## **Emergency Health (Paramedic) Department**

# Course Descriptors - Year 1

# EHS131 - Medical Terminology

This is an introductory course needed by all future paramedics. The course is designed to introduce students to the new language of medical terminology that will help them to prepare their coursework in anatomy and physiology, biology, and other core EMS courses. Professional communication among healthcare providers requires the student to know, understand, and be able to use medical terminology correctly.

# EHS104 – Health and Wellbeing of the Paramedic

This is a foundational course that explores the personal components of duty performance employed throughout the allied health profession of paramedicine. Using a combination of discussion-based learning, clinical laboratory work and simulation, this course will develop the essential personal skills employed throughout your career as a paramedic. In this course you will learn about the health and wellness of the paramedic and strategies for maintaining quality of life and work.

The major themes of study are the maintenance of physical and mental wellness over the course of the practitioner's career. The course introduces the students to physical fitness and its benefits to overall job performance and quality of life; injury prevention by employing proper body mechanics; stress management; healthy dietary choices; and preventive medicine used to reduce the potential for illness.

The course will be physically demanding and will help you develop a life-long habit for a healthy lifestyle.

# **EHS101 Introduction to Paramedic Practice**

This is a foundational course that will introduce you to the field of paramedicine and how the paramedic is integrated into the public and emergency medical services. Using a combination of lectures, discussion and case-based learning this course will introduce some of the essential technical and non-technical skills required to competently assess and manage patients. The course introduces EMS systems; roles and responsibilities of paramedics; and basic lifesaving (BLS) techniques.

## **EHS102 Patient Assessment**

As a paramedic, one of the most important skills you will develop is the ability to assess a patient. Assessment combines several steps – assessing the scene, obtaining the patient's chief complaint and medical history, and performing a physical exam.

This foundational course introduces the student to the trauma, medical, and paediatric patient assessments. Using a combination of didactic lecture, clinical laboratory work and simulation, this course will develop the essential technical skills required to competently assess patients across the lifespan.

The major themes of study are the entry level skills required to function as a competent paramedic. The course introduces the students to the scene survey, primary assessment, secondary assessment, and reassessment; and diagnostic equipment used by the paramedic.

### EHS103 - Communication Skills for Healthcare Professionals

This course will provide the foundation of knowledge specific to communication techniques relevant to the allied health profession of paramedicine. In this course you will learn about the communication principles and practices required by the paramedic and other health care providers.

The major themes of study are the basic principles of communication, therapeutic communications, communication patterns, ethics and healthcare communications and advanced issues in communication. Topics include health communications; types of communication; communication models; barriers to communication; health information technology & systems of healthcare care; conflict and conflict resolution; A consistent theme of patient-centered communications will be threaded through each lesson.

# Course Descriptors - Year 2

### **EHS201 – Introduction to Trauma**

This course continues to develop the role of the paramedic as a clinician by extending clinical examination and decision-making skills that were introduced in previous clinical courses. The course covers commonly encountered life-threatening, acute, and chronic injuries across the lifespan. The course will be case-based and will include clinical skills laboratories and simulation to develop essential clinical skills, clinical problem solving and decision-making competencies. The scope of the course includes the development of skills needed to provide general health care as well as care at an advanced life support level.

# EHS202 - Pharmacology

Paramedics encounter an abundance of pharmaceutical agents within their practice. This course is designed to assist students to develop foundational knowledge, skills and judgments regarding pharmacotherapy within community-based emergency health.

# **EHS203 Emergency Health Technician 1**

This is the first course in a sequence of two biomedical science courses that provide the foundation knowledge of pre-hospital emergency medical care relevant to the allied health profession of paramedicine.

The major themes of study are management of trauma, mass-casualty incident management, disaster management, ambulance operations, and extrication.

Topics include the assessment and management of traumatic conditions; ambulance operations and air medical evacuation; patient extrication principles; hazardous materials awareness training; multiple casualty and incident management; principles of triage; and the EMS response to terrorism.

