

كلية الطب وحدة ضمان الجودة



Faculty of Medicine Quality Assurance

# MASTER (MSC) DEGREE PROGRAM AND COURSES SPECIFICATIONS FOR INTERNAL MEDICINE

(According to currently applied credit points bylaws)

**Internal medicine** 

Faculty of medicine Assiut University 2022-2023

Contents			
Item	Page		
Program Specification For Master degree Internal Medicine., 2022-2023	4		
A. Basic Information			
<b>B. Professional Information</b>	5		
1. Program aims			
2. Intended learning outcomes (ILOs) for the whole program			
3. Program academic standards			
4. Program external references			
5. Program structure and contents			
<ul> <li>Courses contents (Annex 1)</li> <li>Admission requirements</li> </ul>			
8 Progression and completion requirements			
9. Assessment methods and rules			
10. Program evaluation			
11. Declaration			
- Annex 1, Courses/ specifications	21		
1. Course 1	22		
(Pharmacology)			
2. Course 2	28		
Unit ( Module ) 1 (Anatomy)			
Unit ( Module ) 2 (Histology)			
3. Course 3	38		
Unit (Module) 1 (Physiology)			
Unit ( Module ) 2 (Biochemistry)	40		
4. Course 4	48		
Unit ( Module ) 1 (Pathology)			
Unit (module) 2 (Chincal Pathology)			
E Course E	57		
Linit (Modulo) 1 infection control	57		
- Onit ( Module ) I mection control			
George G	70		
6.Course 6	/8		
Basic of Internal medicine:			

Specialized Course	89
Course 7 Internal medicine 2 Advanced	
1) Unit (Module) 1:Cardiovascular&critical care	
2) Unit (Module) 2:Nephrology	
3) Unit (Module) 3:Haematology & Hematological care unit	
4) Unit (Module) 4:Endocrine & critical & diabetic emergency	
unit	
5) Unit (Module) 5:Gastroenterology,hepatology&GIT critical	
care unit	
6) Unit (Module)6 Rheumatology and muscloskeletal diseases	
<ol><li>7) Unit (Module)7 Chest diseases</li></ol>	
8) Unit (Module)8 Neurology.	
9) Unit (Module) 9 Radiology	
- Annex 2, Program academic standards	175
- Annex 3, Teaching methods	180
- Annex 4, Assessment methods	184
- Annex 5, Program evaluation tools	189
- Annex 6 Matrixes:	191
I-General Academic reference standards(GARS) for postgraduates	
versus Program ARS	
1-Graduate attributes	
2-Academic Standards	
II-Program AKS Versus program ILUS	
III- Program Matrix.	
- Annex 7, Additional information.	209



Assiut University Faculty of Medicine Quality Assurance Unit (QAU)



كلية الطب وحدة ضمان الجودة

# **Master degree of Internal Medicine**

# A. Basic Information

Program Title: Master degree of Internal Medicine for

# 2022-**2023**

- Nature of the program: Single.
- Responsible Department: Internal Medicine
- Program Academic Director (Head of the Department):

Pr. Dr: Mohammed AlYamany

- Principle coordinator: Prof. Dr/Manal Ez Eldeen
- Assistant coordinators Dr. Ahmed Abd El Fadeel Maghraby
- Internal evaluators: Prof. Mohamed Hosam Al Dien Al Maghraby
- **External evaluator:** Pr. Dr. Hassan Hassaneen
- 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 + 1 elective course

# **B. Professional Information**

# 1- Program aims

1/1 To enable candidates to keep with national standards of patients care by teaching high level of clinical skills, bedside care skills, in addition to update medical knowledge as well as and clinical experience competence in the area of gastroenterology, Cardiovascular, rheumatology, endocrine, hematology, nephrology, chest, neurology and geriatric medicine in addition to critical and intermediate care and units , besides dealing with emergent cases in emergency unit and enabling the candidates of making appropriate referrals to a sub-specialist.

1/2. Provide candidates with fundamental knowledge critical care unit as regards; dealing with critically ill patients, ICU equipments, techniques, indications, contraindications and training skills of different critical care techniques.

