Course Specification Of Emergency Medicine Master Degree

(A) Administrative information

(1) Programme offering the course	**Master Degree of Emergency Medicine**
(2) Department offering the programme.	**Multidisciplinary**
(3) Department responsible for teaching the course.	**General and special medicine departments**
(4) Part of the programme.	**2nd Part**
(5) Date of approval by the Department's council	**7/8/2016**
(6) Date of last approval of programme specification by Faculty council	**9/8/2016**
(7) Course title,	**Internal medicine**
(8) Course code,	**EM 510** **EM 510 Ta-Tb-Tc-Td-Te-Tf-Tg**
(9) Total teaching hours	**120 hr** **210 hr clinical** **Total = 330 hours**
(10) Credit hours	**8 Theoretical hours** **7 Clinical hours**

(B) Professional information

(1) Course Aims

The broad aims of the course are as follows:

MSc candidates must be able to provide a high standard patient care that is compassionate and effective for the treatment of medical emergencies and the promotion of health. Be able to treat their patient's conditions with practices that are safe, scientifically based, effective, efficient, timely, cost effective as well as evidence -based.

Master graduates are expected to demonstrate the ability of:

(2) Intended learning outcomes (ILOs):

On successful completion of the course, the candied will be able to:

A- Knowledge and understanding:

A.1. Discuss causes, pathogenesis, diagnosis and treatment Endocrinal and metabolic emergencies.

A.2. Discuss causes, pathogenesis, diagnosis and treatment of Nephrology emergencies.

A.3. Recognize causes, pathogenesis, diagnosis and treatment of Hematology &Hepatology emergencies.

A.4. Define Cardiac emergencies and discuss their causes, pathogenesis, diagnosis and treatment of

A.5. Explain pathogenesis, diagnosis and treatment of Pulmonary emergencies.

A.6. Discuss causes, pathogenesis, diagnosis and treatment of Pediatric emergencies.

A.7. define causes, pathogenesis, diagnosis and treatment of Neuro-psychiatry emergencies .

A.8. Discuss Imaging features of different emergencies.

B- Intellectual skills

B.1. B.2. Solve specific clinical problems despite limited information and resources

B.3. integrate knowledge and understanding of internal medicine and other medical specialties and interpret basic clinical tests and images as well as obscure findings to solve clinical problems.

B.4. analyze efficiently case scenarios and refer to the most appropriate diagnosis and possible differential diagnosis.

B.5. making clinical decisions in different situations including emergencies.

B.6. systematically analyze practice using *quality improvement methods* , and implement changes with the goal of practice improvement and set learning and improvement goals.

B.*7.* locate, appraise, and assimilate evidence from scientific studies related to their patient's health problems, i.e. adopt an evidence based approach.

C- Professional/ practical skills

C.1. Take detailed history, perform full physical examination and make clinical diagnosis.

C2. Perform relevant investigative and therapeutic procedures.

C3 Perform Advanced life support measures effectively

C4 Treat cases of dysthymias efficiently

C5 Manage patients according to standard phases of the management of multiple trauma patients

C6 Apply a proper regimen to treat Shock

C7 Diagnose chest pain & mange it efficiently

C8 Assess Mental status of patient

C9: Interpret history, examination, laboratory and radiological evaluation to reach proper diadosis

C10. Mange Ophthalmologic emergencies

C11. Mange Vaginal emergencies

C12 Mange Musculoskeletal injuries emergencies

C.12. Apply Wound care and infection control measures

C.13. Manage acutely poisoned patients

C.14. Mange Pediatrics emergencies.

D- Communication and transferable skills

D.1. Communicate effectively with physicians, other health professionals and health related agencies.

D.2. Communicate effectively with patients, families, and the public as appropriate. Across a broad range of socioeconomic and cultural backgrounds.

D.3. Demonstrate the ability to interact with diverse patient population including but not limited to diversity in gender, age , culture , race ,religion, disabilities

D.4. Demonstrate compassion, integrity and respect of others and respect for patient privacy and autonomy and demonstrate responsiveness to patient needs that exceeds self interest.

D.5. Use of different resources and information technology to gain knowledge and information.

D.6. Effective time management and continuous self learning

3-Course content:

Course	Code	Credit hours	Total teaching hours
Internal Medicine	**EM 510 Ta**	**2**	**30**
Endocrinal and metabolic - **Diabetic ketoacidosis in adults and children - Hyperosmolar non ketotic coma** - **Hypoglycemia - Thyroid storm - hypothyroid crises - Pheochromocytoma** - **Pituitary failure - Diabetes insipidus - Other complications of diabetes**			
Nephrology - **acute renal failure (De Novo or on top of chronic) - urinary tract infection** - **life threatening electrolyte disturbances - hemolytic uremic syndrome** - **hematuria for DD - proteinuria for DD**			
Hematology &Hepatology - **Bleeding disorders- Patient on anticoagulants** - **rheumatological emergencies** - **Acute liver cell failure - Hepatitis -Jaundice for D.D** - **Hematemesis due to portal hypertension - Hepato-renal syndrome**			
Cardiac emergency	**EM 510 Tb**		
- **chest pain – acute coronary syndrome** - **syncope – congestive heart failure and acute pulmonary edema**			