Upon Completion of these two courses the student may be eligible to test for the internationally recognized U.S. certification through the National Registry of Emergency Medical Technicians as an Emergency Medical Technician.

## EHS232 - Law, Ethics and Professionalism

Law, Ethics and Professionalism will provide Bachelor of Emergency Health students with a sound basis for their legal and ethical practice within a chosen profession. The course is divided into three distinct themes which blend to assist in their understanding of legal principles, the application of legal standards, assessment and application of ethical practices while analyzing the overarching concepts of professionalism in a challenging and continually developing area of health practice.

The course will offer a broad range of teaching and learning strategies to accommodate the variety of participants in a non-clinical setting with an emphasis in supporting students in these activities. A combination of a prescribed text written specifically for the discipline and referral articles that encompass a wider field of practice will be used in conjunction with lectures, tutorials, online discussion and research tasks. A particularly important area of activity within the course will be applying the principles in contextualized scenarios that relate directly to paramedic practice to ensure students consider and reflect upon areas of their professional practice, beyond the purely clinical environment.

# EHS233 – Human Development Across the Lifespan

This course uses the framework of human development throughout the lifespan to identify health and, specifically, emergency health issues at various stages of the lifespan. Students will investigate the roles of paramedics and allied health professionals in assessing human development and maintaining health across the lifespan and will explore issues relating to death and grieving. Included in this course will be clinical visits to selected agencies to provide clinical context to the theoretical background.

## EHS204 - Mental Health

This course continues to develop the role of the paramedic as a clinician who can assess and care for patients with mental health problems. The course addresses the epidemiology and history of mental health in the United Arab Emirates, and the features of care systems with emphasis on community-based care. Acute and chronic medical mental health problems commonly encountered by paramedics are investigated. The special needs of people from various cultural and ethnic backgrounds are investigated. The course will be case based to develop essential assessment skills, clinical problem solving and decision-making competencies

# **EHS205 – Medical Emergencies**

This is the first course in a series of two courses that explores commonly encountered acute and chronic health emergencies and provide the foundation knowledge of Pre-Hospital Emergency Medical Care relevant to your practice as a paramedic. The major themes of study are management of medical emergencies throughout the lifespan. The course introduces you to the scientific methods of thought; it encourages critical evaluation of evidence and promotes an awareness of the changing nature of medical knowledge. Topics include the assessment and management of respiratory emergencies; endocrine emergencies; neurologic emergencies; environmental emergencies; allergies and anaphylaxis; and abdominal emergencies.

Using a combination of case-based learning, clinical laboratory work and simulation, this course will develop your essential clinical skills, clinical problem solving and decision-making competencies in managing common health emergencies.

# EHS206 - Toxicology

This course continues to develop the role of the paramedic as a clinician by extending clinical examination and decision-making skills that were introduced in previous clinical courses. The course covers commonly encountered toxicological emergencies across the lifespan. The course will be case based and will include clinical skills laboratories and simulation to develop essential clinical skills, clinical problem solving and decision-making competencies. The scope

of the course includes the development of skills needed to provide effective out-of-hospital care for patients experiencing health emergencies related to toxicological exposure.

### **EHS207 – Maternal and Neonate Care**

This course continues to develop the role of the paramedic as a clinician by developing knowledge and skills needed to care for birthing women and neonates in the community. The course will be case based and will include clinical skills laboratories and simulation to develop essential clinical skills, clinical problem solving and decision-making competencies.

### EHS234 - Evidence-Based Practice

This course introduces population health, public health and primary health care principles to the analysis of community-based emergency health (CBEH). Population health principles are applied to illness prevention and health promotion. The use of health datasets in population and public health is also discussed.

The basis of science, knowledge and evidence is explored along with the principles and use of evidence-based practice in the CBEH setting. Students are encouraged to develop their capacity for enquiry, research, critical thought, critical appraisal and analysis through the semester. Information technology is used to access and interrogate the multitude of health datasets.

