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 surgery 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,	**General and special surgery**
(8) Course code,	**EM 520** **EM 520Ta-Tb-Tc-Td-Te-Tf-Tg**
(9) Total teaching hours	**135 hr** **210 hr clinical** **Total = 345 hours**
(10) Credit hours	**9 theoretical** **7 Clinical**

(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 surgical emergencies and the promotion of health and 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. Recognize causes, pathogenesis, diagnosis and treatment of the Anesthesia & ICU conditions.

A.2. Discuss causes, pathogenesis, diagnosis and treatment of the Trauma cases.

A.3. Identify Surgical emergencies and discuss their causes, pathogenesis, diagnosis and treatment of

A.4. Recognize causes, pathogenesis, diagnosis and treatment of Obs/Gyn emergencies.

A.5. Recognize causes, pathogenesis, diagnosis and treatment of Orthopedic emergencies.

A.6. List ENT emergencies, mention their causes, pathogenesis, diagnosis and treatment of.

A.7. Explain causes, pathogenesis of Ophthalmological emergencies, and illustrate their management plan.

B- Intellectual skills

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

b.2. Integrate knowledge and understanding of general surgery and other surgical specialties and interpret basic clinical tests and images as well as obscure findings to solve clinical problems.

B.3. Analyze efficiently case scenarios and refer to the most appropriate diagnosis and possible differential diagnosis.

B.4. Making clinical decisions in different situations including emergencies.

B.5. Systematically analyze practice using *quality improvement methods* , and implement changes with the goal of practice improvement and set learning and improvement goals.

B.*6.* Locate, appraise, and assimilate evidence from scientific studies related to their patient's health problems, i.e. Adopt an evidence based approach.

B.7. Use information technology to optimize learning and write an essay about a specific surgical problem.

C- Professional/ practical skills

C.1. Take a proper history records and clinical examination in different surgical specialties.
C.2. Perform and interpret laboratory and radiological findings in diagnosis and treatment of internal medical diseases.
C.3. Choose proper diagnostic and therapeutic procedures required by the surgical specialists including advanced life support CVP , and Sengstaken tube insertion, difficult cases ECG interpretation, stress ECG, echocardiography, endoscopy, Liver biopsy, renal biopsy and lumber puncture, according to their specialization.
C.4. evaluate febrile patient.

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 information technology in the clinical practice.
D.6. Use of different resources to gain knowledge and information.
D.8. Effective time management and continuous self learning

3-Course content:

The general and special surgical emergency course is divided into 2modules to be studies through two semesters.

Module I is – 6 Theoretical credit hours

Module II is 3 Theoretical credit hours

Course Title	NO. of hours per week					Total credit hours	
	Theoretical			practical			
	Lectures	seminars	total	Clinical	total		
General and special surgery **EM520 Module 1** **Anesthesia & ICU** **Traumatology** **Surgical emergencies** **Obs/Gyn emergency**	**1** **1** **1** **1**	**1** **0.5** **0.5**	**6**	**1** **1** **1** **1**	**4**	**10**	**16**
General and special surgery **EM520 Module 2** **Orthopedic** **ENT emergency** **Eye emergency**	**1** **0.5** **0.5**	**1**	**3**	**1** **1** **1**	**3**	**6**	

Course	Code	Credit hours	Total teaching hours
Anesthesia & ICU	**EM 520 Te**	**2**	**30**

- Life threatening emergencies: anaphylaxis, cardiac arrest, BLS, specific intervention, ACLS algorithm, post resuscitation care

- Analgesia and anesthesia: pain relief, analgesics, analgesia in specific situations, local anesthesia, toxicity, general principles, nerve block, sedation, general anesthesia in A&E.

- Airway management

Traumatology	**EM 520 Tb**	**2**	**30**

Major trauma:

- **treatment principles, investigations, trauma scoring**
- **penetrating and blunt abdominal trauma - crush syndrome, instrument tie**
- **tetanus and antibiotic prophylaxis - soft tissue injuries, soft tissue neck problems**
- **maxillofacial injuries**

Special fields:

- **neurosurgery**(head trauma,spines and spinal cord trauma)
- **cardiothoracic surgery(**chest wall,pulmonary and diaphragmatic injuries-flail chest-blunt and penetrating cardiac trauma-airway injuries)
- **Plastic surgery**
- **Vascular surgery**(vascular trauma)
- **Environmental emergencies:** drowning, electrical, radiation accidents, diving emergencies.

Surgical emergencies	**EM 520 Ta**	**1**	**15**

- **Approach to abdominal pain & causes of acute abdomen- Acute appendicitis**
- **Acute pancreatitis -Biliary tract problems -Peptic ulcer disease**
- **Intestinal obstruction- Mesenteric infarction**
- **Acute limb ischemia,acute DVT ,Abdominal Aortic Aneurysm**
- **Cutaneous abscess.**

Obs/Gyn emergency	**EM 520 Tg**	**1**	**15**

- **vaginal discharge, contraceptive problems, genital injury & assault, gynecological pain, vaginal bleeding - emergency normal delivery, and its difficulties**
- **vaginal bleeding in pregnancy spontaneous abortion -ectopic pregnancy**
- **abdominal pain in pregnancy- medical complications with pregnancy**
- **trauma in pregnancy- cardiac arrest in pregnancy**
- **post partum problems**

Course

Orthopedic

General topics/ cases - Principles for management of fractures and joint injuries - Pediatric trauma

Skeletal infections - open fracture

Clavicle, Scapula & ACJ and SCJ injuries	**Fracture pelvis & management of bleeding related to vertebral fractures**
Upper extremity	**Lower extremity**
a-Shoulder and arm **1. Dislocated shoulder** **2. Proximal humerus** **3. Humorous shaft** **4. Suprcondylar Fracture**	**a-Hip and thigh** **1. Dislocation of hip** **2. Fracture neck femur** **3. Fracture shaft femur** **4. Fracture lower end femur**
b-Elbow & forearm fractures **1. Dislocation elbow & pulled elbow** **2. Fracture radius and ulna** **3. Forearm compartment**	**b-Knee and leg** **1. Meniscal injuries** **2. Knee ligaments injury** **3. Patella injuries** **4. Tibial palate fractures** **5. Fractures Tibia and fibula**

c-Wrist and hand **1. Fractures** **2. Hand compartment syndrome** **3. Tendon injuries** **4. Hand wounds and crush injuries**	**c-Ankle and foot** **1. Ankle fractures** **2. Ankle ligamentous injuries and dislocations** **3. Tendo-Achillis injuries** **4. Fractures of foot bones & crush injuries**

ENT emergency	**EM 520 Td**

- **ENT foreign bodies- Ear ache - Epistaxis**
- **Nasal fracture - Sore throat - Salivary gland problems**
- **Facial nerve pals**

Eye emergency	**EM 520 Tf**

- **Eye problems in A &E - Ophthalmological trauma**
- **Corneal trauma - Contact lense problems**
- **Sudden visual loss -The red eye**

4- Teaching methods:

4.1. Lectures with power point presentations and discussions.
4.2. Interactive bedside teaching with clinical case presentations of difficult and 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 1-7 , B 1-7)
5.2. Case Scenario (commentary).. for assessment of (ILOs number; A 1-7,B l-7).
5.3. Clinical exam for assessment of (ILOs number; Bl-7, C1-4, ,D 1-8)
5.4. Oral exam. for assessment of (ILOs number; A1-7, Bl-7, D,1-8)
5.5. Practical exam for assessment of procedural skills (ILOs number;C3-5,D,1-4)

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