and technical aspects of telemedicine, including, but not limited to, emerging technologies, planning and operational considerations. Students complete a number of practical exercises requiring direct application and utilization of Internet, video, audio, and other technologies.

**EHS 3101. Leadership Concepts. 3 Credits.**

Leadership topics in the context of emergency action and disaster response, including developing leadership skills, team and group dynamics, and contrasting military and civilian leadership structures. Restricted to students in the health sciences program or with the instructor's permission. Credit cannot be earned for this course and EHS 4111.

**EHS 3103. Technology in Critical Incident Response. 3 Credits.**

Examination of the role of technology in critical incident response through an assessment of domestic and international cases. Restricted to students in the health sciences program or with the permission of the instructor. Prerequisite: EHS 2160.

**EHS 3105. Integrated Response to High Impact Violent Incidents. 3 Credits.**

Examination of resources and response strategies needed to mitigate high impact, violent incidents involving an ongoing threat; evaluation of multiagency and multidiscipline integrated operations, mass casualty events, and terrorism. Restricted to students in the health sciences program or with the instructor's permission. Prerequisite: EHS 2160.

**EHS 3107. Financial Management for the Disaster Cycle. 3 Credits.**

Financial management, budgeting, and grants management in the emergency response and preparedness arenas. Restricted to students in the health sciences program or with the instructor's permission. Prerequisite: EHS 2160. Credit cannot be earned for this course and CML 2142.

**EHS 3174. Foundations of Emergency Health Services Systems. 3 Credits.**

Design and operation of emergency health services (EHS) systems, delivery of services, and the echelons of care. History of EHS.

**EHS 3175. Community Risk Management and Safety in Emergency Health Services. 3 Credits.**

The benefits of community information and community relations. Strategies for introducing risk reduction programs and their application to developing of such programs.

**EHS 4101. Humanitarian Relief Operations. 3 Credits.**

An integrative approach to humanitarian relief operations, including factors that can influence relief delivery, field planning considerations, and the roles and limitations of non-governmental organizations, international organizations, local government, and various federal and civilian and military agencies. Emphasis on medical aspects of working with particular populations such as women, children, the elderly, and culturally underrepresented or persecuted population subsets.

**EHS 4103. Advanced Topics in Leadership. 3 Credits.**

Leadership topics for emergency managers and responders, including leadership in complex systems, change management, interagency collaboration, and leadership in domestic and international responses. Restricted to students in the health sciences program or with the instructor's permission. Prerequisite: EHS 3101. Recommended background: EHS 2160.

**EHS 4105. Operations Management in Asymmetric Conditions. 3 Credits.**

Application of operations management principles in asymmetric conditions, including multi-dimensional approaches and responses to attack, man-made, and natural disasters. Restricted to students in the health sciences program or with the instructor's permission. Prerequisites: EHS 2160 and EHS 3101. Credit cannot be earned for this course and EHS 4110.

**EHS 4110. Operations Management in Emergency Health Services Systems. 3 Credits.**

Applies principles of general management that contribute to the effectiveness of day to day operations within an Emergency Health Services Organization.

**EHS 4111. Leadership Concepts in EHS. 3 Credits.**

This course is designed to provide a basic introduction to leadership by focusing on what it means to be a good leader. Emphasis in the course is on the practice of leadership in the Emergency Health Services setting. The course examines topics such as: the nature of leadership, recognizing leadership traits, developing leadership skills, creating a vision, setting the tone, listening to out-group members, handling conflict, overcoming obstacles, and addressing ethics in leadership. The course provides a special focus on facilitating students' understanding of their own leadership vision.

**EHS 4112. Special Operations and Disaster Management. 3 Credits.**

This course is an introduction to Emergency Health Services (EHS) Special Operations. The student develops and applies a general understanding of what constitutes special operations and resources needed to mitigate special operations incidents, both small and large, in the twenty-first century. The student is able to evaluate local special operations incidents, major multi-agency operations, scheduled and unscheduled mass casualty events, terrorism and natural disaster.

**EHS 4144. Seminar in EHS Leadership. 3 Credits.**

A senior capstone course, integrating the theories and concepts covered in previous work, with a focus on the identification and resolution of problems and opportunities encountered by the health sciences manager. To be taken in the final semester of study or with the program director approval.

**EHS 4160. Project Management and Leadership Capstone. 3 Credits.**

Capstone course using challenges and opportunities encountered by emergency managers to apply and develop project management and leadership approaches. Restricted to students in the health sciences program or with the instructor's permission. Prerequisites: EHS 2160 and EHS 3101. Recommended background: completion of EHS 3107, EHS 4103, and EHS 4105.

**EHS 4197. Clinical Internship. 6 Credits.**

Clinical internship in emergency health services.

**EHS 4198. Administrative Internship. 1-12 Credits.**

**EHS 4199. Independent Study. 1-3 Credits.**

**EHS 5099. Variable Topics. 1-99 Credits.**

**EHS 6115. Operational Leadership in a VUCA Environment. 3 Credits.**

How leadership can operate most effectively within and meet the challenges of a VUCA (volatility, uncertainty, complexity, and ambiguity) environment using innovation, collaboration and cultural intelligence. Models, principles, and best practices for leaders. Restricted to SMHS students.

**EHS 6201. Response to High Impact Emergencies. 3 Credits.**

Strategies for an effective response to large-scale and high-impact emergencies examined as the managerial foundation for development of a response policy.

**EHS 6203. Legal, Regulatory, and Ethical Issues in Emergency Medical Services Leadership. 3 Credits.**

Laws, regulations, and standards pertaining to emergency services. Implications for organizational policy and response requirements for executives, managers, and supervisors.

**EHS 6204. Public Information Management for Emergency Medical Services Leadership. 3 Credits.**

Public information management for emergency services executives, managers, and supervisors.

**EHS 6205. Strategic Emergency Response. 3 Credits.**

Strategic analysis of counterterrorism response requirements for the emergency service organization. Determination of vulnerabilities and trends; development of operational doctrine.

**EHS 6206. Case Studies in EMS Leadership. 3 Credits.**

Integrative case-based approach to the analysis of complex problems in the management and leadership of emergency medical services. Same as CML 6205.

**EHS 6210. EMS Systems Design and Analysis. 3 Credits.**

System design characteristics of high-performance EMS systems based on excellence in emergency care, response-time reliability, economic efficiency, and customer service from a strategic perspective.

**EHS 6211. Innovations in Telemedicine. 3 Credits.**

Consideration of telemedicine in a multidisciplinary format toward innovation and entrepreneurship in the fields of medicine, public health, engineering, and business. Credit cannot be earned for this course and PUBH 6099.

**EHS 6227. Introduction to Human Health in Space. 3 Credits.**

Introduction to aerospace concepts in an interdisciplinary context for those interested in human spaceflight. Elements of physiology, medicine, law, policy, engineering, and history are incorporated.

**EHS 6274. Health Economics and Finance. 3 Credits.**

Issues of health care economics, financial management, and budgeting that relate to managerial decision making. Applied financial management, management control systems, budgeting, staffing, and cost accounting. (Same as CML 6274)

**EHS 6275. Leadership and Change in Emergency Medical Services. 3 Credits.**

The concept of leadership within the context of health professions, health systems, and health policy.