



كلية الطب
وحدة ضمان الجودة



Faculty of Medicine
Quality Assurance Unit

**Master (MSC) Degree Program and Courses Specifications for
Emergency Medicine**

(According to currently applied **Credit points bylaws**)

***Anesthesia and postoperative
intensive care
Faculty of medicine
Assiut University
2022-2023***

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Master degree of Emergency Medicine

A. Basic Information

- ✚ **Program Title:** Master degree of Emergency Medicine
Nature of the program: Single.
- ✚ **Responsible Department:** Department of Anesthesia and postoperative intensive care Faculty of Medicine- Assiut University.
- ✚ **Program Academic Director (Head of the Department):**
Prof. Hany El-Morabaa
- ✚ **Coordinator (s):**
Principle coordinator: Prof. Fatma Ahmed Abd El Aal
Assistant coordinator (s): Dr. Khaled Abdel-Baky Abdel-Rahman
- ✚ **Internal evaluators:** Prof: Hany El-Morabaa
- ✚ **External evaluator:** Prof: Abdel-Rahman Hassan Abd El-Rahman
- ✚ **Date of Approval by the Faculty of Medicine Council of Assiut University:** - 23-9-2014
- ✚ **Date of most recent approval of program specification by the Faculty of Medicine Council of Assiut University:** -27-11-2022.
- ✚ **Total number of courses:** **7 courses + one elective**

B. Professional Information

1- Program aims

1/1 To enable candidates to acquire high level of clinical skills, bedside care skills, in addition to update medical knowledge as well as clinical experience and competence in the area of Emergency Medicine and enabling the candidates of making appropriate referrals to a sub-specialist.

1/2. Provide candidates with fundamental knowledge of Emergency Medicine as regards; dealing with patients, and training skills of different Emergency Medicine techniques.

1/3 To introduce candidates to the basics of scientific medical research.

1/4 Enable candidates to start professional careers as specialists in Egypt but recognized abroad.

1/5 To enable candidates to understand and get the best of published scientific research and do their own.

2- Intended learning outcomes (ILOs) *for the whole program:*

2/1 Knowledge and understanding:

- A. Explain the essential facts and principles of relevant basic sciences including, pathology, pharmacology, physiology, anatomy and forensic medicine and microbiology related to Emergency Medicine.
- B. Mention essential facts of clinically supportive sciences including Clinical pathology and Diagnostic radiology related to Emergency Medicine.
- C. Demonstrate sufficient knowledge of etiology, clinical picture, diagnosis, prevention and treatment of common diseases and situations related to Emergency Medicine.
- D. Give the recent and update developments in the pathogenesis, diagnosis, prevention and treatment of common diseases related to Emergency Medicine.

- E. Mention the basic ethical and medicolegal principles that should be applied in practice and relevant to Emergency Medicine.
- F. Mention the basics and standards of quality assurance to ensure good clinical practice in the field of Emergency Medicine.
- G. Mention the ethical and scientific principles of medical research.
- H. State the impact of common health problems in the field of Emergency Medicine on the society and how good clinical practice improves these problems.

2/2 Intellectual outcomes

- A. Correlate the facts of relevant basic and clinically supportive sciences with clinical reasoning, diagnosis and management of common diseases of the Emergency Medicine.
- B. Demonstrate an investigatory and analytic thinking approach (problem solving) to common clinical situations related to Emergency Medicine.
- C. Design and /or present a case or review (through seminars/journal clubs) in one or more of common clinical problems relevant to Emergency Medicine.
- D. Formulate management plans and alternative decisions in different situations in the field of Emergency Medicine.

2/3 Skills

2/3/1 Practical skills (Patient Care)

- A. Obtain proper history and examine patients in caring and respectful behaviors.
- B. Make informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, up-to-date scientific evidence, and clinical judgment for common conditions related to Emergency Medicine.

- C. Carry out patient management plans for common conditions related to Emergency Medicine.
- D. Use information technology to support patient care decisions and patient education in common clinical situations related to Emergency Medicine.
- E. Perform competently non invasive and invasive procedures considered essential for Emergency Medicine.
- F. Provide health care services aimed at preventing health problems related to Emergency Medicine.
- G. Provide patient-focused care in common conditions related to Emergency Medicine, while working with health care professionals, including those from other disciplines
- H. Write competently all forms of patient charts and sheets including reports evaluating these charts and sheets (Write a consultation note, Inform patients of a diagnosis and therapeutic plan, completing and maintaining medical records)

2/3/2 General skills

Including:

- Practice-based Learning and Improvement
- Interpersonal and Communication Skills
- Professionalism
- Systems-based Practice

Practice-Based Learning and Improvement

- A. Perform practice-based improvement activities using a systematic methodology (share in audits and risk management activities and use logbooks).
- B. Appraises evidence from scientific studies.
- C. Conduct epidemiological Studies and surveys.
- D. Perform data management including data entry and analysis and using information technology to manage information,

access on-line medical information; and support their own education.

E. Facilitate learning of students and other health care professionals including their evaluation and assessment.

Interpersonal and Communication Skills

F. Maintain therapeutic and ethically sound relationship with patients.

G. Elicit information using effective nonverbal, explanatory, questioning, and writing skills.

H. Provide information using effective nonverbal, explanatory, questioning, and writing skills.

I. Work effectively with others as a member of a health care team or other professional group.

Professionalism

J. Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society

K. Demonstrate a commitment to ethical principles including provision or withholding of clinical care, confidentiality of patient information, informed consent, business practices

L. Demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities

Systems-Based Practice

M. Work effectively in relevant health care delivery settings and systems including good administrative and time management.

N. Practice cost-effective health care and resource allocation that does not compromise quality of care.

O. Assist patients in dealing with system complexities.

3- Program Academic Reference Standards (ARS) (Annex2)

Academic standards for master degree of Emergency Medicine

Assiut Faculty of Medicine developed master degree programs' academic standards for different clinical specialties.

In preparing these standards, the General Academic Reference Standards for post graduate programs (GARS) were adopted. These standards set out the graduate attributes and academic characteristics that are expected to be achieved by the end of the program. These standards were approved by the Faculty Council on 17-6- 2009. These standards were revised and approved without changes by the Faculty Council on 23-9-2014. These standards were recently revised and reapproved without changes by the Faculty Council on 27-11-2022.

4- Program External References (Benchmarks)

1. ACGME (Accreditation Council for Graduate Medical Education).

http://www.acgme.org/acWebsite/navPages/nav_Public.asp

2. University of Michigan Health System, Anesthesiology Critical Care Fellowship

http://www.med.umich.edu/anescriticalcare/templates/education_fellow_goals.html
<http://western.edu/anesthesiology/Education/residency/training/simcenter-curriculum.html>

Comparison between program and external reference		
Item	Emergency Medicine program	University of Michigan Health System, Anesthesiology Critical Care Fellowship
Goals	Matched	Matched
ILOS	Matched	Matched
Duration	3-5 years	3 years
Requirement	Different	different
Program structure	Different	different

5. Program Structure and Contents

A. Duration of program: 3 – 5 years

B. Structure of the program:

Total contact number of credit points 180 point (20 out of them for thesis)

Didactic# 40 (22.2 %), practical 120 (66.7%), thesis 20 (11.1%), total 180

First part

Didactic 14 (35 %), practical 24 (60 %), elective course 2 CP (5%), total 40

Second part

Didactic 24 (20%), practical 96 (80 %), total 120

Didactic (lectures, seminars, tutorial)

According the currently applied credit points bylaws:

Total courses 160 credit point

Compulsory courses: 98.9%

Elective course: 2 credit point =1.25%

	Credit points	% from total
Basic science courses	24	13.3%
Humanity and social courses	2	1.1%
Speciality courses	134	74.5%
Others (Computer, ...)		
Field training	120	66.7%
Thesis	20	11.1%

C. Program Time Table

A. Duration of program 3 years maximally 5 years divided into

○ **Part 1: (One year)**

Program-related basic science courses and ILOs

Students are allowed to sit the exams of these courses after 12 months from applying to the MSc degree.

One elective course can be set during either the 1st or 2nd parts.

- **Thesis**

For the M Sc thesis;

MSc thesis subject should be officially registered within 6 months from application to the MSc degree,

Discussion and acceptance of the thesis could be set after 12 months from registering the MSc subject;

It should be discussed and accepted before passing the second part of examination)

- **Part 2 (2 years)**

Program –related speciality courses and ILOs

Students are not allowed to sit the exams of these courses before 3 years from applying to the MSc degree.

The students pass if they get 50% from the written exams and 60% from oral and clinical/practical exams of each course and 60% of summation of the written exams, oral and clinical/practical exams of each course

Total degrees 1900 marks.

700 marks for first part

1200 for second part

Written exam 40% - 70%.

Clinical/practical and oral exams 30% - 60%.

D. Curriculum Structure: (Courses):

Curriculum Structure: (Courses / units/ rotations):

Year 1

The first year of the fellowship is primarily for basic science related medical knowledge and clinically supportive sciences (studied in specialized courses over 12 months in collaboration with basic sciences and clinical departments and a clinical year during which the fellows gain experience with emergency medicine, develop proficiency in the performance and appropriate utilization of various procedures, and develop

proficiency in the utilization and management of patient in emergency room and reception unites Throughout the year.

The first year fellow spends the year rotating among three different services: 1) radiology department Assiut University Hospital; 2) clinical pathology and blood banking unit Assiut University Hospital; 3) different reception units Assiut University Hospital;

Years 2 and 3

Although the primary focus of the second and third year is the development of skills and experience in research (see below), senior fellows continue to participate in clinical activities and certain procedures. First, they maintain their longitudinal anesthesia in special departments (cardiac, neuro, pediatric, orthopedic, trauma, CPR) experience throughout these years. Senior fellows will also actively participate in the regular weekly scientific seminars and collaborate with those fellows in their first year. In addition, fellows rotate through the different reception units on clinical rotations. This rotation complements the previous experiences.

Approximately by the end of the first year, fellows are expected to identify a research area in which the subsequent two years will be focused. Together, the trainee and supervisors develop a project for investigation that is of interest to the trainee and within the expertise of the faculty member; in certain instances, joint mentorship provided by two faculty members within the Division, or by one divisional faculty member and a collaborator from another unit, is appropriate. By the beginning of the second year, the fellow presents a conference in which he/she synthesizes existing knowledge, presents the problem for investigation, and describes the proposed plan of investigation. The faculty members and fellows in attendance provide feedback to the fellow and supervisors about the proposed project; this process of peer review provides a useful experience for the fellow and often strengthens the experimental approach.

During the second and third years, the trainee carries out the proposed work in the clinical research facilities of the faculty mentor(s). The trainee also benefits from interactions with other trainees, technicians, and collaborating investigators. The trainee also participates in laboratory meetings and journal clubs specific to individual research groups. Presenting research findings at regional and national meetings and submitting work for publication are both important aspects of the investigative endeavor. The trainee will receive guidance and specific assistance in learning to prepare data for oral and written presentation, to prepare graphics, and to organize talks and prepare slides. Throughout the research training period, it is anticipated that the fellow will assume increasing intellectual responsibility and technical independence.

Research Pathway

Selection of a research project and supervisors is subject to the approval of the Emergency Medicine, council approval and vice-Dean of post graduate studies of the faculty as officially regulated. Fellows may elect clinical trial, meta-Analysis/systematic Review, clinical audit or epidemiological studies - based research training pathways. For all Master degree students, a research advisory committee will be selected by the fellow based on the approved regulatory rules of the faculty council. This committee will monitor the progress of research fellows and provide advice regarding research training and career development

 courses of the program:

Courses and student work load list	Course Code	Credit points		
		Didactic #	training	total
First Part				
Basic science courses (8CP)				
1. Course 1 Applied anatomy and Pathology	EMM229A#	2		
2. Course 2 Applied physiology, forensic medicine and toxicology	EMM229B#	3		
3. Course 3 Pharmacology and Microbiology	EMM229C#	3		
General clinical compulsory courses (6 points)	EMM229D#			
Clinical pathology and Diagnostic radiology		6		6
Elective courses*		2 CP		
Clinical training and scientific activities:				
Clinical training in General clinical compulsory courses (10 CP)	EMM229D#		10	10
Clinical pathology and Diagnostic radiology				
Clinical training and scientific activities in Speciality course (14 CP)				
Course 5: Emergency Medicine(1) Anesthesia and ICU, Cardiopulmonary resuscitation and Trauma ATLS	EMM229E	8		8
Course 6: Emergency Medicine(2) Internal medicine emergencies including Toxicology, Cardiovascular, Pulmonary, Neuropsychiatric and Pediatric emergencies	EMM229F#	3		3
Course 7: Emergency Medicine(3) Surgery emergencies including General surgery, Cardio-thoracic, Vascular, Burns, Orthopedic, Urology Ophthalmology, ENT, and Obstetric & Gynecology emergencies	EMM229G#	3		3
Total of the first part		16	24	40
Second Part				
Speciality course 24 CP Speciality Clinical Work 96 CP				
Speciality Courses				
Emergency Medicine*				
Course 5: Emergency Medicine(1) Anesthesia and ICU, Cardiopulmonary resuscitation and Trauma ATLS	EMM229E	10		10
Course 6: Emergency Medicine(2) Internal medicine emergencies including Toxicology, Cardiovascular, Pulmonary, Neuropsychiatric and Pediatric emergencies	EMM229F#	7		7

Course 7: Emergency Medicine(3) Surgery emergencies including General surgery, Cardio-thoracic, Vascular, Burns, Orthopedic, Urology Ophthalmology, ENT, and Obstetric & Gynecology emergencies	EMM229G#	7	7
Training and practical activities in speciality (96 CP) (Emergency Medicine)		96	96
Total of the second part		24	96
Thesis	20 CP		
Total of the degree	180 CP		

Didactic (lectures, seminars, tutorial)

* Elective courses can be taken during either the 1st or 2nd parts.

Student work load calculation:

Work load hours are scheduled depending on the type of activities and targeted competences and skills in different courses

Elective Courses#:

- Medical statistics.
- Evidence based medicine.
- Medicolegal Aspects and Ethics in Medical Practice and Scientific Research
- Quality assurance of medical education
- Quality assurance of clinical practice.
- Hospital management

One of the above mentioned courses are prerequisites for fulfillment of the degree.

Thesis:

20 CP are appointed to the completion and acceptance of the thesis.

* Emergency Medicine

Units' Titles' list	% from total	Level (Year)	Core Credit points		
			Didactic	training	Total
1) Course 5 " Emergency Medicine 1"	43.4%	1,2&3	10	48	58
2) Course 6" Emergency Medicine2"	28.3%	1,2&3	7	31	38
3) Course 7 " Emergency Medicine 3"	28.3%	1,2&3	7	31	38
Total No. of Units:	3	1,2,3	24	110	134

** Different Courses ILOs are arranged to be studied and assessed in the 1st and 2nd parts of the program as scheduled in the program time table.

6. Courses Contents (Annex 1)

The competency based objectives for each course/module/rotation are specified in conjunction with teaching/training methods, requirements for achieving these objectives and assessment methods.

See Annex 1 for detailed specifications for each course/module

7-Admission requirements

Admission Requirements (prerequisites) if any :

I. General Requirements:

- MBBCh Degree form any Egyptian Faculties of Medicine
- Equivalent Degree from medical schools abroad approved by the Ministry of Higher Education

- One year appointment within responsible department (for non Assiut University based registrars)

II. Specific Requirements:

- Fluent in English (study language)

VACATIONS AND STUDY LEAVE

The current departmental policy is to give working residents 2 week leave prior to first/ second part exams.

FEES:

As regulated by the postgraduate studies rules and approved by the faculty vice dean of post graduate studies and the faculty and university councils.

8-Progression and completion requirements

- + Examinations of the first part could be set at 12 months from registering to the MSc degree.
- + Examination of the second part cannot be set before 3 years from registering to the degree.
- + Discussion of the MSc thesis could be set after 1 year from officially registering the MSc subject before setting the second part exams.
- + The minimum duration of the program is 3 years.

The students are offered the degree when:

1. Passing the exams of all basic science, elective and speciality courses of this program as regulated by the post graduates approved rules by the faculty council.
2. Completing all scheduled CP and log book (minimum 80%).
3. Discussion and acceptance of the MSc thesis.