## **EHS208 – Emergency Medical Technician 2**

This is the second course in a sequence of two biomedical science courses that provide the foundation knowledge of pre-hospital emergency medical care relevant to the allied health profession of paramedicine. The major themes of study are management of medical emergencies, paediatric emergencies, geriatric emergencies, obstetric emergencies, and patients with special challenges.

Topics include the assessment and management of cardiac emergencies; respiratory emergencies; endocrine emergencies; GI/GU emergencies; paediatric emergencies; geriatric emergencies; obstetric emergencies; care of the new born; and management of patients with special healthcare needs. Upon Completion of this course the student may be eligible to test for the internationally recognized U.S. certification through the National Registry of Emergency Medical Technicians as an Emergency Medical Technician.

## **EHS271 – Clinical Practice**

This course continues to develop the role of the paramedic as a clinician. It will build on a model of paramedic clinical competence developed in prerequisite courses and will provide the context to support the implementation of knowledge and skills necessary for effective patient care.

Students will have the opportunity to practice and develop their clinical skills in the management of patients with acute health conditions in the setting of clinical placements with ambulance service providers and other health agencies.

The course will also place an emphasis on the insightfulness that is required to deliver quality patient care through a range of reflective tasks that challenge the student to consider their practice from a variety of alternative perspectives.

# Course Descriptors - Year 3

#### **EHS301 – Medical Conditions**

This is the second course in a sequence of two courses that explores commonly encountered acute and chronic health emergencies and provide the foundation knowledge of Pre-Hospital Emergency Medical Care relevant to the allied health profession of paramedicine. The major themes of study are management of medical emergencies throughout the lifespan.

The course introduces the students to the scientific methods of thought; it encourages critical evaluation of evidence and promotes an awareness of the changing nature of medical knowledge. Topics include the assessment and management medical conditions affecting each of the bodies systems. Using a combination of case-based learning, clinical laboratory work and simulation, this course will develop the essential clinical skills, clinical problem solving and decision-making competencies in managing common health emergencies.

#### EHS302 - Trauma Resuscitation

This course continues to develop the role of the paramedic as a clinician by extending clinical examination and decision-making skills that were introduced in previous clinical courses. The course covers commonly encountered life-threatening, acute, and chronic injuries across the lifespan. The course will be case-based and will include clinical skills laboratories and simulation to develop essential clinical skills, clinical problem solving and decision-making competencies. The scope of the course expands on existing skills needed to provide general health care as well as care at an advanced life support level.

# **EHS303 – Pediatric Emergencies and Special Populations**

Patients across the lifespan pose unique challenges for the paramedic in practice. The age development and size of the pediatric patient has special considerations that must be correctly addressed so that the patient can be competently managed.

On the other end of the spectrum, geriatric patients may present with multiple ailments that must be addressed. This course continues to develop the role of the paramedic as a clinician by extending clinical examination and decision-making skills that were introduced in previous clinical courses. The course covers the assessment of special populations and commonly encountered life-threatening, acute and chronic illnesses in these special populations. The course will be case-based and include clinical skills laboratories and simulation to develop essential skills, problem-solving and decision-making competencies. The scope of the course expands on existing skills needed to provide general health care as well as care at an advanced life support level.

# EHS336 - Innovation and Entrepreneurship

Recent advances in medical research, basic sciences, agricultural and nutritional sciences, information technology, communication and transportation have created a wealth of new information that can use used to improve human health outcomes. The challenge for society now is to learn how to use all this information and propose solutions to improve human health. Many changes and improvements come from creativity, innovation and entrepreneurship.

Through real world examples and research from experts in the field, students will learn how to incorporate design thinking, entrepreneurship, and growth and leadership into the UAE health system as well as their own personal and professional development.

This course is designed to provide students with essential skills needed to be competitive in today's growing economy. It will challenge students to innovate, overcome obstacles, and grow rapidly; with the goal of recognize opportunities to improve health care; and creating a business that will provide innovative solutions that can have a positive impact on the health of the UAE population and the gulf region. Overall this course will look into the processes of innovation from discovery to delivery, and to identify suitable pathways in order to bring students' ideas to fruition.