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

**1.4.** Enable the candidates to start professional careers as specialists in Egypt but recognized abroad.

1.5 Enabling the candidates to understand and get the best of published scientific research and do their own.

# 2- Intended learning outcomes (ILOs) <u>for the whole</u> <u>program</u>:

# 2/1Knowledge and understanding:

- A. Explain the essential facts and principles of relevant basic sciences including, Pharmacology, Anatomy, Histology Physiology, Biochemistry, Pathology, Bacteriology and Clinical pathology related to internal medicine.
- B. Mention essential facts of clinically supportive sciences including Infection control and Addiction and Basic of Internal medicine.
- C. Demonstrate sufficient knowledge of etiology, clinical picture, diagnosis, prevention, and treatment of the diseases and situations related to internal medicine.
- D. Give the recent and update developments in the pathogenesis, diagnosis, prevention and treatment of common diseases related to internal medicine.
- E. Mention the basic ethical and medicolegal principles that should be applied in practice and are relevant to internal medicine.
- F. Mention the basics and standards of quality assurance to ensure good clinical practice in the field of internal medicine.
- G. Mention the ethical and scientific principles of medical research methodology.
- H. State the impact of common health problems in the field of internal medicine on the society and how good clinical practice improve 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 internal medicine.

B. Demonstrate an investigatory and analytic thinking approach (problem solving) to common clinical situations related to internal medicine.

C. Design and /or present a case or review (through seminars/journal clubs.) in one or more of common clinical problems relevant to internal medicine.

D. Formulate management plans and alternative decisions in different situations in the field of the internal medicine.

# <u>2/3 Skills</u>

# 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 internal medicine.

C. Carry out patient management plans for common conditions related to internal medicine.

D. Use information technology to support patient care decisions and patient education in common clinical situations related to internal medicine.

E. Perform competently non invasive and invasive procedures considered essential for the internal medicine.

F. Provide health care services aimed at preventing health problems related to internal medicine.

G. Provide patient-focused care in common conditions related to internal 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) (Annex 2)

#### Academic standards for master degree in Internal 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 re-revised and approved 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, internal medicine Fellowship Program

http://www.med.umich.edu/intmed/resident/index.htm

Comparison between program and external reference				
Item	internal medicine Diseases program	University of Michigan Health System, internal medicine Fellowship Program		
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 number of credit point: 180 (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 According the currently applied credit points bylaws: Total courses 160 credit point ``

Compulsory courses: 98.75%

Elective course : 2 credit point =1.25%

	Credit points	% from total
Basic science courses	24	13.3%
Humanity and social courses	2	1.1%
Specialized 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 1<sup>st</sup> or 2<sup>nd</sup> parts.

#### o 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.** Courses of the program:

Courses and student work	Course	Core CREDIT POINTs			
load list	Code	Lectures	training	total	
First Part		-		-	
Basic science courses					
(8CP)					
5. Course 1	MED206	1	-	1	
(Pharmacology)	WIED200				
6. Course 2		1	-	2	
Unit ( Module ) 1	WILDZ10A#				
(Anatomy)		1	-		
Unit ( Module ) 2					
(Histology)				2	
7. Course 3	MED218B#	1	_	2	
(Physiology)		<b>–</b>			
Unit ( Module ) 2		1			
(Biochemistry)		L	-		
8. Course 4	MED218C#	1		2	
Unit ( Module ) 1		1	-	3	
(Pathology)					
Unit (module ) 2		1	-		
(Bacteriology)					
Unit ( Module ) 3 (Clinical		1	-		
Pathology)					
General clinical					
compulsory courses (6					
points)					
Course 5	MED218D#			2	
- Unit ( Module ) 1		1			
Infection control					
Unit ( Module ) 2		1			

Addiction. Course 6 Basic of Internal	MED218E	4		4
medicine:				
Elective courses*	2	СР		
<b>Clinical training and</b>				
scientific activities:				
Clinical training in				
General Clinical				
compulsory courses (10				
CP)				
Course 5:	MED218D#			2
- Unit (Module ) 1			1	
Infection control				
Unit ( Module ) 2			1	
Addiction.				
Course 6			8	8
Basic of Internal	WILD218L			
medicine:				
Clinical training and	MED218F		14	
scientific activities in				
Specialized course (14 CP)				
Course 7: Internal				
medicine 2 Advanced				
Total of the first part		16	24	40
Second Part	S	pecialized co	urses 24 Cl	D
	Specialized Clinical Work 96 CP			
Specialized Courses	MED218F	24		24
7) Course 7 : internal				
medicine 2 Advanced				
Training and practical			96	96
activities in speciality (				
96 CP)				
Total of the second part		24	96	120
Thesis	20 CP			