9- Program assessment methods and rules (Annex IV)

Method	ILOs measured
Written examinations: Structured essay questions Objective questions: MCQ Problem solving	K & I
Structured oral	K ,I &G skills
Logbook assessment	All
Research assignment	I &G skills

Weighting of assessments:

Courses	Course Code	Degrees			
		Written Exam	Oral Exam*	Practical / Clinical Exam	Total
First Part					
Basic science courses:					
Course 1 <u>Applied anatomy and Pathology</u>	EMM229A#	40	60		100
Unit (1): Applied anatomy		20	30		50
Unit (2): pathology		20	30		50
Course 2 <u>Applied physiology, forensic medicine and toxicology</u>	EMM229B#	60	90		150
Unit (1): Applied physiology		30	45		75
Unit (2): Forensic medicine and toxicology		30	45		75
Course 3 <u>Pharmacology and Microbiology</u>	EMM229C#	60	90		150
Unit (1): pharmacology		30	45		75
Unit (2): microbiology		30	45		75
General clinical courses					
Course 4 <u>Clinical pathology and Diagnostic radiology</u>	EMM229D#	120	90	90	300
Unit (1): Clinical pathology		60	45	45	150
Unit (2): Diagnostic radiology		60	45	45	150
Total of the first part					700
Second Part					
Speciality Courses:					
1) Course 5 Emergency Medicine*		480	380	340	1200
Course 5 Emergency Medicine (1) Paper 1	EMM229E	100	150	150	500
Paper 2		100			
Course 6 Emergency Medicine (2) Paper 1	EMM229F#	60	45	45	350
Paper 2		80			
Course 7 Emergency Medicine (3) Paper 1	EMM229G#	60	55	35	350
Paper 2		80			
Total of the degree					1900
Elective course		50	50		100

* 25% of the oral exam for assessment of logbook

*** Emergency Medicine**

Units' (Module)Titles' list	% from total Marks	Degrees			
		Written Exam	Oral Exam	Practical /Clinical Exam	Total
1) Course 5 Emergency medicine (1)	43.4%	200	150	150	500
2) Course 6 Emergency medicine (2)	28.3%	140	105	105	350
3) Course 6 Emergency medicine (3)	28.3%	140	125	85	350
Total No. of Units (Modules):	3	480	380	340	1200

* 25% of the oral exam for assessment of logbook

Total degree 1900

700 marks for first part

1200 for second part

Written exam 40% (480 marks).

Clinical /practical and oral exams 60% (720 marks)

✚ Examination system:

➤ **First part:**

- Written exam 2 hours in Applied anatomy and Pathology + Oral exam
- Written exam 3 hours in Applied physiology, forensic medicine and toxicology + Oral exam
- Written exam 3 hours in Pharmacology and Microbiology + Oral exam
- Written exam 3 hours in Clinical pathology and Diagnostic radiology + Oral exam+ Clinical exam

➤ **Second part:**

- Written exam 2 papers with 6 hours in Emergency Medicine (1) + Oral exam+ Clinical & Practical exams
- Written exam 2 papers with 6 hours in Emergency Medicine (2) + Oral exam+ Clinical & Practical exams

- Written exam 2 papers with 6 hours in Emergency Medicine (3) + Oral exam+ Clinical & Practical exams

➤ **Elective courses**

- Written exam one paper 1 hour in Elective course + Oral & Practical exam

10-Program evaluation

By whom	Method	sample
Quality Assurance Unit	Reports Field visits	#
External Evaluator (s):According to department council External Examiner (s): According to department council	Reports Field visits	#
Stakeholders	Reports Field visits Questionnaires	#
Senior students	Questionnaires	#
Alumni	Questionnaires	#

#Annex 5 contains evaluation templates and reports (Joined in the departmental folder).

11-Declaration

We certify that all of the information required to deliver this program is contained in the above specification and will be implemented.

All course specifications for this program are in place.

Contributor	Name	Signature	Date
Program Principle Coordinator:	Prof. Fatma Ahmed Abdel-Aal		
Head of the Responsible Department (Program Academic Director):	Prof.Hany El-Morabaa		

Annex 1, Specifications for Courses / Modules

Annex 1: specifications for courses

Course 1 (Applied anatomy and Pathology)

Name of department: *Anesthesia and post-operative Intensive Care*
Faculty of medicine
Assiut University
2022-2023

1. Course data

- ✚ Course Title: Applied anatomy and Pathology
- ✚ Course code: EMM229A#
- ✚ Speciality Emergency Medicine
- ✚ Number of credit points: 2 credit point, didactic 2 credit point (100%)
- ✚ Department (s) delivering the Course: Anatomy, Pathology in conjunction with Anesthesia and post-operative Intensive Care Coordinator (s):
- ✚ Course coordinator(s) : Staff members of Anatomy, Pathology Departments in conjunction with Anesthesia and post-operative Intensive Care Department as annually approved by both departments councils
- ✚ Date last reviewed: September 2022
- ✚ General requirements (prerequisites) if any :
None
- ✚ Requirements from the students to achieve Course ILOs are clarified in the joining log book.

2. 4 Course aims

The student should acquire the anatomical and Pathological background necessary for Emergency Medicine

3. Course intended learning outcomes (ILOs):

Unit (1): Applied Anatomy

A. Knowledge and understanding

ILOs	Methods of teaching/ learning	Methods of Evaluation
<p>A. <u>Mention anatomical principles of:</u></p> <ul style="list-style-type: none">• Surface anatomy of The human body• Nervous system (Nerve supply of body wall and limbs, dermatomes, myotomes, nerve supply of head and neck, autonomic nervous system, sympathetic nervous system, parasympathetic nervous system, cranial autonomic ganglia• Central Nervous System (Brain, Mid Brain, Brain Stem, Cerebellum and Spinal Cord)• Head and Neck (Skull and Cranial Cavity, Face, Mouth, Pharynx, Larynx, Ear, Neck, Vessels, Cranial Nerves, Vertebral Column , Spinal Canal and the Eye)• Upper Limb (Pectoral Girdle, Breast and Axilla, Scapular Region, Arm, Forearm, Hand, Joints, Vessels and Nerves)	Lectures	<ul style="list-style-type: none">- Written and oral examination- Log book

<ul style="list-style-type: none"> • Lower Limb (Front of the Thigh, Adductor Compartment, Gluteal Region, Hamstring Compartment, Popliteal Fossa, Front of the leg, Dorsum of the foot, Peroneal Compartment, Calf, Sole, Joints, Vessels and Nerves) • Thorax (chest wall and diaphragm, Mediastinum, Heart and Great Vessels, Airways and Lungs) • Abdomen and Pelvis (Abdominal Wall and Peritoneum, Gut, Liver, Spleen, Pancreas, Kidneys, Ureters, Bladder and Urethra, Reproductive Organs, Joints of Pelvis, related Vessels and related Nerves) 		
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B. Intellectual outcomes

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Correlates the facts of anatomy with clinical reasoning, diagnosis and management of common diseases related to emergency medicine.	-Didactic (lectures, seminars, tutorial)	-Written and oral examination - Log book
B. Demonstrate an investigatory and analytic thinking (problem solving) approaches to common clinical situations related to Emergency Medicine.		

C. Practical skills

Practical: 0 credit point

D. General Skills

Practice-Based Learning and Improvement

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Use information technology to manage information, access on-line medical information; and support their own education.	-Observation and supervision -Written & oral communication	-Log book -Oral exam

Interpersonal and Communication Skills

ILOs	Methods of teaching/ learning	Methods of Evaluation
B. Write a report in the conditions mentioned in A.A	Observation and supervision Written & oral communication	-Log book - Oral exam - Check list

Professionalism

ILOs	Methods of teaching/ learning	Methods of Evaluation
C. Demonstrate a commitment to ethical principles.	-Observation - Senior staff experience	-Log book - Oral exam

Systems-Based Practice

ILOs	Methods of teaching/ learning	Methods of Evaluation
D. Work effectively in relevant health care delivery settings and systems.	Observation - Senior staff experience	-360o global rating

**Unit contents (topic s/modules/rotation
Course Matrix**

Time Schedule: First Part

Topic	Covered ILOs			
	Knowledge	Intellectual	Practical skills	General Skills
	A	B	C	D
• Surface anatomy of The human body	A	A,B	-	A-D
• Nervous system (Nerve supply of body wall and limbs, dermatomes, myotomes, nerve supply of head and neck, autonomic nervous system, sympathetic nervous system, parasympathetic nervous system, cranial autonomic ganglia)	A	A,B	-	A-D
• Central Nervous System (Brain, Mid Brain, Brain Stem, Cerebellum and Spinal Cord)	A	A,B	-	A-D
• Head and Neck (Skull and Cranial Cavity, Face, Mouth, Pharynx, Larynx, Ear, Neck, Vessels, Cranial Nerves, Vertebral Column , Spinal Canal and the Eye)	A	A,B	-	A-D
• Upper Limb (Pectoral Girdle, Breast and Axilla, Scapular Region, Arm, Forearm, Hand, Joints, Vessels and Nerves)	A	A,B	-	A-D
• Lower Limb (Front of the Thigh, Adductor Compartment, Gluteal	A	A,B	-	A-D

Region, Hamstring Compartment, Popliteal Fossa, Front of the leg, Dorsum of the foot, Peroneal Compartment, Calf, Sole, Joints, Vessels and Nerves)				
•Thorax (chest wall and diaphragm, Mediastinum, Heart and Great Vessels, Airways and Lungs)	A	A,B	-	A-D
	A	A,B	-	A-D
•Abdomen and Pelvis (Abdominal Wall and Peritoneum, Gut, Liver, Spleen, Pancreas, Kidneys, Ureters, Bladder and Urethra, Reproduc-tive Organs, Joints of Pelvis, related Vessels and related Nerves)	A	A,B	-	A-D

1. Unit methods of teaching/learning:

2. lectures

Unit methods of teaching/learning: for students with poor achievements

1. lectures

Unit assessment methods:

i. Assessment tools:

1. Written and oral examination
2. Log book

ii. Time schedule: At the end of the first part

iii. Marks: 50

List of references

i. Lectures notes

- Course notes
- Staff members print out of lectures and/or CD copies

ii. Essential books

- Alex S Evers: Anesthetic Pharmacology 1st edition 2013
- Basic & Clinical Pharmacology, 11th Edition. By Bertram Katzung, Anthony Trevor, Susan Masters. Publisher: McGraw-Hill

iii. Recommended books

- Godman Gilmans. The pharmacological therapeutics. 11th Ed, 2016

iv. Periodicals, Web sites, ... etc

➤ Periodicals,

- Anesthesia and analgesia
- Journal of pain
- Anesthesia journal
- Bja
- British journal f pharmacology
- Pharmacological review

v. others : None

Signatures

Course Coordinator:		Head of the Department:	
Date:		Date:	

Unit (2): pathology

Unit intended learning outcomes (ILOs):

A. Knowledge and understanding

ILOs	Methods of teaching/ learning	Methods of Evaluation
<p><u>A. Mention pathological principles of:</u></p> <ul style="list-style-type: none"> • Inflammation • Repair by healing, scar formation, and fibrosis • Cutaneous wound healing • Fibrosis • Edema • Hyperemia and congestion • Hemorrhage and Hemostasis • Thrombosis and Embolism • Infarction and atherosclerosis • Shock 	Lectures	<ul style="list-style-type: none"> - Written and oral examination - Log book

E. Intellectual outcomes

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Correlates the facts of pathology with clinical reasoning, diagnosis and management of common diseases related to emergency medicine.	-Didactic (lectures, seminars, tutorial)	-Written and oral examination - Log book
B. Demonstrate an investigatory and analytic thinking (problem solving) approaches to common clinical situations related to Emergency Medicine.		

F. Practical skills

Practical: 0 credit point

G. General Skills

Practice-Based Learning and Improvement

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Use information technology to manage information, access on-line medical information; and support their own education.	-Observation and supervision -Written & oral communication	-Log book -Oral exam

Interpersonal and Communication Skills

ILOs	Methods of teaching/ learning	Methods of Evaluation
B. Write a report in the conditions mentioned in A.A	Observation and supervision Written & oral communication	-Log book - Oral exam - Check list

Professionalism

ILOs	Methods of teaching/ learning	Methods of Evaluation
C. Demonstrate a commitment to ethical principles.	-Observation - Senior staff experience	-Log book - Oral exam

Systems-Based Practice

ILOs	Methods of teaching/ learning	Methods of Evaluation
D. Work effectively in relevant health care delivery settings and systems.	Observation - Senior staff experience	-360o global rating

**Unit contents (topic s/modules/rotation
Course Matrix**

Time Schedule: First Part

Topic	Covered ILOs			
	Knowledge	Intellectual	Practical skills	General Skills
	A	B	C	D
• Inflammation	A	A,B	-	A-D
• Repair by healing, scar formation, and fibrosis	A	A,B	-	A-D
• Cutaneous wound healing	A	A,B	-	A-D
• Fibrosis	A	A,B	-	A-D
• Edema	A	A,B	-	A-D
• Hyperemia and congestion	A	A,B	-	A-D
• Hemorrhage and Hemostasis	A	A,B	-	A-D
• Thrombosis and Embolism	A	A,B	-	A-D
• Infarction and atherosclerosis	A	A,B	-	A-D
• Shock	A	A,B	-	A-D

Unit methods of teaching/learning:

- lectures

Unit methods of teaching/learning: for students with poor achievements

- lectures

Unit assessment methods:

i. Assessment tools:

- Written and oral examination
- Log book

ii. Time schedule: At the end of the first part

iii. Marks: 50

List of references

i. Lectures notes

- Course notes
- Staff members print out of lectures and/or CD copies

ii. Essential books

- Alex S Evers: Anesthetic Pharmacology 1st edition 2013
- Basic & Clinical Pharmacology, 11th Edition. By Bertram Katzung, Anthony Trevor, Susan Masters. Publisher: McGraw-Hill

iii. Recommended books

- Godman Gilmans. The pharmacological therapeutics. 11th Ed, 2016

iv. Periodicals, Web sites, ... etc

➤ **Periodicals,**

- Anesthesia and analgesia
- Journal of pain
- Anesthesia journal
- Bja
- British journal f pharmacology
- Pharmacological review

v. others : None

Signatures

Unit Coordinator:	Head of the Department:
Date:	Date:

Course 2 (Applied physiology, Forensic medicine and toxicology)

Name of department: Anesthesia and post-operative Intensive Care

Faculty of medicine

Assiut University

2022-2023

1. Course data

- + Course Title: Applied Physiology, forensic medicine and toxicology**
- + Course code: EMM229B#**
- + Speciality Emergency Medicine**
- + Number of credit points: 3 credit point, didactic 3 credit point (100%)**
- + Department (s) delivering the Course: Physiology and Forensic medicine departments in conjunction with Anesthesia and post-operative Intensive Care Coordinator (s):**
- + Course coordinator: Staff members of Physiology and Forensic medicine departments in conjunction with Anesthesia and post-operative Intensive Care Department as annually approved by departments councils**
- + Date last reviewed: September 2022**
- + General requirements (prerequisites) if any :
None**
- + Requirements from the students to achieve Course ILOs are clarified in the joining log book.**

2. Course aims

The student should acquire the physiological Forensic medicine and toxicological background necessary for emergency medicine

3. Course intended learning outcomes (ILOs):

Unit (1): Applied Physiology

A) Knowledge and understanding

ILOs	Methods of teaching/ learning	Methods of Evaluation
<u>A. Describe Physiologic details of</u> <ul style="list-style-type: none">• Haemostasis• Physiological principles of cardiac cycle and cardiac conduction• Regulation of arterial blood pressure• Shock• Pulmonary circulation• Coronary and cerebral circulation• Tissue fluid formation and edema• Water balance• Electrolyte balance• Acid-base balance• Ventilation and perfusion relationship• Body temperature regulation• Hypothalamic pituitary axis• Physiology of liver and pancreas• Physiology of renal system	Lectures	- Written and oral examination - Log book

B) Intellectual outcomes

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Correlates the facts of physiology with clinical reasoning, diagnosis and management of common diseases related to Emergency Medicine.	-Didactic (lectures, seminars, tutorial)	-Written and oral examination - Log book
B. Demonstrate an investigatory and analytic thinking (problem solving) approaches to common clinical situations related to Emergency Medicine.		