- **valvular emergencies**
- **prosthetic valve diseases**
- **cardiomyopathies ,myocarditis, pericardial diseases,pericardial tamponade**
- **life threatening arrhythmias**
- **Hypertensive crisis -Aortic dissection –**
- **thromboembolism**

Pulmonary emergency	**EM 510 Tc**		

- **Heamoptysis- The dyspnic patient - Hyperventilation**
- **non cardiogenic pulmonary edema -Acute asthma-respiratory failure COPD – pneumonia -pulmonary aspiration -spontaneous pneumothorax**
- **pleural effusion - pulmonary embolism**

Pediatric emergency & ICU	**EM 510 Te**		

- **Resuscitation of the newborn - Pediatric BLS & ALS- Infantile skin problems**
- **ENT and respiratory problems- CNS problems- Urologic problems**
- **Poisoning- Abdominal pain in children - Inguinal and scrotal swellings**
- **Orthopedic problems Major pediatric trauma & its considerations**
- **Child abuse**

Neurology & Psychiatric	**EM 510 Td**		

- **history taking – interview - Mental state examination -Violent & abusive patient**
- **Deliberate self harm - Depression, mania, Schizophrenia -Alcohol abuse**
- **Drug & substance abuse -Delirium & dementia -Complication of psychiatric drugs**
- **Headache -Subarachnoid Hemorrhage - Migraine & other causes of headache**
- **The unconscious patient - Collapse and syncope -Acute generalized weakness**
- **TIA, stroke,**
- **epilepsy & status epilepticus**
- **muscles and neuromuscular diseases and emergencies**
- **spinal cord diseases and emergencies**
- **CNS infections**

Radiological emergency	**EM 10 Tf**		

<u>Imaging features of different emergencies:</u>

- **cardiac, chest, musculoskeletal, urological, abdomen**
- **indications and further lines of imaging assessment**
- **FAST US**
- **CT brain – CT chest**

4- Teaching methods:

4.1. Lectures with power point presentations and discussions.
4.2. Interactive bedside teaching with clinical case presentations of difficult and

Course Title	NO. of hours per week					Total credit hours	
	Theoretical			practical			
	Lectures	seminars	total	Clinical	total		
General and special medicine EM510 Module 1 **Internal Medicine** **Cardiac emergency** **Pulmonary emergency** **Pediatric emergency & ICU**	**2** **2** **1** **1**			**1** **1** **1** **1** **1**		**15**	**19**
General and special medicine EM510 Module 2 **Neuro-psychiatry** **Radiological emergency**	**1** **1**			**1** **1**		**4**	

interesting
cases and group discussions.
4.3. Problem solving case scenarios (commentary).
4.4 Seminars and presentation of an essay by the postgraduate students.
4.5. Workshops and training courses for procedural skills.
4.6. Attendance of activities in the department including thesis discussion, conferences,
clinical rounds, outpatient clinics, procedures . . .with both senior staff and junior staff

5- Assessment methods:

5. l. Written exam for assessment of (ILOs number; A 1-8 , B 1-7)
5.2. Case Scenario (commentary).. for assessment of (ILOs number; A1-8,Bl-7).
5.3. Clinical & practical exam for assessment OSCE , OSPE (ILOs number; Bl-7, C1-14, D 1-8)
5.4. Oral exam. for assessment of (ILOs number; A1-8, Bl-7, D,1-8)

Assessment schedule,
I Continuous assessment,
After completion of each module an MCQ exam is conducted, and the sum of the 2 exams represents 20 % of the final written exam.

II, Second part exam.
Assessment 1. Written exam (structured short essay questions).
Assessment 2. Clinical exam
(a long case and 4 short cases as an OSCE exam)
Assessment 3. Oral exam
Assessment 4. Practical (procedural skills, ECG. radiology interpretation)

Percentage of each Assessment to the total mark (300 marks):

Written exam... . 150 marks
Clinical exam.... 50 marks
Oral exam. 50 marks
Practical exam. 50 marks

Other assessment without marks

Presentation and open discussion of the MSc essay or thesis.
Log book for assessment of the attendance and activities throughout the course.

6- References of the course:

Rosens Emergency Medicine
Tintinallis Emergency Medicine
Emergency Medicine Procedure
Oxford Acute Medicine

7- Facilities and resources mandatory for course completion:

Candidates and their learning are supported in a number of ways:

- Induction course introducing study skills
- Candidates logbook
- Programme Specification and Handbooks
- Extensive library and other learning resources
- Computer laboratories with a wide range of software
- Intranet with a wide range of learning support material
- MSc Dissertation Supervisor

Course coordinator:
Prof . Samir Attia