Total of the degree	180
* Elective courses of	can be taken during either the 1 <sup>st</sup> or 2 <sup>nd</sup>
parts.	
Student work load c	alculation:
Work load hours a	re scheduled depending on the type of
activities and targe	eted competences and skills in different
courses	
Elective Courses#:	
<ul> <li>Medical stat</li> </ul>	istics.
o Evidence ba	ised medicine.
<ul> <li>Medicolegal</li> </ul>	Aspects and Ethics in Medical Practice and
Scientific Re	search
<ul> <li>Quality assu</li> </ul>	rance of medical education
<ul> <li>Quality ass</li> </ul>	urance of clinical practice.
o Hospital ma	inagement
# One of the above	e mentioned courses are prerequisites for
fulfillment of the deg	gree.
Thesis:	
20 CP are appointed	to the completion and acceptance of the
thesis.	

#### \*Internal Medicine Course

Units' Titles' list	% from	Level	Core Credit points		
	total	(Year)	Didactic training T		Total
	Marks				
<u>Unit 1</u> Cardiovascular	15%	1,2,3	3.6	16.5	20.1
and Critical care					
Unit 2 Nephrology and	15%	1,2,3	3.6	16.5	20.1
dialysis			3.6	16.5	20.1
Unit 3 Hematology and its	15%	1.2.3			-
critical care		, , -	3.6	16.5	20.1
Unit 4 Endocrinology, diabetes	15%	1,2,3			
and its critical care			3.6	16.5	20.1
Unit 5 Gastroenterology &					
Hepatology and its Critical	15%	1,2,3	2.4	11	13.4
care					
<u>Unit 6</u> Rheumatology and	10%	1,2,3	1.2	5.5	6.7
musculoskeletal diseases					
<u>Unit 7</u> Chest disease	5%	2,3	1.2	5.5	6.7
<u>Unit 8</u> Neurological disease					
	5%	2,3	1.2	5.5	6.7
<u>Unit 9 </u> Radiology					
	5%	2,3			
			24	110	134

# 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 :**

#### **4** General Requirements:

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

#### **4** 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.
- **4** 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:	K & I
Structured essay questions	
<b>Objective questions:</b>	
MCQ	
Problem solving	
Clinical:	K ,I, P &G skills
Long/short cases	
OSCE	
Structured oral	K ,I &G skills
Logbook assessment	All
Research assignment	I &G skills

#### Weighting of assessments:

Courses		Degrees				
	Course	Written Oral Practical / Total				
	Code	Exam	Exam*	Clinical		
				Exam		
First Part						
Course 1		30	20		50	
Pharmacology						
Course 2						
Unit 1(Anatomy)		30	20	-	50	
Unit 2 (Histology)		30	20	-	50	
Course 3						
Unit 1(Physiology)		30	20	-	50	
Unit 2 (Biochemistry)		30	20	-	50	
Course 4						
Unit 1 (Pathology)		30	20	-	50	
Unit 2 (Bacteriology )		30	20	-	50	
Unit 3 (Clinical pathology)		30	20	-	50	
Course 5:						
- Unit ( Module ) 1		30	10	10	50	
Infection control						
Unit ( Module ) 2		30	10	10	50	
Addiction.						
Course 6						
Basic of Internal medicine:		120	40	40	200	
Total of first part					700	
	Seco	nd Part				
Specialized Courses:						
Course 7;			200	500		
Internal Medicine 2						
Advanced						
Paper1		125				
Paper 2		125				
Paper3		125				
Paper 4		125				
Total*		500	200	500	1200	
Elective course		50		50	100	

\* 25% of the oral exam for assessment of logbook

700 marks for first part

**1200** for second part

Written exam 41.7% (500 marks).

Clinical /practical and oral exams 58.3% (700 marks)

#### 100 for elective course

#### **L** Examination system:

#### > First part:

- Written exam 2 hours in Anatomy and Histology + Oral exam.
- Written Exam hour in Pharmacology+ Oral exam.
- written exam 2 hours in Physiology & Biochemistry
- Written exam 2 hours in Physiology and Biochemistry + Oral exam.
- Written exam 3 hours in Pathology and Bacteriology and clinical pathology + Oral exam
- written exam 2 hours in Infection control& Addiction+ Oral exam+ Practical or Clinical Exam.
- written exam 3 hours in Basics of Internal medicine+ Oral exam+ Clinical Exam.