C) Practical skills

Practical: 0 credit point

D) General Skills

Practice-Based Learning and Improvement

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Use information technology to manage information, access on-line medical information; and support their own education.	-Observation and supervision -Written & oral communication	-Log book - Oral exam

Interpersonal and Communication Skills

ILOs	Methods of teaching/ learning	Methods of Evaluation
C. Write a report in the conditions mentioned in A.A	Observation and supervision Written & oral communication	-Log book - Oral exam - Check list

Professionalism

ILOs	Methods of teaching/ learning	Methods of Evaluation
C. Demonstrate a commitment to ethical principles.	-Observation - Senior staff experience	-Log book - Oral exam

Systems-Based Practice

ILOs	Methods of teaching/ learning	Methods of Evaluation
D. Work effectively in relevant health care delivery settings and systems.	-Observation - Senior staff experience	360o global rating

**Unit contents (topic s/modules/rotation
Course Matrix**

Time Schedule: First Part

Topic	Covered ILOs			
	Knowledge	Intellectual	Practical skills	General Skills
	A	B	C	D
Cardiovascular Physiology	A	A,B	-	A-D
Aspects of Myocardial Physiology	A	A,B	-	A-D
Cerebral Blood Flow and Intracranial Pressure	A	A,B	-	A-D
The Autonomic Nervous System – Basic Physiology	A	A,B	-	A-D
The Physiology of Neuromuscular Junction	A	A,B	-	A-D
Body Fluid Compartments, Sodium and Potassium physiology	A	A,B	-	A-D
Respiratory Physiology	A	A,B	-	A-D
Renal Physiology	A	A,B	-	A-D
Liver Physiology	A	A,B	-	A-D
Endocrine Physiology	A	A,B	-	A-D
Physiology of Pain	A	A,B	-	A-D
Physiological Changes Associated with Pregnancy, pediatric and elderly patients.	A	A,B	-	A-D

3. Unit methods of teaching/learning:

4. lectures

Unit methods of teaching/learning: for students with poor achievements

2. lectures

Unit assessment methods:

i. Assessment tools:

- 3. Written and oral examination
- 4. Log book

ii. Time schedule: At the end of the first part

iii. Marks: 75

List of references

i. Lectures notes

- Course notes
- Staff members print out of lectures and/or CD copies

ii. Essential books

- Guyton AC, Hall JE: Textbook of Medical Physiology, 11th ed. Saunders, 2016.
- Miller R.D., Cucchiara RF et al, (2010): Anesthesia, 5th edition, vol(1).

iii. Recommended books

- Gillian Pocock, Christopher D. Richards: Human Physiology the Basis of Medicine. Oxfordcore texts, 2012

iv. Periodicals, Web sites, ... etc

➤ **Periodicals,**

- Anesthesia and analgesia
- Journal of pain
- Anesthesia journal
- Bja
- American journal of physiology.

v. others

- None

Signatures

Course Coordinator:	Head of the Department:
Date:	Date:

Unit (2): Forensic medicine and toxicology

A. Knowledge and understanding

ILOs	Methods of teaching/ learning	Methods of Evaluation
<p><u>A. Describe forensic and toxicological details of:</u></p> <ul style="list-style-type: none"> • Writing medical reports • Medicolegal aspects of emergency medicine • Violation of human rights • Management of acute poisoning • Environmental toxicology • Drug poisoning 	Lectures	- Written and oral examination - Log book

B. Intellectual outcomes

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Correlates the facts of forensic medicine with clinical reasoning, diagnosis and management of common diseases related to Emergency Medicine.	-Didactic (lectures, seminars, tutorial)	-Written and oral examination - Log book
B. Demonstrate an investigatory and analytic thinking (problem solving) approaches to common clinical situations related to Emergency Medicine.		

C. Practical skills

Practical: 0 credit point

D. General Skills

Practice-Based Learning and Improvement

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Use information technology to manage information, access on-line medical information; and support their own education.	-Observation and supervision -Written & oral communication	-Log book - Oral exam

Interpersonal and Communication Skills

ILOs	Methods of teaching/ learning	Methods of Evaluation
B. Write a report in the conditions mentioned in A.A	Observation and supervision Written & oral communication	-Log book - Oral exam - Check list

Professionalism

ILOs	Methods of teaching/ learning	Methods of Evaluation
C. Demonstrate a commitment to ethical principles.	-Observation - Senior staff experience	-Log book - Oral exam

Systems-Based Practice

ILOs	Methods of teaching/ learning	Methods of Evaluation
D. Work effectively in relevant health care delivery settings and systems.	-Observation - Senior staff experience	360o global rating

**Unit contents (topic s/modules/rotation
Course Matrix**

Time Schedule: First Part

Topic	Covered ILOs			
	Knowledge	Intellectual	Practical skills	General Skills
	A	B	C	D
Cardiovascular Physiology	A	A,B	-	A-D
Aspects of Myocardial Physiology	A	A,B	-	A-D
Cerebral Blood Flow and Intracranial Pressure	A	A,B	-	A-D
The Autonomic Nervous System – Basic Physiology	A	A,B	-	A-D
The Physiology of Neuromuscular Junction	A	A,B	-	A-D
Body Fluid Compartments, Sodium and Potassium physiology	A	A,B	-	A-D
Respiratory Physiology	A	A,B	-	A-D
Renal Physiology	A	A,B	-	A-D
Liver Physiology	A	A,B	-	A-D
Endocrine Physiology	A	A,B	-	A-D
Physiology of Pain	A	A,B	-	A-D
Physiological Changes Associated with Pregnancy, pediatric and elderly patients.	A	A,B	-	A-D

Unit methods of teaching/learning:

1-lectures

Unit methods of teaching/learning: for students with poor achievements

1-lectures

Unit assessment methods:

i. Assessment tools:

- 5. Written and oral examination
- 6. Log book

ii. Time schedule: At the end of the first part

iii. Marks: 150

List of references

i. Lectures notes

- Course notes
- Staff members print out of lectures and/or CD copies

ii. Essential books

- Guyton AC, Hall JE: Textbook of Medical Physiology, 11th ed. Saunders, 2006.
- Miller R.D., Cucchiara RF et al, (2000): Anesthesia, 5th edition, vol(1).

iii. Recommended books

- Gillian Pocock, Christopher D. Richards: Human Physiology the Basis of Medicine. Oxfordcore texts, 1999-2001.

iv. Periodicals, Web sites, ... etc

➤ **Periodicals,**

- Anesthesia and analgesia
- Journal of pain
- Anesthesia journal
- Bja
- American journal of physiology.

v. others

- None

Signatures

Course Coordinator:	Head of the Department:
Date:	Date:

Course 3 (Pharmacology and Microbiology)

Name of department: *Anesthesia and post-operative Intensive Care*

Faculty of medicine

Assiut University

2022-2023

1. Course data

- ✚ Course Title: Pharmacology and Microbiology
- ✚ Course code: EMM229C#
- ✚ Speciality Emergency Medicine
- ✚ Number of credit points: 3 credit point, didactic 3 credit point (100%)
- ✚ Department (s) delivering the course: Pharmacology and Microbiology in conjunction Anesthesia and post-operative Intensive Care
- ✚ Unit coordinator: Staff members of Pharmacology and Microbiology Department in conjunction with Anesthesia and post-operative Intensive Care as annually approved by both departments councils
- ✚ Date last reviewed: September 2022
- ✚ General requirements (prerequisites) if any :
 - None
- ✚ Requirements from the students to achieve course ILOs are clarified in the joining log book.

2. Course Aims

The student should acquire the anatomic facts necessary for Anesthesia and postoperative intensive care.

Unit (1): Pharmacology

Unit intended learning outcomes (ILOs):

A- Knowledge and understanding

ILOs	Methods of teaching/ learning	Methods of Evaluation
<p><u>A. Describe pharmacological details of</u></p> <ul style="list-style-type: none">• The clinical pharmacology of emergency cardiac drugs (drugs used in arrest, inotropes and other emergency cardiac medications)• Antiarrhythmic medications• Antihypertensive medications• The pharmacology of (antiemetics, antidiarrheals, antiulcer medications and anti-spasmodics)• The pharmacology of drugs used in anticoagulation, thrombolysis• Principles of antimicrobial therapy• Anticonvulsants (phenytoin, carbamazepine, valproate)• The pharmacology of steroids	Lectures	Written and oral examination Log book

B- Intellectual outcomes

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Correlates the facts of pharmacology with clinical reasoning, diagnosis and management of common diseases related to Emergency Medicine.	Didactic (lectures, seminars, tutorial)	Written and oral examination Log book

C- Practical skills

Practical 0 credit point

D- General Skills

Practice-Based Learning and Improvement

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Use information technology to manage information, access on-line medical information; and support their own education.	-Observation and supervision -Written & oral communication	-Log book - Oral exam

Interpersonal and Communication Skills

ILOs	Methods of teaching/ learning	Methods of Evaluation
B. Write a report in the conditions mentioned in A.A	-Observation and supervision -Written & oral communication	-Log book - Oral exam - Check list

Professionalism

ILOs	Methods of teaching/ learning	Methods of Evaluation
C. Demonstrate a commitment to ethical principles.	-Observation -Senior staff experience	-Log book - Oral exam

Systems-Based Practice

ILOs	Methods of teaching/ learning	Methods of Evaluation
D. Work effectively in relevant health care delivery settings and systems.	-Observation -Senior staff experience	--360o global rating

**Unit contents (topic s/modules/rotation
Course Matrix**

Time Schedule: First Part

Topic	Covered ILOs			
	Knowledge	Intellectual	Practical skills	General Skills
	A	B	C	D
- Upper respiratory tract including pharynx, larynx, trachea	A	A	A,B	A-D
- Bronchial tree	A	A	A,B	A-D
- Lungs	A	A	A,B	A-D
- Pleura	A	A	A,B	A-D
- Chest wall	A	A	A,B	A-D
- Mediastinum	A	A	A,B	A-D
- Heart and great vessels	A	A	A,B	A-D

Unit methods of teaching/learning:

1. Lectures
2. Laboratory work

Unit methods of teaching/learning: for students with poor achievements

1. Lectures
2. Laboratory work

Unit assessment methods:

i. Assessment tools:

- a. Written and oral examination
- b. Log book

ii. Time schedule: At the end of the first part

iii. Marks: 150

List of references

i. Lectures notes

- Staff members print out of lectures.
- Anatomy and embryology books by staff members of anatomy department, Assiut University.

ii. Essential books

- Miller R.D., Cucchiara RF et al, (2010): Anesthesia, 5th edition, vol(1).
- Fitzgerald M.J.T. (2015): The anatomical basis of medicine and surgery. By Standing s., ELIS H., Healy J. C., Johnson D. and Williams A. Gray's Anatomy. Elsevier; London, New York. Sydney. Toronto.

iii. Recommended books

- McMinn R.M.H. (2014): Lasts anatomy regional and applied chapter 7; ninth edition, edited by Longman group UK.
- A colored Atlas of Human anatomy and Embryology.

iv. Periodicals, Web sites, ... etc

- American Journal of Anatomy
- British journal of anatomy

v. others

- None

Signatures

Course Coordinator:	Head of the Department:
Date:	Date:

Unit (2): Microbiology

Unit intended learning outcomes (ILOs):

A. Knowledge and understanding

ILOs	Methods of teaching/ learning	Methods of Evaluation
<p><u>A. Describe microbiological details of</u></p> <ul style="list-style-type: none"> • General features of microbial activity and modes of transmission • Viral and bacterial infections and mechanism of resistance to antimicrobial therapy • Features of other infectious diseases fungi, protozoa, helminths • Hospital infection control • Antimicrobial chemotherapy • Skin and soft tissue infection • Bacteraemia and septicaemia • Sterilization disinfection and antisepsis • Lower respiratory tract infection 	Lectures	Written and oral examination Log book

B. Intellectual outcomes

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Correlates the facts of microbiology with clinical reasoning, diagnosis and management of common diseases related to Emergency Medicine.	Didactic (lectures, seminars, tutorial)	Written and oral examination Log book

C. Practical skills

Practical 0 credit point

D. General Skills

Practice-Based Learning and Improvement

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Use information technology to manage information, access on-line medical information; and support their own education.	-Observation and supervision -Written & oral communication	-Log book - Oral exam

Interpersonal and Communication Skills

ILOs	Methods of teaching/ learning	Methods of Evaluation
B. Write a report in the conditions mentioned in A.A	-Observation and supervision -Written & oral communication	-Log book - Oral exam - Check list

Professionalism

ILOs	Methods of teaching/ learning	Methods of Evaluation
C. Demonstrate a commitment to ethical principles.	-Observation -Senior staff experience	-Log book - Oral exam

Systems-Based Practice

ILOs	Methods of teaching/ learning	Methods of Evaluation
D. Work effectively in relevant health care delivery settings and systems.	-Observation -Senior staff experience	--360o global rating

**Unit contents (topic s/modules/rotation
Course Matrix**

Time Schedule: First Part

Topic	Covered ILOs			
	Knowledge	Intellectual	Practical skills	General Skills
	A	B	C	D
- Upper respiratory tract including pharynx, larynx, trachea	A	A	A,B	A-D
- Bronchial tree	A	A	A,B	A-D
- Lungs	A	A	A,B	A-D
- Pleura	A	A	A,B	A-D
- Chest wall	A	A	A,B	A-D
- Mediastinum	A	A	A,B	A-D
- Heart and great vessels	A	A	A,B	A-D

Unit methods of teaching/learning:

3. Lectures
4. Laboratory work

Unit methods of teaching/learning: for students with poor achievements

3. Lectures
4. Laboratory work

Unit assessment methods:

- i. Assessment tools:
 - c. Written and oral examination
 - d. Log book
- ii. Time schedule: At the end of the first part
- iii. Marks: 75

List of references

i. Lectures notes

- Staff members print out of lectures.
- Anatomy and embryology books by staff members of anatomy department, Assiut University.

ii. Essential books

- Miller R.D., Cucchiara RF et al, (2010): Anesthesia, 5th edition, vol(1).
- Fitzgerald M.J.T. (2015): The anatomical basis of medicine and surgery. By Standing s., ELIS H., Healy J. C., Johnson D. and Williams A. Gray's Anatomy. Elsevier; London, New York. Sydney. Toronto.

iii. Recommended books

- McMinn R.M.H. (2014): Lasts anatomy regional and applied chapter 7; ninth edition, edited by Longman group UK.
- A colored Atlas of Human anatomy and Embryology.

iv. Periodicals, Web sites, ... etc

- American Journal of Anatomy
- British journal of anatomy

v. others

- None

Signatures

Course Coordinator:	Head of the Department:
Date:	Date:

Course 4 Clinical Pathology and Diagnostic Radiology

Name of department: *Anesthesia and post-operative Intensive Care*
Faculty of medicine- Assiut University
2022-2023

1. Course data

- + Course Title: Clinical Pathology and Diagnostic Radiology
- + Course code: EMM229D#
- + Speciality Emergency Medicine
- + Number of credit point: 16 credit point, Didactic 6 credit point (37.5%), training 10 credit point (62.5%)
- + Department (s) delivering the course: Clinical pathology and Diagnostic radiology Departments
- + Course coordinator:): Staff members of Anesthesia and post-operative Intensive Care, Clinical pathology and Diagnostic radiology Departments as annually approved by departments council
- + Date last reviewed: September 2022
- + General requirements (prerequisites) if any :
- + None
- + Requirements from the students to achieve course ILOs are clarified in the joining log book.

2. Course aims

- To make the students able to be familiar with the diagnosis and management of common medical problems that may be encountered with Emergency Medicine
- To make the students able to deal with emergency related investigations and radiological diagnosis safely and effectively as regard their investigations and management.

3. Course intended learning outcomes (ILOs):

Unit (1): Clinical Pathology

A. Knowledge and understanding

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Describe the etiology, clinical picture, diagnosis of the following diseases and clinical conditions: Anemia Disorders of white blood cells Disorders of hemostasis Blood group system Transfusion medicine Liver disorders and liver function tests Kidney disorders and renal function tests Glucose tolerance test Acute abdomen and markers CSF examination Urine analysis	-Clinical round -Didactic (lectures, seminars, tutorial) -Case presentation -Hand on workshops, - Clinical rotation in the general medical emergency Unit	-Written and oral examination -Log book
B. Mention the principles of the clinical pathology related to above mentioned conditions		
C. State update and evidence based Knowledge of above mentioned conditions		
D. Memorize the facts and principles of the relevant		

basic supportive sciences related to clinical pathology		
E. Mention the basic ethical and medicolegal principles relevant to the clinical pathology.		
F. Mention the basics of quality assurance to ensure good clinical care in his field		
G. Mention the ethical and scientific principles of medical research		
H. State the impact of common health problems in the field of clinical pathology on the society.		

B. Intellectual outcomes

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Correlates the facts of relevant basic and clinically supportive sciences with clinical reasoning, diagnosis and management of common conditions related to clinical pathology.	-Clinical rounds -Senior staff experience	-Procedure & case presentation -log book & portfolio
B. Demonstrate an investigatory and analytic thinking (problem solving) approaches to common clinical situations related to clinical pathology.		
C. Design and present cases, seminars in common problem.		
D-Formulate management plans and alternative decisions in different situations in the field of the clinical pathology.		