#### EHS304 - Critical Care

This course addresses the paramedic management of patients with critical care conditions at the Advanced Life Support level. It will also introduce students to specialty situations, including extended care due to entrapment or environmental barriers, medical retrieval, and inter-hospital transfers. The course will be case-based and will include clinical skills laboratories and simulation to develop essential clinical skills, clinical problem solving and decision-making competencies.

# **EHS305 – Cardiovascular Emergencies and Conditions**

This course continues to develop the role of the paramedic as a clinician by extending clinical examination and decision-making skills that were introduced in previous clinical courses. The course covers commonly encountered chronic, acute, and life-threatening cardiovascular problems across the lifespan. Learning will be case-based and will include clinical skills laboratories and simulation to develop essential clinical skills, clinical problem solving and decision-making competencies.

# **EHS306 – Disaster Management**

This course develops the role of the paramedic with a focus on major incidents and disasters. The course will explore an all-hazards approach to mass casualty management and population-based care across a broad range of disasters.

Topics include basic types of disasters; workforce readiness; mass casualty and fatality management; public and population health; disaster triage; health system surge capacity; personal protective equipment and decontamination; legal and ethical issues in disaster management; incident management and emergency operations center; and community health emergency response operations.

The scope of the course includes the development of skills needed to function as a member of a disaster response team.

At the completion of this course the student may be eligible for certification in Basic and Advanced Disaster Life Support through the National Disaster Life Support Foundation.

## EHS337 – Leadership and Management for Health Professionals

This course develops the role of the paramedic as a clinical leader in the community. The course reviews key leadership theories, styles and responsibilities of a leader in a community-based emergency health setting.

Topics include ethics in leadership; mentoring and subordinate development; leading in a culturally diverse healthcare system, performance improvement; team building; gender in leadership and leading change.

### EHS381 - Clinical Simulation 1

This course continues to develop the role of the paramedic as a clinician. It will build on a model of paramedic clinical competence developed in prerequisite courses and will provide the context to support the implementation of knowledge and skills necessary for effective

patient care. Students will have the opportunity to practice and develop their clinical skills in the management of patients with acute health conditions in a simulated setting and simulated scenarios that develop core paramedic and nursing competencies. The major theme during this course will be critical care.

#### EHS372 - Clinical Practice 2

This course continues to develop the role of the paramedic as a clinician. It will build on a model of paramedic clinical competence developed in prerequisite courses and will provide the context to support the implementation of knowledge and skills necessary for effective patient care.

The major theme during this course will be the advanced life support (ALS) management of the medical patient.

### **EHS373 - Clinical Practice 3**

This course continues to develop the role of the paramedic as a clinician. It will build on a model of paramedic clinical competence developed in prerequisite courses and will provide the context to support the implementation of knowledge and skills necessary for effective patient care.

The major theme during this course will be the advanced life support (ALS) management of the medical patient

# Course Descriptors - Year 4

### EHS474 - Clinical Practice 4

This course continues to develop the role of the paramedic as a clinician. It will build on a model of paramedic clinical competence developed in prerequisite courses and will provide the context to support the implementation of knowledge and skills necessary for effective patient care.

### **EHS475 – Clinical Practice 5**

This course continues to develop the role of the paramedic as a clinician. It will build on a model of paramedic clinical competence developed in prerequisite courses and will provide the context to support the implementation of knowledge and skills necessary for effective patient care.

## **EHS482 - Clinical Simulation 2**

This course continues to develop the role of the paramedic as a clinician. It will build on a model of paramedic clinical competence developed in prerequisite courses and will provide the context

to support the implementation of knowledge and skills necessary for effective patient care. Students will have the opportunity to practice and develop their clinical skills in the management of patients with acute health conditions in a simulated setting and simulated scenarios that develop core paramedic and nursing competencies. The major theme during this course will be critical care.

### EHS4911 - Advanced Resuscitation 1/2/3

This course will cover American Heart Association Advanced Cardiac Life Support (ACLS) and Pediatric Advanced Life Support (PALS). Students that successfully complete this course will receive ACLS and PALS certification valid for two years.