C) Practical skills

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Obtain proper history and examine patients in caring and respectful behaviors.	-Clinical round -Seminars -Lectures -Tutorial -Case presentation -Hand on workshops, -Clinical rotation in the general medical emergency Unit	-OSCE -log book & portfolio -Clinical exam in internal medicine
B. Order non invasive and invasive diagnostic procedures for conditions mentioned above	-Clinical round with senior staff -Observation Post graduate teaching -Hand on workshops	-OSCE -log book & portfolio -Clinical exam in internal medicine
C. Interpret non invasive and invasive diagnostic procedures for conditions mentioned above	-Clinical round with senior staff -Observation Post graduate teaching -Hand on workshops	
D. Perform the following non invasive and invasive diagnostic and therapeutic procedures for conditions mentioned above	-Clinical round with senior staff -Observation Post graduate teaching	

	-Hand on workshops	
E. Use information technology to support patient care decisions and patient education in common clinical situations related to clinical pathology.		
F. Provide health care services aimed at preventing health problems related to clinical pathology.		
G. Provide patient-focused care in common conditions related to Internal Medicine, while working with health care professionals, including those from other disciplines like: Conditions mentioned in A.A		

D. General Skills

Practice-Based Learning and Improvement

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Perform practice-based improvement activities using a systematic methodology(audit, logbook)	-Case log -Observation and supervision -Written & oral communication	--Log book & portfolio -Procedure & case presentation
B. Appraises evidence from scientific studies(journal club)	- Case log - Observation and supervision - Written & oral communication - Journal clubs - Discussions in seminars and clinical rounds	--Log book & portfolio -Procedure & case presentation
C. Conduct epidemiological Studies and surveys.		
D. Perform data management including data entry and analysis.		
E. Facilitate learning of junior students and other health care professionals.	-Clinical rounds -Senior staff experience	

Interpersonal and Communication Skills

ILOs	Methods of teaching/learning	Methods of Evaluation
F. Maintain therapeutic and ethically sound relationship with patients.	-Simulations -Clinical round -Seminars -Lectures -Case presentation -Hand on workshops	-Global rating -Procedure & case presentation -Log book & portfolio -Chick list
G. Elicit information using effective nonverbal, explanatory, questioning, and writing skills.		
H. Provide information using effective nonverbal, explanatory, questioning, and writing skills.		
I. Work effectively with others as a member of a health care team or other professional group.		
J. Present a case in <ul style="list-style-type: none"> • Common problems of Clinical Pathology. 		
K. Write a report <ul style="list-style-type: none"> • Patients' medical reports 	-Senior staff experience	
L. Council patients and families about <ul style="list-style-type: none"> • Conditions mentioned in A.A 	-Perform under supervision of senior staff	

Professionalism

ILOs	Methods of teaching/ learning	Methods of Evaluation
M. Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society	-Observation Senior staff experience -Case taking	-Objective structured clinical examination -Patient survey
N. Demonstrate a commitment to ethical principles including provision or withholding of clinical care, confidentiality of patient information, informed consent, business practices		- 360o global rating
O. Demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities		-Objective structured clinical examination -360o global rating

Systems-Based Practice

ILOs	Methods of teaching/ learning	Methods of Evaluation
P. Work effectively in relevant health care delivery settings and systems.	-Observation -Senior staff experience	-360o global rating
Q. Practice cost-effective health care and resource allocation that does not compromise quality of care.		-Check list evaluation of live or recorded performance
R. Assist patients in dealing with system complexities.		-360o global rating - Patient survey

**4. Course contents (topic s/modules/rotation
Course Matrix**

Time Schedule: First Part

Topic	Covered ILOs			
	Knowledge	Intellectual	Practical skills	General Skills
	A	B	C	D
Anemia	A,B,D-H	A-D	A-I	A-R
Disorders of white blood cells	A,B,D-H	A-D	A-I	A-R
Disorders of hemostasis	A,B,D-H	A-D	A-I	A-R
Blood group system	A,B,D-H	A-D	A-I	A-R
Transfusion medicine	A-H,D-H	A-D	A-I	A-R
Liver disorders and liver function tests	A,BD-H	A-D	A-I	A-R
Kidney disorders and renal function tests	A,B,D-H	A-D	A-I	A-R
Glucose tolerance test	A,B,D-H	A-D	A-I	A-R
Acute abdomen and markers	A,B,D-H	A-D	A-I	A-R
CSF examination	A,B,D-H	A-D	A-I	A-R
Urine analysis	A-H	A-D	A-I	A-R

5. Course methods of teaching/learning:

1. Didactic (lectures, seminars, tutorial)
2. Clinical rounds
3. Seminars Clinical rotations
4. Service teaching
5. Observation
6. Post graduate teaching
7. Hand on workshops
8. Perform under supervision of senior staff
9. Simulations
10. Case presentation
11. Observation and supervision
12. Written & oral communication

6. Course methods of teaching/learning: for students with poor achievements

1. Extra Didactic (lectures, seminars, tutorial) according to their needs
2. Extra training according to their needs

7. Course assessment methods:

i. Assessment tools:

Assessment tools:

1. Clinical examination
2. Written and oral examination
3. Check list
4. log book & portfolio
5. Procedure and case presentation
6. Objective structured clinical examination
7. Check list evaluation of live or recorded performance
8. Patient survey
9. 360o global rating

ii. **Time schedule:** At the end of the first part

iii. **Marks:** 150

8. List of references

Lectures notes

- Course notes
- Staff members print out of lectures and/or CD copies
- Book by Staff Members of the Department of Anesthesia and postoperative intensive care - Assiut University

ii. Essential books

- Davidson's Principles and Practice of Medicine - 20th Edition - 2016-17
- Hutchison's Clinical Methods; Robert Hutchison; Harry Rainy; 21st edition;2013

iii. Recommended books

- Harrison's Principles of Internal Medicine, 17th Edition by Anthony Fauci, Eugene Braunwald, Dennis Kasper, and Stephen Hauser (Hardcover - Mar 6 2008)

iv. Periodicals, Web sites, ... etc

- Internal medicine journal
- Annals of Internal medicine journal
- Journal of General Internal Medicine

v. others : None

9. Signatures

Course Coordinator:	Head of the Department:
Date:	Date:

Unit (2): Diagnostic Radiology

A. Knowledge and understanding

ILOs	Methods of teaching/ learning	Methods of Evaluation
<p>A. Describe the etiology, clinical picture, diagnosis of the following diseases and clinical conditions:</p> <p>Basic principles of diagnostic imaging Imaging features of cardiac emergencies Imaging features of chest emergencies Imaging features of musculoskeletal emergencies Imaging features of urological emergencies Imaging features of abdominal emergencies Imaging features of obstetric emergencies Head and neck imaging Indications and further lines of imaging assessment Fast US CT brain CT chest</p>	<p>-Clinical round -Didactic (lectures, seminars, tutorial) -Case presentation -Hand on workshops, - Clinical rotation in the general medical emergency Unit</p>	<p>-Written and oral examination -Log book</p>
B. Mention the principles of the Diagnostic Radiology related to above mentioned conditions		
C. State update and evidence based Knowledge of above mentioned conditions		
D. Memorize the facts and principles of the relevant basic supportive sciences related to clinical pathology		
E. Mention the basic ethical and medicolegal principles relevant to the Diagnostic Radiology.		
F. Mention the basics of quality assurance to ensure good clinical care in his field		
G. Mention the ethical and scientific principles		

of medical research		
H. State the impact of common health problems in the field of Diagnostic Radiology on the society.		

B. Intellectual outcomes

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Correlates the facts of relevant basic and clinically supportive sciences with clinical reasoning, diagnosis and management of common conditions related to Diagnostic Radiology.	-Clinical rounds -Senior staff experience	-Procedure & case presentation -log book & portfolio
B. Demonstrate an investigatory and analytic thinking (problem solving) approaches to common clinical situations related to Diagnostic Radiology.		
C. Design and present cases, seminars in common problem.		
D-Formulate management plans and alternative decisions in different situations in the field of the Diagnostic Radiology.		

C) Practical skills

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Obtain proper history and examine patients in caring and respectful behaviors.	-Clinical round -Seminars -Lectures -Tutorial -Case presentation -Hand on workshops, -Clinical rotation in the general medical emergency	-OSCE -log book & portfolio -Clinical exam in internal medicine

	Unit	
B. Order non invasive and invasive diagnostic procedures for conditions mentioned above	-Clinical round with senior staff -Observation Post graduate teaching -Hand on workshops	-OSCE -log book & portfolio -Clinical exam in internal medicine
C. Interpret non invasive and invasive diagnostic procedures for conditions mentioned above	-Clinical round with senior staff -Observation Post graduate teaching -Hand on workshops	
D. Perform the following non invasive and invasive diagnostic and therapeutic procedures for conditions mentioned above	-Clinical round with senior staff -Observation Post graduate teaching -Hand on workshops	
E. Use information technology to support patient care decisions and patient education in common clinical situations related to Diagnostic Radiology.		
F. Provide health care services aimed at preventing health problems related to Diagnostic Radiology.		
G. Provide patient-focused care in common conditions related to Internal Medicine, while working with health care professionals, including those from other disciplines like: Conditions mentioned in A.A		

D. General Skills

Practice-Based Learning and Improvement

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Perform practice-based improvement activities using a systematic methodology(audit, logbook)	-Case log -Observation and supervision -Written & oral communication	--Log book & portfolio -Procedure & case presentation
B. Appraises evidence from scientific studies(journal club)	- Case log - Observation and supervision - Written & oral communication - Journal clubs - Discussions in seminars and clinical rounds	--Log book & portfolio -Procedure & case presentation
C. Conduct epidemiological Studies and surveys.		
D. Perform data management including data entry and analysis.		
E. Facilitate learning of junior students and other health care professionals.	-Clinical rounds -Senior staff experience	

Interpersonal and Communication Skills

ILOs	Methods of teaching/ learning	Methods of Evaluation
F. Maintain therapeutic and ethically sound relationship with patients.	-Simulations -Clinical round -Seminars -Lectures -Case presentation -Hand on workshops	-Global rating -Procedure & case presentation -Log book & portfolio -Chick list
G. Elicit information using effective nonverbal, explanatory, questioning, and writing skills.		
H. Provide information using effective nonverbal, explanatory, questioning, and writing skills.		
I. Work effectively with others as a member of a health care team or other professional group.		
J. Present a case in <ul style="list-style-type: none"> • Common problems of Diagnostic Radiology. 		
K. Write a report <ul style="list-style-type: none"> • Patients' medical reports 	-Senior staff experience	
L. Council patients and families about <ul style="list-style-type: none"> • Conditions mentioned in A.A 	-Perform under supervision of senior staff	

Professionalism

ILOs	Methods of teaching/ learning	Methods of Evaluation
M. Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society	-Observation Senior staff experience -Case taking	-Objective structured clinical examination -Patient survey
N. Demonstrate a commitment to ethical principles including provision or withholding of clinical care, confidentiality of patient information, informed consent, business practices		- 360o global rating
O. Demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities		-Objective structured clinical examination -360o global rating

Systems-Based Practice

ILOs	Methods of teaching/ learning	Methods of Evaluation
P. Work effectively in relevant health care delivery settings and systems.	-Observation -Senior staff experience	-360o global rating
Q. Practice cost-effective health care and resource allocation that does not compromise quality of care.		-Check list evaluation of live or recorded performance
R. Assist patients in dealing with system complexities.		-360o global rating - Patient survey

**4. Course contents (topic s/modules/rotation
Course Matrix**

Time Schedule: First Part

Topic	Covered ILOs			
	Knowledge A	Intellectual B	Practical skills C	General Skills D
Basic principles of diagnostic imaging	A,B,D-H	A-D	A-I	A-R
Imaging features of cardiac emergencies	A,B,D-H	A-D	A-I	A-R
Imaging features of chest emergencies	A,B,D-H	A-D	A-I	A-R
Imaging features of musculoskeletal emergencies	A,B,D-H	A-D	A-I	A-R
Imaging features of urological emergencies	A-H,D-H	A-D	A-I	A-R
Imaging features of abdominal emergencies	A,BD-H	A-D	A-I	A-R
Imaging features of obstetric emergencies	A,B,D-H	A-D	A-I	A-R
Head and neck imaging	A,B,D-H	A-D	A-I	A-R
Indications and further lines of imaging assessment	A,B,D-H	A-D	A-I	A-R
Fast US	A,B,D-H	A-D	A-I	A-R
CT brain	A-H	A-D	A-I	A-R
CT chest				

5. Course methods of teaching/learning:

1. Didactic (lectures, seminars, tutorial)
2. Clinical rounds
3. Seminars Clinical rotations
4. Service teaching
5. Observation
6. Post graduate teaching
7. Hand on workshops
8. Perform under supervision of senior staff
9. Simulations
10. Case presentation
11. Observation and supervision
12. Written & oral communication

6. Course methods of teaching/learning: for students with poor achievements

1. Extra Didactic (lectures, seminars, tutorial) according to their needs
2. Extra training according to their needs

7. Course assessment methods:

i. Assessment tools:

Assessment tools:

1. Clinical examination
2. Written and oral examination
3. Check list
4. log book & portfolio
5. Procedure and case presentation
6. Objective structured clinical examination
7. Check list evaluation of live or recorded performance
8. Patient survey
9. 360o global rating

10. ii. Time schedule: At the end of the first part

iii. Marks: 150

8. List of references

Lectures notes

- Course notes
- Staff members print out of lectures and/or CD copies
- Book by Staff Members of the Department of Anesthesia and postoperative intensive care - Assiut University

ii. Essential books

- Davidson's Principles and Practice of Medicine - 20th Edition - 2016-07
- Hutchison's Clinical Methods; Robert Hutchison; Harry Rainy; 21st edition;2013

iii. Recommended books

- Harrison's Principles of Internal Medicine, 17th Edition by Anthony Fauci, Eugene Braunwald, Dennis Kasper, and Stephen Hauser (Hardcover - Mar 6 2008)

iv. Periodicals, Web sites, ... etc

- Internal medicine journal
- Annals of Internal medicine journal
- Journal of General Internal Medicine

v. others : None

9. Signatures

Course Coordinator:	Head of the Department:
Date:	Date:

Second Part

Course 5: Anesthesia and ICU, Cardio-pulmonary resuscitation (CPR) and Advanced Trauma Life Support (ATLS)

Name of department: Anesthesia and post operative intensive care

Faculty of medicine

Assiut University

2022-2023

1. Course data

- + **Course Title:** Anesthesia and ICU, Cardio-pulmonary resuscitation (CPR) and Advanced Trauma Life Support (ATLS)
- + **Course code:** EMM229E
- + **Speciality is** Emergency Medicine
- + **Number of hours: Number of credit points: 58, didactic 10 credit points (17.24%), practical 48 credit points (82.76%).**

- + **Department (s) delivering the course:** Department of Anesthesia and post operative intensive care
- + **Coordinator (s):**
Principle coordinator: Prof. Fatma Ahmed Abd El Aal
Assistant coordinator (s):
Dr. khaled Abdel-Baky Abdel-Rahman
- + **Date last reviewed:** September 2022
- + **General requirements (prerequisites) if any :**
None
- + **Requirements from the students to achieve course ILOs are clarified in the joining log book.**

- + **This course consists of 1 Unit**

2. Course aims

1. To teach and learn high level of clinical skills, in addition to update medical knowledge as well as clinical experience and competence in the area of Anesthesia, ICU, CPR and ATLS
2. Provide candidates with fundamental knowledge of dealing with patients during pre- intra- and post operative periods.
3. To provide knowledge about cardiopulmonary resuscitation during different circumstances especially in cancer patients.
4. Provide candidates with fundamental knowledge of intensive care medicine as regards; dealing with critically ill medical, post operative, and trauma.

3. Course intended learning outcomes (ILOs):

A- Knowledge and understanding

ILOs	Methods of teaching/ learning	Methods of Evaluation
<p><u>A. Describe the etiology, clinical picture, diagnosis and management of the following diseases and clinical conditions:</u></p> <ul style="list-style-type: none"> • Anesthesia for Healthy Patients • Airway management • Anaphylactic Reactions • Thermoregulation, and Perioperative Hypothermia • Physiologic response to trauma • Evaluation of the trauma Patient and Patient with Multiple Organ Dysfunction Syndrome • Monitoring and Transport of the Critically Ill Patient • Sedation muscle relaxants and Pain Management in the ICU • Hemodynamic Support of the Critically Ill Patient • DVT and GIT prophylaxis in ICU • Psychiatric problems in ICU • Shock • Respiratory failure • Disorders of Fluid Volume • Disorders of Water and sodium Balance • Disorders of Potassium Balance, Phosphorus, Magnesium and Calcium Balance • Acid-Base Homeostasis & Disorders • Cardiac problems in ICU 	<p>- Didactic; Lectures Clinical rounds Seminars Clinical rotations (service teaching)</p>	<p>--OSCE at the end of each year -log book & portfolio - One MCQ examination at the second year -Oral and written exam</p>
<p><u>B. Mention the principles of</u></p> <ul style="list-style-type: none"> • Preoperative Assessment and Management 		

<ul style="list-style-type: none"> • Patient positioning • Principles of Pharmacokinetics and Pharmacodynamics: • Pharmacology of Intravenous Anesthetics • Pharmacology of Opioid Analgesics • Total Intravenous Anesthesia • Cardiovascular Drugs • Pharmacology of Local Anesthetics • Anesthesia Drugs and Drug Delivery Systems • Mechanisms of General Anesthetic Action • Pharmacology of Inhalational Anesthetics and muscle relaxants • Anesthesia Delivery System • Preoperative Evaluation of the Anesthesia Patient • Monitoring the Anesthesia Patient • Hemodynamic Monitoring • Transesophageal Echocardiography • Monitoring Respiratory system • Neurologic Monitoring • Monitoring of Neuromuscular Blockade • Monitoring of Perioperative Electrolyte • Post-operative care • Recovery of the Healthy Patient • Postoperative Complications • Management of Acute Postoperative Pain • Mechanical ventilation • Nutrition and malnutrition in the critically ill patients • Principles of antibiotic use in ICU • Post operative care in non cardiac surgery 		
<p>C. State update and evidence based Knowledge of Conditions mentioned in A &B</p>		
<p>D. Memorize the facts and principles of the</p>		

relevant basic and clinically supportive sciences related to Anesthesia, ICU, CPR and ATLS.		
E. Mention the basic ethical and medicolegal principles that should be applied in practice and are relevant to Anesthesia, ICU, CPR and ATLS.		
F. Mention the basics and standards of quality assurance to ensure good clinical practice in the field of Anesthesia, ICU, CPR and ATLS.		
G. Mention the ethical and scientific principles of medical research methodology		
H. State the impact of common health problems in the field of Anesthesia, ICU, CPR and ATLS on the society and how good clinical practice improve these problems.		

B- Intellectual outcomes

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Correlates the facts of relevant basic and clinically supportive sciences with clinical reasoning, preparation and anesthetic management of common diseases related to Anesthesia, ICU, CPR and ATLS.	-Clinical rounds -Senior staff experience	-Procedure & case presentation -log book & portfolio
B. Demonstrate an investigatory and analytic thinking (problem solving) approaches to common clinical situations related to Anesthesia, ICU, CPR and ATLS.		
C. Design and /or present a case or review (through seminars/journal clubs.) in one or more of common clinical problems relevant to the field of Anesthesia, ICU, CPR and ATLS.		
D-Formulate management plans and alternative decisions in different situations in the field of Anesthesia, ICU, CPR and ATLS.		

C- Practical skills (Patient Care)

ILOs	Methods of teaching/ learning	Methods of Evaluation
<p>A. Obtain proper history and examine patients in caring and respectful behaviors.</p>	<p>-Didactic (lectures, seminars, tutorial) -Clinical rounds -Clinical rotations (service teaching)</p>	<p>-OSCE at the end of each year -log book & portfolio - One MCQ examination at the second half of the second year</p>
<p>B. Order the following non invasive and invasive diagnostic procedures</p> <p>- Routine preoperative investigations</p> <ul style="list-style-type: none"> • Complete blood picture. • Renal function test. • Liver function test • Random blood sugar • Coagulation profile • Electrocardiogram • Chest X-ray • CVP (order) • Arterial blood gases • Ventilator adjustment • Investigations appropriate to conditions mentioned above 	<p>-Clinical round with senior staff -Observation -Post graduate teaching -Hand on workshops</p>	<p>-Procedure presentation - Log book - Chick list</p>
<p>C. Interpret the following non invasive and invasive diagnostic procedures</p> <p>Routine preoperative investigations</p> <ul style="list-style-type: none"> • Complete blood picture. • Renal function test. • Liver function test • Random blood sugar • Coagulation profile • Electrocardiogram • Chest X-ray • Hemodynamic Monitoring 	<p>-Clinical round with senior staff -Observation - Post graduate teaching -Hand on workshops</p>	

<ul style="list-style-type: none"> • ABGs • Investigations appropriate to conditions mentioned above 		
<p>G. Perform the following non invasive and invasive diagnostic and therapeutic procedures</p> <ul style="list-style-type: none"> • General anesthesia • Local anesthetic techniques • Airway management • Arterial blood gases • Central venous catheter insertion • NIV & IPPV modes and settings • Chest care • Syringe pump adjustment 	<ul style="list-style-type: none"> -Clinical round with senior staff -Observation Post graduate teaching -Hand on workshops 	
<p>F. Carry out patient management plans for common conditions related to Anesthesia, ICU, CPR and ATLS.</p>	<ul style="list-style-type: none"> - Clinical round with senior staff - Perform under supervision of senior staff 	
<p>G. Use information technology to support patient care decisions and patient education in common clinical situations related to Anesthesia, ICU, CPR and ATLS.</p>		
<p>H. Provide health care services aimed at preventing health problems related to Anesthesia, ICU, CPR and ATLS.</p>		
<p>I. Provide patient-focused care in common conditions related to Anesthesia, ICU, CPR and ATLS, while working with health care professionals, including those from other disciplines like:</p> <ul style="list-style-type: none"> • Conditions mentioned in A.A 		
<p>J. Write competently all forms of patient charts and sheets including reports evaluating these charts and sheets.(Write a consultation note, Inform patients of a diagnosis and therapeutic plan, completing and maintaining medical records)</p>		

D- General Skills

Practice-Based Learning and Improvement

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Perform practice-based improvement activities using a systematic methodology (share in audit and risk management activities and use logbook).	-Case log -Observation and supervision -Written & oral communication	--Log book & portfolio -Procedure & case presentation
B. Appraises evidence from scientific studies (journal club)	- Case log - Observation and supervision - Written & oral communication - Journal clubs - Discussions in seminars and clinical rounds	--Log book & portfolio -Procedure & case presentation
C. Conduct epidemiological Studies and surveys.		
D. Perform data management including data entry and analysis using information technology to manage information, access on-line medical information; and support their own education.		
E. Facilitate learning of junior students and other health care professionals including their evaluation and assessment.	-Clinical rounds -Senior staff experience	

Interpersonal and Communication Skills

ILOs	Methods of teaching/ learning	Methods of Evaluation
F. Maintain therapeutic and ethically sound relationship with patients.	-Simulations -Clinical round -Seminars -Lectures -Case presentation -Hand on workshops	-Global rating -Procedure & case presentation -Log book & portfolio -Chick list
G. Elicit information using effective nonverbal, explanatory, questioning, and writing skills.		
H. Provide information using effective nonverbal, explanatory, questioning, and writing skills.		
I. Work effectively with others as a member of a health care team or other professional group.		
K .Write a report <ul style="list-style-type: none"> ● Patients' anesthetic sheet reports ● ABGs reports 	-Senior staff experience	
L. Council patients and families about <ul style="list-style-type: none"> ● Alternative of anesthetic procedures ● Post operative care of surgical patients 	-Perform under supervision of senior staff	

Professionalism

ILOs	Methods of teaching/ learning	Methods of Evaluation
M. Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society	-Observation Senior staff experience -Case taking	-Objective structured clinical examination -Patient survey
N. Demonstrate a commitment to ethical principles including provision or withholding of clinical care, confidentiality of patient information, informed consent, business practices		- 360o global rating
O. Demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities		-Objective structured clinical examination -360o global rating

Systems-Based Practice

ILOs	Methods of teaching/ learning	Methods of Evaluation
P. Work effectively in relevant health care delivery settings and systems including good administrative and time management.	-Observation -Senior staff experience	-360o global rating
Q. Practice cost-effective health care and resource allocation that does not compromise quality of care.		-Check list evaluation of live or recorded performance
R. Assist patients in dealing with system complexities.		-360o global rating - Patient survey

**Course contents (topic s/modules/rotation
Course Matrix**

Time Schedule: Second Part

Topic	Covered ILOs			
	Knowledge	Intellectual	Practical skills	General Skills
	A	B	C	D
<ul style="list-style-type: none"> • Anesthesia for Healthy Patients • Airway management • Anaphylactic Reactions • Thermoregulation, and Perioperative Hypothermia • Physiologic response to trauma • Evaluation of the trauma Patient and Patient with Multiple Organ Dysfunction Syndrome • Monitoring and Transport of the Critically Ill Patient • Sedation muscle relaxants and Pain Management in the ICU • Hemodynamic Support of the Critically Ill Patient • DVT and GIT prophylaxis in ICU • Psychiatric problems in ICU • Shock • Respiratory failure • Disorders of Fluid Volume • Disorders of Water and 	A,C-H	A-D	A-J	A-R

<p>sodium Balance</p> <ul style="list-style-type: none"> • Disorders of Potassium Balance, Phosphorus, Magnesium and Calcium Balance • Acid-Base Homeostasis & Disorders <p>Cardiac problems in ICU</p>				
<ul style="list-style-type: none"> • Preoperative Assessment and Management • Patient positioning • Principles of Pharmacokinetics and Pharmacodynamics: • Pharmacology of Intravenous Anesthetics • Pharmacology of Opioid Analgesics • Total Intravenous Anesthesia • Cardiovascular Drugs • Pharmacology of Local Anesthetics • Anesthesia Drugs and Drug Delivery Systems • Mechanisms of General Anesthetic Action • Pharmacology of Inhalational Anesthetics and muscle relaxants • Anesthesia Delivery System • Preoperative Evaluation of the Anesthesia Patient • Monitoring the Anesthesia Patient • Hemodynamic Monitoring 	<p>BS,C-H</p>	<p>A-D</p>	<p>A-J</p>	<p>A-R</p>

<ul style="list-style-type: none"> • Transesophageal Echocardiography • Monitoring Respiratory system • Neurologic Monitoring • Monitoring of Neuromuscular Blockade • Monitoring of Perioperative Electrolyte • Post-operative care • Recovery of the Healthy Patient • Postoperative Complications • Management of Acute Postoperative Pain • Mechanical ventilation • Nutrition and malnutrition in the critically ill patients • Principles of antibiotic use in ICU <p>Post operative care in non cardiac surgery</p>				
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5. Course methods of teaching/learning:

1. Didactic (lectures, seminars, tutorial)
2. Clinical rounds
3. Clinical rotations
4. Service teaching
5. Post graduate teaching
6. Hand on workshops
7. Perform under supervision of senior staff
8. Simulations
9. Senior staff experience
10. Case presentation

11. Case log
12. Outpatient
13. Inpatient
14. Direct observation
15. journal club,
16. Critically appraised topic
17. Educational prescription
18. Observation and supervision
19. Written & oral communications

6. Course methods of teaching/learning: for students with poor achievements

1. Extra Didactic (lectures, seminars, tutorial) according to their needs
2. Extra training according to their needs

7. Course assessment methods:

i. Assessment tools:

1. Oral examination
2. Clinical examination
3. Written examination
4. One MCQ examination
5. Objective structure clinical examination (OSCE)
6. Procedure & case Log b& Portfolios
7. Simulation
8. Record review (report)
9. Patient survey
10. 360o global rating
11. Check list evaluation of live or recorded performance

ii. Time schedule: At the end of the second part

iii. Marks: 500 mark

8. List of references

i. Lectures notes

- Course notes
- Staff members print out of lectures and/or CD copies

ii. Essential books

- Morgan G.E, Mikhail M and Murry M., (2008): Clinical anesthesiology, 5th edition, McGraw-Hill Companies, UK, and USA.
- Paul L Marino: The ICU Book (3rd Edition ,2007)

iii. Recommended book

- Miller R.D., Cucchiara RF et al, (2000): Anesthesia, 5th edition, vol(1).
- Mechanical Ventilation - MacIntyre N R Branson R D – 2008
- Frederic S. Bongard: Current Diagnosis & Treatment in critical care (3rd edition, 2008)

iv. Periodicals, Web sites, ... etc

➤ **Periodicals**

- American Journal of Respiratory & Critical Care Medicine
- Chest
- BMJ
- British journal of anesthesia
- Anesthesia and analgesia
- Anesthesiology
- Canadian journal of anesthesia

v. others : None

9. Signatures

Course Coordinator:	Head of the Department:
Date:	Date:

**Course 6: Internal medicine emergencies including
Toxicology, Cardiovascular, Pulmonary, Neuropsychiatric and
Pediatric emergencies**

Name of department: Anesthesia and post operative intensive care

Faculty of medicine

Assiut University

2022-2023

1. Course data

- + **Course Title:** Internal medicine emergencies including Toxicology, Cardiovascular, Pulmonary, Neuropsychiatric and Pediatric emergencies
- + **Course code:** EMM229F#
- + **Speciality is** Emergency Medicine
- + **Number of hours: Number of credit points:** 38, didactic 7 credit points (18.4%), practical 31 credit points (81.6%).

- + **Department (s) delivering the course:** Department of Anesthesia and post operative intensive care
- + **Coordinator (s):**
Principle coordinator: Prof. Fatma Ahmed Abd El Aal
Assistant coordinator (s):
Dr. khaled Abdel-Baky Abdel-Rahman
- + **Date last reviewed:** September 2022
- + **General requirements (prerequisites) if any :**
None
- + **Requirements from the students to achieve course ILOs are clarified in the joining log book.**

- + **This course consists of 1 Unit**

2. Course aims

1. To teach and learn high level of clinical skills, in addition to update medical knowledge as well as clinical experience and competence in the area of Internal medicine emergencies including Toxicology, Cardiovascular, Pulmonary, Neuropsychiatric and Pediatric emergencies.

A- Knowledge and understanding

ILOs	Methods of teaching/ learning	Methods of Evaluation
<p><u>A. Describe the etiology, clinical picture, diagnosis and management of the following diseases and clinical conditions:</u></p> <p><u>Hepatic and GIT emergencies</u> GIT bleeding Liver cell failure</p> <p><u>Hematological emergencies</u> Deep venous thrombosis</p> <p><u>Infectious emergencies</u> The febrile child in the ER</p> <p><u>Oncological emergencies</u></p> <p><u>Endocrinologic emergencies</u> Hypoglycemia Diabetic ketoacidosis and hyperglycemia Other endocrinologic emergencies</p> <p><u>Renal emergencies</u> Acute renal failure Urinary tract infections</p> <p><u>Toxicology</u> Carbon monoxide poisoning</p> <p><u>Cardiac emergencies</u> Infective endocarditis Dysrhythmias Acute coronary syndromes Congestive heart failure and acute pulmonary edema</p> <p><u>Chest emergencies</u> Pulmonary embolism Upper air way emergencies Lower air way emergencies</p>	<p>-Didactic (lectures, seminars, tutorial)</p> <p>- journal club,</p> <p>-Critically appraised topic, Educational prescription</p> <p>-Present a case (true or simulated) in a grand round</p>	<p>-Log book & Portfolio</p> <p>-Oral exam & Written exam</p>

<p>Bronchial asthma and obstructive airway disease Pediatric medical emergencies Pediatric surgical emergencies <u>Neuro-psychiatric emergencies</u> Meningitis and encephalitis Stroke and transient ischemic attack Epilepsy and status epilepticus <u>Psychiatric emergencies</u> <u>Pediatric emergencies</u></p>		
<p><u>B. Mention the principles of</u> Hepatic and GIT emergencies Hematological emergencies Infectious emergencies Oncological emergencies Endocrinologic emergencies Renal emergencies Toxicology Cardiac emergencies Chest emergencies Neuro-psychiatric emergencies Psychiatric emergencies Pediatric emergencies</p>		
<p>C. State update and evidence based Knowledge in medical emergencies</p>		
<p>D. Memorize the facts and principles of the relevant basic and clinically supportive sciences related to medical emergencies.</p>		
<p>E. Mention the basic ethical and medicolegal principles relevant that should be applied in practice and are to medical emergencies.</p>		
<p>F. Mention the basics and standards of quality assurance to ensure good clinical practice in the field of medical emergencies.</p>		
<p>G. Mention the ethical and scientific principles of medical research methodology</p>		
<p>H. State the impact of common health problems in the field of medical emergencies on the society and how good clinical practice improve these problems.</p>		

B- Intellectual outcomes

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Correlates the facts of relevant basic and clinically supportive sciences with clinical reasoning, diagnosis and management of common diseases related to medical emergencies.	-Clinical rounds -Senior staff experience	-Procedure & case presentation -log book & portfolio
B. Demonstrate an investigatory and analytic thinking (problem solving) approaches to common clinical situations related to medical emergencies.		
C. Design and /or present a case or review (through seminars/journal clubs.) in one or more of common clinical problems relevant to the field medical emergencies.		
D-Formulate management plans and alternative decisions in different situations in the field of medical emergencies.		

C- Practical skills (Patient Care)

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Obtain proper history and examine patients in caring and respectful behaviors.	-Didactic (lectures, seminars, tutorial) -Outpatient -Inpatient -Case presentation -Direct	- Log book - Objective structure clinical examination (OSCE) - One MCQ examination at the

	observation	second half of the second year
B. Order the non invasive and invasive diagnostic procedures related to conditions mentioned above.	-Clinical round with senior staff -Observation -Post graduate teaching -Hand on workshops	-Procedure presentation - Log book - Chick list
C. Interpret the non invasive and invasive diagnostic procedures related to conditions mentioned above.	-Clinical round with senior staff -Observation - Post graduate teaching -Hand on workshops	
D. Perform the non invasive and invasive diagnostic and therapeutic procedures related to conditions mentioned above	-Clinical round with senior staff -Observation Post graduate teaching -Hand on workshops	
E. Prescribe the non invasive and invasive therapeutic procedures related to conditions mentioned above	-Clinical round with senior staff -Perform under supervision of senior staff	- Procedure presentation - Log book - Chick list

F. Carry out patient management plans for common conditions related to medical emergencies.	- Clinical round with senior staff - Perform under supervision of senior staff	
G. Use information technology to support patient care decisions and patient education in common clinical situations related to medical emergencies.		
H. Provide health care services aimed at preventing health problems related medical emergencies.		
I. Provide patient-focused care in common conditions related to medical emergencies, while working with health care professionals, including those from other disciplines.		
J. Write competently all forms of patient charts and sheets including reports evaluating these charts and sheets.(Write a consultation note, Inform patients of a diagnosis and therapeutic plan, completing and maintaining medical records)		

D- General Skills

Practice-Based Learning and Improvement

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Perform practice-based improvement activities using a systematic methodology (share in audit and risk management activities and use logbook	-Case log -Observation and supervision -Written & oral communication	--Log book & portfolio
B. Appraises evidence from scientific studies	- Case log	--Log book

(journal club)	- Observation and supervision - Written & oral communication - Journal clubs - Discussions in seminars and clinical rounds	& portfolio
C. Conduct epidemiological Studies and surveys.		
D. Perform data management including data entry and analysis using information technology to manage information, access on-line medical information; and support their own education		
E. Facilitate learning of junior students and other health care professionals including their evaluation and assessment.	-Clinical rounds -Senior staff experience	

Interpersonal and Communication Skills

ILOs	Methods of teaching/ learning	Methods of Evaluation
F. Maintain therapeutic and ethically sound relationship with patients.	-Observation & supervision -Didactic	Simulation Record review (report)
G. Elicit information using effective nonverbal, explanatory, questioning, and writing skills.		
H. Provide information using effective nonverbal, explanatory, questioning, and writing skills.		
I. Work effectively with others as a member of a health care team or other professional group.		

J. Present a case in <ul style="list-style-type: none"> • Common problems of medical emergencies. 		
K. Write a report <ul style="list-style-type: none"> • Patients' medical reports • Death report 	-Senior staff experience	
L. Council patients and families about conditions mentioned above.	-Perform under supervision of senior staff	

Professionalism

ILOs	Methods of teaching/ learning	Methods of Evaluation
M. Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society	-Observation & supervision -Didactic	-Objective structured clinical examination -Patient survey
N. Demonstrate a commitment to ethical principles including provision or withholding of clinical care, confidentiality of patient information, informed consent, business practices		- 360o global rating
O. Demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities		-Objective structured clinical examination -360o global rating

Systems-Based Practice

ILOs	Methods of teaching/ learning	Methods of Evaluation
P. Work effectively in relevant health care delivery settings and systems including good administrative and time management.	-Observation -Senior staff experience	-360o global rating
Q. Practice cost-effective health care and resource allocation that does not compromise quality of care.		-Check list evaluation of live or recorded performance
R. Assist patients in dealing with system complexities.		-360o global rating - Patient survey

**Course contents (topic s/modules/rotation
Course Matrix**

Time Schedule: Second Part

Topic	Covered ILOs			
	Knowledge	Intellectual	Practical skills	General Skills
	A	B	C	D
<u>Hepatic and GIT emergencies</u> GIT bleeding Liver cell failure <u>Hematological emergencies</u> Deep venous thrombosis <u>Infectious emergencies</u> The febrile child in the ER <u>Oncological emergencies</u> <u>Endocrinologic emergencies</u> Hypoglycemia Diabetic ketoacidosis and hyperglycemia Other endocrinologic emergencies <u>Renal emergencies</u> Acute renal failure Urinary tract infections <u>Toxicology</u> Carbon monoxide poisoning <u>Cardiac emergencies</u> Infective endocarditis Dysrhythmias Acute coronary syndromes Congestive heart failure and acute pulmonary edema <u>Chest emergencies</u> Pulmonary embolism Upper air way emergencies Lower air way emergencies Bronchial asthma and obstructive airway disease Pediatric medical emergencies	A -H	A-D	A-J	A-R

Pediatric surgical emergencies <u>Neuro-psychiatric emergencies</u> Meningitis and encephalitis Stroke and transient ischemic attack Epilepsy and status epilepticus <u>Psychiatric emergencies</u> <u>Pediatric emergencies</u>				
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5. Course methods of teaching/learning:

1. Didactic (lectures, seminars, tutorial)
2. Clinical rounds
3. Clinical rotations
4. Service teaching
5. Post graduate teaching
6. Hand on workshops
7. Perform under supervision of senior staff
8. Simulations
9. Senior staff experience
10. Case presentation
11. Case log
12. Outpatient
13. Inpatient
14. Direct observation
15. journal club,
16. Critically appraised topic
17. Educational prescription
18. Observation and supervision
19. Written & oral communications

6. Course methods of teaching/learning: for students with poor achievements

1. Extra Didactic (lectures, seminars, tutorial) according to their needs
2. Extra training according to their needs

7. Course assessment methods:

i. Assessment tools:

1. Oral examination
2. Clinical examination
3. Written examination
4. One MCQ examination
5. Objective structure clinical examination (OSCE)
6. Procedure & case Log b& Portfolios
7. Simulation
8. Record review (report)
9. Patient survey
10. 360o global rating
11. Check list evaluation of live or recorded performance

ii. **Time schedule:** At the end of the second part

iii. **Marks:** 350 mark

8. List of references

i. Lectures notes

- Course notes
- Staff members print out of lectures and/or CD copies

ii. Essential books

- Morgan G.E, Mikhail M and Murry M., (2008): Clinical anesthesiology, 5th edition, McGraw-Hill Companies, UK, and USA.
- Paul L Marino: The ICU Book (3rd Edition ,2007)

iii. Recommended book

- Miller R.D., Cucchiara RF et al, (2000): Anesthesia, 5th edition, vol(1).
- Mechanical Ventilation - MacIntyre N R Branson R D – 2008

- Frederic S. Bongard: Current Diagnosis & Treatment in critical care (3rd edition, 2008)

iv. Periodicals, Web sites, ... etc

➤ **Periodicals**

- American Journal of Respiratory & Critical Care Medicine
- Chest
- BMJ
- British journal of anesthesia
- Anesthesia and analgesia
- Anesthesiology
- Canadian journal of anesthesia

V. others : None

9. Signatures

Course Coordinator:	Head of the Department:
Date:	Date:

Course 7 : Surgery emergencies including General surgery, Cardio-thoracic, Vascular, Burns, Orthopedic, Urology Ophthalmology, ENT, and Obstetrics & Gynecology emergencies

Name of department: Anesthesia and post operative intensive care

Faculty of medicine

Assiut University

2022-2023

1. Course data

- + **Course Title:** Surgery emergencies including General surgery, Cardio-thoracic, Vascular, Burns, Orthopedic, Urology Ophthalmology, ENT, and Obstetrics & Gynecology emergencies
- + **Course code:** EMM229G#
- + **Speciality is** Emergency Medicine
- + **Number of hours: Number of credit points: 38, didactic 7 credit points (18.4%), practical 31 credit points (81.6%).**

- + **Department (s) delivering the course:** Department of Anesthesia and post operative intensive care
- + **Coordinator (s):**
Principle coordinator: Prof. Fatma Ahmed Abd El Aal
Assistant coordinator (s):
Dr. khaled Abdel-Baky Abdel-Rahman
- + **Date last reviewed:** September 2017
- + **General requirements (prerequisites) if any :**
None
- + **Requirements from the students to achieve course ILOs are clarified in the joining log book.**

- + **This course consists of 1 Unit**

2. Course aims

2. To teach and learn high level of clinical skills, in addition to update medical knowledge as well as clinical experience and competence in the area of Surgery emergencies including General surgery, Cardio-thoracic, Vascular, Burns, Orthopedic, Urology Ophthalmology, ENT, and Obstetrics & Gynecology emergencies

A- Knowledge and understanding

ILOs	Methods of teaching/ learning	Methods of Evaluation
<p><u>A. Describe the etiology, clinical picture, diagnosis and management of the following diseases and clinical conditions:</u></p> <p><u>General Surgical emergencies</u> Soft tissue infections Emergency wound management Acute abdomen Abdominal injuries Vascular emergencies Acute limb ischemia and traumatic vascular injuries Aortic dissection and aneurysm</p> <p><u>Burn management</u></p> <p><u>Head injuries</u></p> <p><u>Cardiothoracic emergencies</u> Management of cardiothoracic surgical emergencies (cardiac tamponade, pneumo- and hemothorax, chest trauma and flail chest)</p> <p><u>Orthopedic emergencies</u> principles for management of fractures (ankle and foot fractures, long bone fractures, spine fractures and pelvic fractures) joint injuries pediatric trauma (epiphyseal plate injuries, birth fractures and child abuse) skeletal infections (osteomyelitis, acute septic arthritis, bursitis and tenosynovitis) open fractures</p>	<p>-Didactic (lectures, seminars, tutorial) - journal club, -Critically appraised topic, Educational prescription -Present a case (true or simulated) in a grand round</p>	<p>-Log book & Portfolio -Oral exam & Written exam</p>

<p>compartment syndrome nerve injuries crush injuries <u>Urological emergencies</u> Hematuria and acute retention of urine Testicular torsion and epididymitis emergency penile conditions <u>Gynecological emergencies</u> Emergency normal delivery Complications of normal vaginal delivery Abortions and vaginal bleeding Eclampsia and preeclampsia, HELLP syndrome Obstetrical hemorrhage, and Fetal distress Abdominal pain in gynecology Puerperal sepsis <u>ENT emergencies</u> Ear pain Epistaxis Sore throat Nasal and mandibular fractures Facial palsy <u>Eye emergencies</u> Red eye Sudden visual loss Eye trauma Painful eye</p>		
<p><u>B. Mention the principles of</u> General Surgical emergencies Burn management Head injuries Cardiothoracic emergencies Orthopedic emergencies Urological emergencies Gynecological emergencies ENT emergencies Eye emergencies</p>		
<p>C. State update and evidence based Knowledge in surgical emergencies.</p>		
<p>D. Memorize the facts and principles of the relevant basic and clinically supportive sciences related to surgical emergencies.</p>		
<p>E. Mention the basic ethical and medicolegal</p>		

principles relevant that should be applied in practice and are to surgical emergencies.		
F. Mention the basics and standards of quality assurance to ensure good clinical practice in the field of surgical emergencies..		
G. Mention the ethical and scientific principles of medical research methodology		
H. State the impact of common health problems in the field of medical emergencies on the society and how good clinical practice improve these problems.		

B- Intellectual outcomes

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Correlates the facts of relevant basic and clinically supportive sciences with clinical reasoning, diagnosis and management of common diseases related to surgical emergencies.	-Clinical rounds -Senior staff experience	-Procedure & case presentation -log book & portfolio
B. Demonstrate an investigatory and analytic thinking (problem solving) approaches to common clinical situations related to surgical emergencies.		
C. Design and /or present a case or review (through seminars/journal clubs.) in one or more of common clinical problems relevant to the field surgical emergencies.		
D-Formulate management plans and alternative decisions in different situations in the field of surgical emergencies.		

C- Practical skills (Patient Care)

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Obtain proper history and examine patients in caring and respectful behaviors.	<ul style="list-style-type: none"> -Didactic (lectures, seminars, tutorial) -Outpatient -Inpatient -Case presentation -Direct observation 	<ul style="list-style-type: none"> - Log book - Objective structure clinical examination (OSCE) - One MCQ examination at the second half of the second year
B. Order the non invasive and invasive diagnostic procedures related to conditions mentioned above.	<ul style="list-style-type: none"> -Clinical round with senior staff -Observation -Post graduate teaching -Hand on workshops 	<ul style="list-style-type: none"> -Procedure presentation - Log book - Chick list
C. Interpret the non invasive and invasive diagnostic procedures related to conditions mentioned above.	<ul style="list-style-type: none"> -Clinical round with senior staff -Observation - Post graduate teaching -Hand on workshops 	
D. Perform the non invasive and invasive diagnostic and therapeutic procedures related to conditions mentioned above	<ul style="list-style-type: none"> -Clinical round with senior staff -Observation Post graduate 	

	teaching -Hand on workshops	
E. Prescribe the non invasive and invasive therapeutic procedures related to conditions mentioned above	-Clinical round with senior staff -Perform under supervision of senior staff	- Procedure presentation - Log book - Chick list
F. Carry out patient management plans for common conditions related to surgical emergencies.	- Clinical round with senior staff - Perform under supervision of senior staff	
G. Use information technology to support patient care decisions and patient education in common clinical situations related to surgical emergencies.		
• Provide health care services aimed at preventing health problems related surgical emergencies.		
K. Provide patient-focused care in common conditions related to surgical emergencies, while working with health care professionals, including those from other disciplines.		
L. Write competently all forms of patient charts and sheets including reports evaluating these charts and sheets.(Write a consultation note, Inform patients of a diagnosis and therapeutic plan, completing and maintaining medical records)		

D- General Skills
Practice-Based Learning and Improvement

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Perform practice-based improvement activities using a systematic methodology (share in audit and risk management activities and use logbook	-Case log -Observation and supervision -Written & oral communication	--Log book & portfolio
B. Appraises evidence from scientific studies (journal club)	- Case log - Observation and supervision - Written & oral communication - Journal clubs - Discussions in seminars and clinical rounds	--Log book & portfolio
C. Conduct epidemiological Studies and surveys.		
D. Perform data management including data entry and analysis using information technology to manage information, access on-line medical information; and support their own education		
E. Facilitate learning of junior students and other health care professionals including their evaluation and assessment.	-Clinical rounds -Senior staff experience	

Interpersonal and Communication Skills

ILOs	Methods of teaching/ learning	Methods of Evaluation
F. Maintain therapeutic and ethically sound relationship with patients.	-Observation & supervision -Didactic	Simulation Record review (report)
G. Elicit information using effective nonverbal, explanatory, questioning, and writing skills.		
H. Provide information using effective nonverbal, explanatory, questioning, and writing skills.		
I. Work effectively with others as a member of a health care team or other professional group.		
J. Present a case in <ul style="list-style-type: none"> • Common problems of surgical emergencies. 		
K. Write a report <ul style="list-style-type: none"> • Patients' medical reports • Death report 	-Senior staff experience	
L. Counsel patients and families about conditions mentioned above.	-Perform under supervision of senior staff	

Professionalism

ILOs	Methods of teaching/ learning	Methods of Evaluation
M. Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society	-Observation & supervision -Didactic	-Objective structured clinical examination -Patient survey
N. Demonstrate a commitment to ethical principles including provision or withholding of clinical care, confidentiality of patient information, informed consent, business practices		- 360o global rating
O. Demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities		-Objective structured clinical examination -360o global rating

Systems-Based Practice

ILOs	Methods of teaching/ learning	Methods of Evaluation
P. Work effectively in relevant health care delivery settings and systems including good administrative and time management.	-Observation -Senior staff experience	-360o global rating
Q. Practice cost-effective health care and resource allocation that does not compromise quality of care.		-Check list evaluation of live or recorded performance
R. Assist patients in dealing with system complexities.		-360o global rating - Patient survey

**Course contents (topic s/modules/rotation
Course Matrix**

Time Schedule: Second Part

Topic	Covered ILOs			
	Knowledge	Intellectual	Practical skills	General Skills
	A	B	C	D
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<p>nerve injuries crush injuries <u>Urological emergencies</u> Hematuria and acute retention of urine Testicular torsion and epididymitis emergency penile conditions <u>Gynecological emergencies</u> Emergency normal delivery Complications of normal vaginal delivery Abortions and vaginal bleeding Eclampsia and preeclampsia, HELLP syndrome Obstetrical hemorrhage, and Fetal distress Abdominal pain in gynecology Puerperal sepsis <u>ENT emergencies</u> Ear pain Epistaxis Sore throat Nasal and mandibular fractures Facial palsy <u>Eye emergencies</u> Red eye Sudden visual loss Eye trauma Painful eye</p>				
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5. Course methods of teaching/learning:

1. Didactic (lectures, seminars, tutorial)
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3. Clinical rotations
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5. Post graduate teaching
6. Hand on workshops
7. Perform under supervision of senior staff
8. Simulations

9. Senior staff experience
10. Case presentation
11. Case log
12. Outpatient
13. Inpatient
14. Direct observation
15. journal club,
16. Critically appraised topic
17. Educational prescription
18. Observation and supervision
19. Written & oral communications

6. Course methods of teaching/learning: for students with poor achievements

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7. Course assessment methods:

i. Assessment tools:

1. Oral examination
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3. Written examination
4. One MCQ examination
5. Objective structure clinical examination (OSCE)
6. Procedure & case Log b& Portfolios
7. Simulation
8. Record review (report)
9. Patient survey
10. 360o global rating
11. Check list evaluation of live or recorded performance

ii. Time schedule: At the end of the second part

iii. Marks: 350 mark

8. List of references

i. Lectures notes

- Course notes
- Staff members print out of lectures and/or CD copies

ii. Essential books

- Morgan G.E, Mikhail M and Murry M., (2013): Clinical anesthesiology, 5th edition, McGraw-Hill Companies, UK, and USA.
- Paul L Marino: The ICU Book (3rd Edition ,2016)

iii. Recommended book

- Miller R.D., Cucchiara RF et al, (2000): Anesthesia, 5th edition, vol(1).
- Mechanical Ventilation - MacIntyre N R Branson R D – 2008
- Frederic S. Bongard: Current Diagnosis & Treatment in critical care (3rd edition, 2008)

iv. Periodicals, Web sites, ... etc

➤ **Periodicals**

- American Journal of Respiratory & Critical Care Medicine
- Chest
- BMJ
- British journal of anesthesia
- Anesthesia and analgesia
- Anesthesiology
- Canadian journal of anesthesia

V. others : None

9. Signatures

Course Coordinator:	Head of the Department:
Date:	Date:

ANNEX 2

Program Academic Reference Standards (ARS)

1- Graduate attributes for master degree in Emergency Medicine

The Graduate (after residence training and master degree years of study) must:

- 1-** Have the capability to be a scholar, understanding and applying basics, methods and tools of scientific research and clinical audit *in* Emergency Medicine.
- 2-** Appraise and utilise scientific knowledge to continuously update and improve clinical practice in related speciality.
- 3-** Acquire sufficient medical knowledge in the basic biomedical, clinical, behavioural and clinical sciences, medical ethics and medical jurisprudence and apply such knowledge in patient care in the field of Emergency Medicine.
- 4-** Provide patient care that is appropriate, effective and compassionate for dealing with common health problems and health promotion using evidence-based and updated information.
- 5-** Identify and share to solve health problems in his speciality.
- 6-** Acquire all competencies –including the use of recent technologies- that enable him to provide safe, scientific, and ethical and evidence based clinical care including update use of new technology in Emergency Medicine.
- 7-** Demonstrate interpersonal and communication skills that ensure effective information exchange with individual patients and their families and teamwork with other health professions, the scientific community and the public.

- 8-** Function as supervisor, and trainer in relation to colleagues, medical students and other health professions.
- 9-** Acquire decision making capabilities in different situations related to Emergency Medicine.
- 10-** Show responsiveness to the larger context of the health care system, including e.g. the organisation of health care, partnership with health care providers and managers, practice of cost-effective health care, health economics, and resource allocations.
- 11-** Be aware of public health and health policy issues and share in system-based improvement of health care.
- 12-** Show appropriate attitudes and professionalism.
- 13-** Demonstrate skills of lifelong learning and maintenance of competence and ability for continuous medical education and learning in subsequent stages in A Emergency Medicine.or one of its subspecialties.

2- Competency based Standards for clinical master degree graduates

2.1- Knowledge and understanding

By the end of the program, the graduate should demonstrate satisfactory knowledge and understanding of

2-1-A- Established basic, biomedical, clinical, epidemiological and behavioral sciences related conditions, problem and topics.

2-1-B- The relation between good clinical care of common health problems in the speciality and the welfare of society.

2-1-C- Up to date and recent developments in common problems related to Emergency Medicine.

2-1-D- Ethical and medicolegal principles relevant to practice in Emergency Medicine.

2-1-E -Quality assurance principles related to the good medical practice in Emergency Medicine.

2-1-F- Ethical and scientific basics of medical research.

2.2- Intellectual skills:

By the end of the program, the graduate should be able to demonstrate the following:

2-2-A- Correlation of different relevant sciences in the problem solving and management of common diseases of Emergency Medicine.

2-2-B- Problem solving skills based on data analysis and evaluation (even in the absence of some) for common clinical situations related to Emergency Medicine.

2.2- C- Demonstrating systematic approach in studying clinical problems relevant to Emergency Medicine.

2-2-D- Making alternative decisions in different situations in Emergency Medicine..

2.3- Clinical skills

By the end of the program, the graduate should be able to

2-3-A - Provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health.

2-3-B- Demonstrate patient care skills relevant to Anesthesia and post operative intensive care for patients with common diseases and problems.

2-3-C- Write and evaluate reports for situations related to the field of Emergency Medicine.

2.4- General skills

By the end of the program, the graduate should be able to

+ Competency-based outcomes for Practice-based Learning and Improvement

2-4-A- Demonstrate practice-based learning and improvement skills that involves investigation and evaluation of their own patient care, appraisal and assimilation of scientific evidence,, improvements in patient care and risk management.

2-4-B- Use all information sources and technology to improve his practice.

2-4-C- Demonstrate skills of teaching and evaluating others.

+ Competency-based objectives for Interpersonal and Communication Skills

2-4-D- Demonstrate interpersonal and communication skills that result in effective information exchange and teaming with patients, their families, and other health professionals.

+ Competency-based objectives for Professionalism

2-4-E- Demonstrate professionalism behaviors, as manifested through a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population.

+ Competency-based objectives for Systems-based Practice

2-4-F- Demonstrate an awareness of and responsiveness to the larger context and system of health care and the ability to effectively use system resources to provide care that is of optimal value.

2-4-g- Demonstrate skills of effective time management.

2-4-H- Demonstrate skills of self and continuous learning.

Annex 3, Methods of teaching/learning

Annex 3, Methods of teaching/learning

	Patient care	Medical knowledge	Practice-based learning/Improvement	Interpersonal and communication skills	Professionalism	Systems-based practice
Didactic (lectures, seminars, tutorial)	X	X		X	X	X
journal club,	X	X	X			
Educational prescription	X	X	X	X	X	X
Present a case (true or simulated) in a grand round	X	X	X	X	X	
Observation and supervision	X		X	X	X	X
conferences		X	X	X		X
Written assignments	X	X	X	X	X	X
Oral assignments	X	X	X	X	X	X

Teaching methods for knowledge

- ❖ Didactic (lectures, seminars, tutorial)
- ❖ journal club
- ❖ Critically appraised topic
- ❖ Educational prescription (a structured technique for following up on clinical questions that arise during rounds and other venues).
- ❖ Present a case (true or simulated) in a grand round
- ❖ Others

Teaching methods for patient care

- ❖ Observation and supervision /Completed tasks procedure/case logs
- ❖ On-the-job” training without structured teaching is not sufficient for this skill (checklists).
- ❖ Simulation is increasingly used as an effective method for skill/ teamwork training.

Teaching methods for other skills

- ❖ Written communication (e.g., orders, progress note, transfer note, discharge summary, operative reports, and diagnostic reports).
- ❖ Oral communication (e.g., presentations, transfer of care, interactions with patients, families, colleagues, members of the health care team) and/or non verbal skills (e.g., listening, team skills)

- ❖ Professionalism, including medical ethics, may be included as a theme throughout the program curriculum that includes both didactic and experiential components (e.g., may be integrated into already existing small group discussions of vignettes or case studies and role plays, computer-based modules) and may be modeled by the faculty in clinical practice and discussed with the resident as issues arise during their clinical practice.

Annex 4, Assessment methods

Annex 4, ILOs evaluation methods for Master Degree students.

Method	Practical skills	K	Intellectual	General skills			
	Patient care	K	I	Practice-based learning/ Improvement	Interpersonal and communication skills	Professionalism	Systems-based practice
Record review	X	X	X		X	X	X
Checklist	X				X		
Global rating	X	X	X	X	X	X	X
Simulations	X	X	X	X	X	X	
Portfolios	X	X	X	X	X		
Standardized oral examination	X	X	X	X	X		X
Written examination	X	X	X	X			X
Procedure/ case log	X	X					
OSCE	X	X	X	X	X	X	X

Annex 4, Glossary of Master Degree doctors assessment methods

- ❖ Record Review – Abstraction of information from patient records, such as medications or tests ordered and comparison of findings against accepted patient care standards.
- ❖ Chart Stimulated Recall – Uses the MSc doctor’s patient records in an oral examination to assess clinical decision-making.
- ❖ Mini clinical evaluation: Evaluation of Live/Recorded Performance (single event) – A single resident interaction with a patient is evaluated using a checklist. The encounter may be videotaped for later evaluation.
- ❖ Standardized Patients (SP) – Simulated patients are trained to respond in a manner similar to real patients. The standardized patient can be trained to rate MSc doctor’s performance on checklists and provide feedback for history taking, physical examination, and communication skills. Physicians may also rate the MSc doctor’s performance.
- ❖ Objective Structured Clinical Examination (OSCE) – A series of stations with standardized tasks for the MSc doctors to perform. Standardized patients and other assessment methods often are combined in an OSCE. An observer or the standardized patient may evaluate the MSc doctors.

- ❖ Procedure or Case Logs – MSc doctors prepare summaries of clinical experiences including clinical data. Logs are useful to document educational experiences and deficiencies.
- ❖ PSQs – Patients fill out Patient Survey questionnaires (PSQs) evaluating the quality of care provided by a MSc doctors.
- ❖ Case /problems – assess use of knowledge in diagnosing or treating patients or evaluate procedural skills.
- ❖ Models: are simulations using mannequins or various anatomic structures to assess procedural skills and interpret clinical findings. Both are useful to assess practice performance and provide constructive feedback.
- ❖ 360 Global Rating Evaluations – MSc doctors, faculty, nurses, clerks, and other clinical staff evaluate MSc doctors from different perspectives using similar rating forms.
- ❖ Portfolios – A portfolio is a set of project reports that are prepared by the MSc doctors to document projects completed during the MSc study years. For each type of project standards of performance are set. Example projects are summarizing the research literature for selecting a treatment option, implementing a quality improvement program, revising a medical student clerkship elective, and creating a computer program to track patient care and outcomes.
- ❖ Examination MCQ – A standardized examination using multiple-choice questions (MCQ). The in-training examination and written board examinations are examples.
- ❖ Examination Oral – Uses structured realistic cases and patient case protocols in an oral examination to assess clinical decision-making.

- ❖ Procedure or Case Logs – MSc doctors prepare summaries of clinical experiences including clinical data. Logs are useful to document educational experiences and deficiencies.
- ❖ PSQs – Patients fill out Patient Survey questionnaires (PSQs) evaluating the quality of care provided by MSc doctors.

Annex 5, Program evaluation tools

By whom	Method	sample
Quality Assurance Unit	Reports Field visits	#
External Evaluator (s):According to department council External Examiner (s): According to department council	Reports Field visits	#
Stakeholders	Reports Field visits questionnaires	#
Senior students	Questionnaires	#
Alumni	Questionnaires	#

Annex 6, Program Correlations:

مصنوفة توافق المعايير القومية القياسية العامة لبرامج الماجستير مع المعايير
الأكاديمية المعتمدة من كلية الطب □ جامعة أسيوط لدرجة الماجستير في طب
الطوارئ

I- General Academic Reference Standards (GARS) versus Program ARS

1- Graduate attributes

Faculty ARS	NAQAAE General ARS for Postgraduate Programs
1- Have the capability to be a scholar, understanding and applying basics, methods and tools of scientific research and clinical audit in Emergency Medicine.	1- إجادة تطبيق أساسيات و منهجيات البحث العلمي واستخدام أدواته المختلفة
2- Appraise and utilise scientific knowledge to continuously update and improve clinical practice in Emergency Medicine	2- تطبيق المنهج التحليلي واستخدامه في مجال التخصص
3- Acquire sufficient medical knowledge in the basic biomedical, clinical, behavioural and clinical sciences, medical ethics and medical jurisprudence and apply such knowledge in patient care in Emergency Medicine	3- تطبيق المعارف المتخصصة ودمجها مع المعارف ذات العلاقة في ممارسته المهنية
4- Provide patient care that is appropriate, effective and compassionate for dealing with common health problems and health promotion using evidence-based and update information.	4- إظهار وعيا بالمشاكل الجارية و الرؤى الحديثة في مجال التخصص
5- Identify and share to solve health problems in Emergency Medicine	5- تحديد المشكلات المهنية وإيجاد حلول لها
6- Acquire all competencies that enable him to provide safe, scientific, ethical and evidence based clinical care including update use of new technology Emergency Medicine	6- إتقان نطاق مناسب من المهارات المهنية المتخصصة، واستخدام الوسائل التكنولوجية المناسبة بما يخدم ممارسته المهنية

<p>7- Demonstrate interpersonal and communication skills that ensure effective information exchange with individual patients and their families and teamwork with other health professions, the scientific community and the public.</p> <p>8- Function as supervisor, and trainer in relation to colleagues, medical students and other health professions.</p>	<p>7-التواصل بفاعلية و القدرة على قيادة فرق العمل</p>
<p>9- Acquire decision making capabilities in different situations related to Emergency Medicine</p>	<p>8-اتخاذ القرار في سياقات مهنية مختلفة</p>
<p>10- Show responsiveness to the larger context of the health care system, including e.g. the organisation of health care, partnership with health care providers and managers, practice of cost-effective health care, health economics, and resource allocations.</p>	<p>9- توظيف الموارد المتاحة بما يحقق أعلى استفادة و الحفاظ عليها</p>
<p>11- Be aware of public health and health policy issues and share in system-based improvement of health care.</p>	<p>10-إظهار الوعي بدوره في تنمية المجتمع و الحفاظ على البيئة في ضوء المتغيرات العالمية و الإقليمية</p>
<p>12- Show appropriate attitudes and professionalism.</p>	<p>11-التصرف بما يعكس الالتزام بالنزاهة و المصداقية و الالتزام بقواعد المهنة</p>
<p>13- Demonstrate skills of lifelong learning and maintenance of competence and ability for continuous medical education and learning in subsequent stages in Emergency Medicine or one of its subspecialties.</p>	<p>12-تنمية ذاته أكاديميا و مهنيا و قادرا علي التعلم المستمر</p>

2. Academic standard

Faculty ARS	NAQAAE General ARS for Postgraduate Programs
2.1.A -Established basic, biomedical, clinical, epidemiological and behavioral sciences related conditions, problems and topics.	1-2-أ-النظريات و الأساسيات المتعلقة بمجال التعلم وكذا في المجالات ذات العلاقة.
2.1.B- The relation between good clinical care of common health problems in Emergency Medicine and the welfare of society.	1-2-ب-التأثير المتبادل بين الممارسة المهنية وانعكاسها علي البيئة.
2.1. C- Up to date and recent developments in common problems related to Emergency Medicine..	1-2-ج-التطورات العلمية في مجال التخصص.
2.1. D- Ethical and medicolegal principles relevant to practice in the Emergency Medicine.	1-2-د-المبادئ الأخلاقية و القانونية للممارسة المهنية في مجال التخصص.
2.1. E-Quality assurance principles related to the good medical practice in Emergency Medicine.	1-2-هـ- مبادئ و أساسيات الجودة في الممارسة المهنية في مجال التخصص
2.1. F- Ethical and scientific basics of medical research.	1-2-و- أساسيات وأخلاقيات البحث العلمي

<p>2.2. A-Correlation of different relevant sciences in the problem solving and management of common diseases of Emergency Medicine.</p> <p>2.2. B- Problem solving skills based on data analysis and evaluation (even in the absence of some) for common clinical situations related to Emergency Medicine.</p>	<p>2-2-أ- تحليل و تقييم المعلومات في مجال التخصص والقياس عليها لحل المشاكل</p>
<p>2.2. B- Problem solving skills based on data analysis and evaluation (even in the absence of some) for common clinical situations related to Emergency Medicine.</p>	<p>2-2-ب- حل المشاكل المتخصصة مع عدم توافر بعض المعطيات</p>
<p>2.2. A-Correlation of different relevant sciences in the problem solving and management of common diseases of Emergency Medicine.</p>	<p>2-2-ج- الربط بين المعارف المختلفة لحل المشاكل المهنية</p>
<p>2.2. C- Demonstrating systematic approach in studying clinical problems relevant to Emergency Medicine.</p>	<p>2-2-د- إجراء دراسة بحثية أو كتابة دراسة علمية منهجية حول مشكلة بحثية</p>
<p>2.4.A-Demonstrate practice-based learning and Improvement skills that involves investigation and evaluation of their own patient care, appraisal and assimilation of scientific evidence, improvements in patient care and risk management</p>	<p>2-2-هـ- تقييم المخاطر في الممارسات المهنية في مجال التخصص</p>
<p>2.4.A-Demonstrate practice-based learning and Improvement skills that involves investigation and evaluation of their own patient care, appraisal and assimilation of scientific evidence,</p>	<p>2-2-و- التخطيط لتطوير الأداء في مجال التخصص</p>

improvements in patient care and risk management	
2.2.D- Making alternative decisions in different situations in the field of Emergency Medicine.	2-2-ز- اتخاذ القرارات المهنية في سياقات مهنية متنوعة
2.3.A- provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health. 2.3.B- Demonstrate patient care skills relevant to Emergency Medicine for patients with common diseases and problems.	2-3-2-أ- إتقان المهارات المهنية الأساسية و الحديثة في مجال التخصص
2.3.C- Write and evaluate reports for Situation related to Emergency Medicine.	2-3-2-ب- كتابة و تقييم التقارير المهنية
2.3.A- provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health. 2.3.B- Demonstrate patient care skills relevant to that speciality for patients with common diseases and problems.	2-3-2-ج- تقييم الطرق و الأدوات القائمة في مجال التخصص
2.4.D- Demonstrate interpersonal and communication skills that result in effective information exchange and teaming with patients, their families, and other health professionals.	2-4-2-أ- التواصل الفعال بأنواعه المختلفة
2.4.A- Demonstrate practice-based learning and improvement skills investigation that involves and evaluation of their own patient care, appraisal and	2-4-2-ب- استخدام تكنولوجيا المعلومات بما يخدم الممارسة المهنية

<p>assimilation of scientific evidence, improvements in patient care and risk management</p> <p>2.4.B- Use all information sources and technology to improve his practice.</p>	
<p>2.4.A-Demonstrate practice-based learning and improvement skills that involves investigation and evaluation of their own patient care, appraisal and assimilation of scientific evidence, improvements in patient care and risk management</p> <p>2.4.B- Use all information sources and technology to improve his practice.</p> <p>2.4.E-Demonstrate professionalism behavior, as manifested through a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population.</p>	<p>2-4-ج- التقييم الذاتي وتحديد احتياجاته التعليمية الشخصية</p>
<p>2.4.A-Demonstrate practice-based learning and improvement skills that involves investigation and evaluation of their own patient care, appraisal and assimilation of scientific evidence, , improvements in patient care and risk management.</p>	<p>2-4-د- استخدام المصادر المختلفة للحصول على المعلومات و المعارف</p>
<p>2.4. C- Demonstrate skills of teaching and evaluating others.</p>	<p>2-4-هـ- وضع قواعد ومؤشرات تقييم أداء الآخرين</p>

<p>2.4. F- Demonstrate an awareness of and responsiveness to the larger context and system of health care and the ability to effectively use system resources to provide care that is of optimal value.</p>	<p>2-4-2-و- العمل في فريق ، وقيادة فرق في سياقات مهنية مختلفة</p>
<p>2.4.G- Demonstrate skills of effective time management.</p>	<p>2-4-2-ز- إدارة الوقت بكفاءة</p>
<p>2.4.H- Demonstrate skills of self and continuous learning.</p>	<p>2-4-2-ح- التعلم الذاتي و المستمر</p>

**Comparison between ARS and ILOS for master degree
in Emergency Medicine**

(ARS)	(ILOS)
<p><u>2-1- Knowledge and understanding</u></p> <p>2-1-A- Established basic, biomedical, clinical, epidemiological and behavioral sciences related conditions, problem and topics.</p>	<p><u>2-1- Knowledge and understanding</u></p> <p>2-1-A- Explain the essential facts and principles of relevant basic sciences including, pathology, pharmacology, physiology, anatomy and forensic medicine and microbiology related to Emergency Medicine.</p> <p>2-1-B- Mention <u>essential facts</u> of clinically supportive sciences including Basics of clinical pathology and diagnostic radiology related to Emergency Medicine.</p> <p>2-1-C- Demonstrate sufficient knowledge of etiology, clinical picture, diagnosis, prevention and treatment of the common diseases and situations related to Emergency Medicine.</p>
<p>2-1-B The relation between good clinical care of common health problem in the sepciality and the welfare of society.</p>	<p>2-1-H- State the impact of common health problems in the field of Emergency Medicine on the society and how good clinical practice improve these problems.</p>
<p>2-1-C- Up to date and recent developments in common problems related to the field of speciality.</p>	<p>2-1-C- Demonstrate sufficient knowledge of etiology, clinical picture, diagnosis, prevention and treatment of the common diseases and situations related to Emergency Medicine.</p> <p>2-1-D- Give the recent and update developments in the pathogenesis, diagnosis, prevention and treatment of common diseases related to Emergency Medicine.</p>
<p>2-1-D- Ethical and medicolegal Principles relevant to practice in the speciality field</p>	<p>2-1-E- Mention the basic ethical and medicolegal principles that should be applied in practice and are relevant to the field of Emergency Medicine.</p>

2-1-E- Quality assurance principles related to the good medical practice in the speciality field.	2-1-F- Mention the basics and standards of quality assurance to ensure good clinical practice in the field of Emergency Medicine.
2-1-F- Ethical and scientific basics of medical research.	2-1-G- Mention the ethical and scientific principles of medical research methodology.
<u>2-2- Intellectual skills:</u> 2-2-A- Correlation of different relevant sciences in the problem solving and management of common diseases of the speciality.	<u>2-2- Intellectual skills:</u> 2-2-A- Correlate the facts of relevant basic and clinically supportive sciences with clinical reasoning, diagnosis and management of common diseases of the Emergency Medicine.
2-2-B- Problem solving skills based on data analysis and evaluation (even in the absence of some) for common clinical situations related to speciality	2-2-B- Demonstrate an investigatory and analytic thinking approach (problem solving) to common clinical situations related v
2-2-C- Demonstrating systematic approach in studding clinical problems relevant to the speciality field.	2-2-C- Design and /or present a case or review (through seminars/journal clubs.) in one or more of common clinical problems relevant to the Emergency Medicine field.
2-2-D Making alternative decisions in different situations in the field of the speciality.	2-2-D- Formulate management plans and alternative decisions in different situations in the field of the Emergency Medicine.

<p>continuous</p> <p>(ARS)</p>	<p>continuous</p> <p>(ILOs)</p>
<p><u>2-3- Clinical skills:</u></p> <p>2-3-A- Provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health.</p> <p>2-3-B- Demonstrate patient care skills relevant to that speciality for patients with common diseases and problems.</p>	<p><u>2/3/1/Practical skills (Patient Care :)</u></p> <p>2-3-1-A- Obtain proper history and examine patients in caring and respectful behaviors.</p> <p>2-3-1-B- Make informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, up-to-date scientific evidence, and clinical judgment for common conditions related to Emergency Medicine.</p> <p>2-3-1-C- Carry out patient management plans for common conditions related to Emergency Medicine.</p> <p>2-3-1-D- Use information technology to support patient care decisions and patient education in common clinical situations related to Emergency Medicine.</p> <p>2-3-1-E- Perform competently non invasive and invasive procedures considered essential for the Emergency Medicine.</p> <p>2-3-1-F- Provide health care services aimed at preventing health problems related to Emergency Medicine.</p> <p>2-3-1-G- Provide patient-focused care in common conditions related to Emergency Medicine. , while working with health care professionals, including those from other disciplines.</p>
<p>2-3-C- Write and evaluate reports for situations related to the field of speciality.</p>	<p>-3-1-H Write competently all forms of patient charts and sheets including reports evaluating these charts and sheets. (Write a consultation note, Inform patients of a diagnosis and therapeutic plan, completing and maintaining medical records).</p>

<p><u>2-4- General skills</u></p> <p>2-4-A- Demonstrate practice-based learning and improvement skills that involves investigation and evaluation of their own patient care, appraisal and assimilation of scientific evidence, improvements in patient care and risk management</p>	<p><u>2/3/2 General skills</u></p> <p>2-3-2-A- Perform practice-based improvement activities using a systematic methodology (share in audits and risk management activities and use logbooks).</p> <p>2-3-2-B- Appraises evidence from scientific studies.</p> <p>2-3-2-C- Conduct epidemiological studies and surveys.</p>
<p>2-4-B- Use all information sources and technology to improve his practice.</p>	<p>2-3-2-C- Conduct epidemiological studies and surveys.</p> <p>2-3-2-D. Perform data management including data entry and analysis and using information technology to manage information, access on-line medical information; and support their own education.</p>
<p>2-4-C- Demonstrate skills of teaching and evaluating others.</p>	<p>2-3-2-E- Facilitate learning of students other health care professionals including their evaluation and assessment.</p>
<p>2-4-D- Demonstrate interpersonal and communication skills that result in effective information exchange and teaming with patients, their families, and other health professionals.</p>	<p>2-3-2-F- Maintain therapeutic and ethically sound relationship with patients.</p> <p>2-3-2-G- Elicit information using effective nonverbal, explanatory, questioning, and writing skills.</p> <p>2-3-2-H- Provide information using effective nonverbal, explanatory, questioning, and writing skills.</p> <p>2-3-2-I- Work effectively with others as a member of a health care team or other professional group.</p>
<p>2-4-E- Demonstrate professionalism behaviors, as manifested through a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient</p>	<p>2-3-2-J- Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society.</p> <p>2-3-2-K- Demonstrate a commitment to ethical principles including provision or withholding of clinical care, confidentiality</p>

<p>population.</p>	<p>of patient information, informed consent, business practices.</p> <p>2-3-2-L-Demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities.</p>
<p>2-4-F- Demonstrate an awareness of and responsiveness to the larger context and system of health care and the ability to effectively use system resources to provide care that is of optimal value.</p>	<p>2-3-2-M-Work effectively in relevant health care delivery settings and systems including good administrative and time management</p> <p>2-3-2-N- Practice cost-effective health care and resource allocation that does not compromise quality of care.</p> <p>2-3-2-O- Assist patients in dealing with system complexities.</p>
<p>2-4-G- Demonstrate skills of effective time management</p>	<p>2-3-2-M-Work effectively in relevant health care delivery settings and systems including good administrative and time management</p>
<p>2-4-H- Demonstrate skills of self and continuous learning.</p>	<p>2-3-2-A- Perform practice-based improvement activities using a systematic methodology (share in audits and risk management activities and use logbooks).</p>

III-Program matrix Knowledge and Understanding

Course	Program covered ILOs							
	2/1/A	2/1/B	2/1/C	2/1/D	2/1/E	2/1/F	2/1/G	2/1/H
Course 1 Applied anatomy and Pathology	✓							
Course 2 Applied physiology, forensic medicine and toxicology	✓							
Course 3 Pharmacology and Microbiology	✓							
Course 4 Clinical pathology and Diagnostic radiology	✓	✓	✓	✓	✓	✓	✓	✓
Course 5 Emergency Medicine (1)	✓	✓	✓	✓	✓	✓	✓	✓
Course 6 Emergency Medicine (2)	✓	✓	✓	✓	✓	✓	✓	✓
Course 7 Emergency Medicine (3)	✓	✓	✓	✓	✓	✓	✓	✓

Intellectual

Course	Program covered ILOs			
	2/2/A	2/2/B	2/2/C	2/2/D
Course 1 Applied anatomy and Pathology	✓	✓		
Course 2 Applied physiology, forensic medicine and toxicology	✓	✓		
Course 3 Pharmacology and Microbiology	✓	✓		
Course 4 Clinical pathology and Diagnostic radiology	✓	✓	✓	✓
Course 5 Emergency Medicine (1)	✓	✓	✓	✓
Course 6 Emergency Medicine (2)	✓	✓	✓	✓
Course 7 Emergency Medicine (3)	✓	✓	✓	✓

Practical Skills (Patient Care)

Course	Program covered ILOs							
	2/3/1/A	2/3/1/B	2/3/1/C	2/3/1/D	2/3/1/E	2/3/1/F	2/3/1/G	2/3/1/H
Course 1 Applied anatomy and Pathology								
Course 2 Applied physiology, forensic medicine and toxicology								
Course 3 Pharmacology and Microbiology								
Course 4 Clinical pathology and Diagnostic radiology	✓	✓	✓	✓	✓	✓	✓	
Course 5 Emergency Medicine (1)	✓	✓	✓	✓	✓	✓	✓	✓
Course 6 Emergency Medicine (2)	✓	✓	✓	✓	✓	✓	✓	✓
Course 7 Emergency Medicine (3)	✓	✓	✓	✓	✓	✓	✓	✓

General Skills

Course	Program covered ILOs							
	2/3/2/A	2/3/2/B	2/3/2/C	2/3/2/D	2/3/2/E	2/3/2/F	2/3/2/G	2/3/2/H
Course 1 Applied anatomy and Pathology				✓				✓
Course 2 Applied physiology, forensic medicine and toxicology				✓				✓
Course 3 Pharmacology and Microbiology				✓				✓
Course 4 Clinical pathology and Diagnostic radiology	✓	✓	✓	✓	✓	✓	✓	✓
Course 5 Emergency Medicine (1)	✓	✓	✓	✓	✓	✓	✓	✓
Course 6 Emergency Medicine (2)	✓	✓	✓	✓	✓	✓	✓	✓
Course 7 Emergency Medicine (3)	✓	✓	✓	✓	✓	✓	✓	✓

General Skills

Course	Program covered ILOs						
	2/3/2/I	2/3/2/J	2/3/2/K	2/3/2/L	2/3/2/M	2/3/2/N	2/3/2/O
Course 1 Applied anatomy and Pathology			✓		✓		
Course 2 Applied physiology, forensic medicine and toxicology			✓		✓		
Course 3 Pharmacology and Microbiology			✓		✓		
Course 4 Clinical pathology and Diagnostic radiology	✓	✓	✓	✓	✓	✓	✓
Course 5 Emergency Medicine (1)	✓	✓	✓	✓	✓	✓	✓
Course 6 Emergency Medicine (2)	✓	✓	✓	✓	✓	✓	✓
Course 7 Emergency Medicine (3)	✓	✓	✓	✓	✓	✓	✓

Annex 7,
Additional information:

Department information

- Post operative ICU 8 beds
- General ICU 10 beds
- Trauma ICU 15 beds
- Pediatric ICU 5 beds
- Obstetric ICU 8 beds
- 10 operative rooms

Staff members:

Head of the Department: Prof.Hany Ahmed Lbrahim El-Moraba

Staff members:





- 1- Prof. Abdel-Hamid Hassan El-Baz
- 2- Prof. Mahmoud Abdel-Aziz Aly Khalifa
- 3- Prof. Safia Abdel-Hamid Moustafa
- 4- Prof.Mohammed Abdel- Moneim Bakr
- 5- Prof.Samira Mohammed Ahmed Omar
- 6- Prof.Ahmed Mohammed Ahmed Mohareb
- 7- Prof.Golnar Mohammed Fathy
- 8- Prof.Mohammed Gomaa Almaz
- 9- Prof.Laila Hassan Mohammed
- 10- Prof.Hassan Lbrahim Mohammed Kotb
- 11- Prof.Kilani Ali Abdel- Salam
- 12- Prof.Mohammed Reda Abd- Elaziz Morsi
- 13- Prof.Fatma Gadel-Rab El- sayed Askar
- 14- Prof.Nawal Abdel-Aziz Gadel-Rab
- 15- Prof.Kawser Hefney Mohammed
- 16- Prof.Sanaa Abd-allah Aly El-Kady
- 17- Prof. Hamdy Abbas Yousef
- 18- Prof. Mohammed Mohammed Abdel- Latif
- 19- Prof. Esam Sharkawy Abd-Allah
- 20- Prof. Zain El-Abdin Zareh Hassan
- 21- Prof. Esam Sharkawy Abd-Allah
- 22- Assist. Prof Fatma Ahmed Abdel-Al
- 23- Assist. Prof.Nagwa Mostafa Ibrahim
- 24- Assist. Prof Sherif Sayed Abdel-Rihim
- 25- Dr.Allaa Ahmed Ateya
- 26- Dr.Ayman Ahmed Mamdooh
- 27- Dr.Gehan Ahmed Sayed
- 28- Dr.Esam El-Din Mohammed Abd-Alah

- 29- Dr.Ola Mahmoud Wahba
- 30- Dr.Khaled Mohamad Morsy
- 31- Dr.Halla Mohammed Hashem
- 32- Dr.Sayed Kaoud Abd Elshafy

The operative lists achieved by the whole anesthetic team in our hospital per week include:

- 1] Plastic surgery (average of 40 cases per week in the lists)
- 2] Vascular surgery (average of 15-20 cases per week in the lists)
- 3] Neurosurgery (average of 15-20 cases per week in the lists)
- 4] Cardiothoracic surgery (average of 6 cases per week in the lists)
- 5] ENT and Ophthalmic surgery (average of 40 cases per week in the lists)
- 6] Orthopedic surgery (average of 70 cases per week in the lists)
- 7] Obstetrics and Gynecological surgery (average of 15-20 cases per week in the lists)
- 8] Genitourinary tract surgery (average of 50 cases per week in the lists)
- 9] General Surgery (average of 50 cases per week in the lists)
- 10] Endoscopic Surgery (average of 15-20 cases per week in the lists)
- 11] Pediatric general surgery (average of 20-25 cases per week in the lists)
- !2] Pediatric open Heart surgery (average of 4 cases per week in the lists)
- 13] Trauma surgery (average of 50-60 cases per week in the lists)

Department quality control insurance for completing the program

-  Evaluation by the Department head and staff members.
-  Regular assessments.
-  Log book monitoring.
-  Recent equipments and Specialized Units.

(End of the program specifications)