#### Second Part

#### Second part:

• Written exam 4 papers 3 hours for each in Internal medicine 2 Advanced + Oral exam+ Clinical exam

#### Elective courses

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

#### Second part:

• Written exam Two papers 3 hours for each in Internal medicine + Oral exam+ Clinical exam.

# **10-Program evaluation**

By whom	Method	Sample
Quality Assurance	Reports	#
Unit	Field visits	
External Evaluator	Reports	#
(s):According to	Field visits	
department		
council		
External Examiner		
(s): According to		
department		
council		
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	Prof. Dr/Manal Ez Eldeen		
Coordinator:			
Head of the Responsible	Prof. Dr Mohammed		
Department (Program	Alyamany		
Academic Director):			

# Annex 1, Specifications for Courses / Modules

#### Annex 1: specifications for courses

# **First Part**

#### **Course 1 (Pharmacology)**

- Course title : Pharmacology
- **Course code: MED206**
- Speciality : Internal medicine
- Number of credit point: Didactic 1 , (100%) practical 0
   (0%) total 1.
- Department (s) delivering the course: Pharmacology in conjunction with Internal Medicine department.
- Coordinator (s): Staff members of Pharmacology Department in conjunction with Internal Medicine Department as annually approved by both departments councils
- **4** Date last reviewed: 4 / 5 / 2022
- Requirements (prerequisites) if any : None

#### 2. Course Aims

The student should acquire the professional knowledge and facts of pharmacology necessary for internal medicine.

# **3. Intended learning outcomes (ILOs):**

# A-Knowledge and understanding

ILOs	Methods of	Methods of
	teaching/	Evaluation
	learning	
A. Mention principles of pharmacology of:	-Lectures	-Written
General pharmacology (pharmacokinetics,		and oral
pharmacodynamics)		examination
Treatment of ischaemic heart disease		- Log book
Anticoagulants		C C
Antiplatelets		
Antiarrythmic drugs		
Insulin and Hypoglycemic drugs		
Treatment of hypo and hyperthyroidism		
Antihypertensive		
Inotropics		
Corticosteroids		
Antibiotics		
Antiviral		
Antacids		
Diuretics		
Treatment of heart failure		
Non-steroidal anti inflammatory drugs		
Disease modifying anti rheumatic drugs		
Treatment of gout		

### **B-Intellectual outcomes**

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

# **C-Practical skills**

Practical: 0 hours

### **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 and oral communication	Oral Exam Logbook

#### Interpersonal and Communication Skills

ILOs	Methods of teaching/ learning	Methods of Evaluation
B. Write a report in common condition mentioned in A.A .	-Observation and supervision -Written and oral communication	Log book

# Professionalism

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

# 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	360o global rating
	experience	0

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

# Time Schedule: First Part

Торіс	Covered ILOs			
	Knowledge	Intellectual	Practical	General
	Α	В	skill C	Skills D
Principles of General	А	А	-	A-D
pharmacology				
(pharmacokinetics,				
pharmacodynamics :				
Anticoagulants	А	А	-	A-D
Antiplatelets	А	А	-	A-D
<ul> <li>Antiarrythmic drugs</li> </ul>	А	А	-	A-D
- Insulin and	А	А	-	A-D
Hypoglycemic drugs				
- Antihypertensive	А	А	-	A-D
Treatment of hypo and hyperthyroidism	А	А	-	A-D
Inotropics				
- Corticosteroids	A	А	-	A-D
- Antibiotics	A	А	-	A-D
- Antiviral	A	А	-	A-D
- Antacids	A	А	-	A-D
- Diuretics	A	А	-	A-D
- Heart failure drugs	A	А	-	A-D
- Non-steroidal anti	А	А	-	A-D
inflammatory drugs				
-Disease modifying anti -	A	A	-	A-D
rheumatic drugs				
-Treatment of gout	A	A	-	A-D

**5. Course Methods of teaching/learning:** 

- **1** Didactic (lectures, seminars, tutorial)
- 2 Laboratory work
- 3 Observation and supervision
- 4 Written & oral communication
- 5 Senior staff experience

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

- 1. Extra Didactic (lectures, seminars, tutorial) according to their needs
- 2. Extra Laboratory work according to their needs

7. Course assessment methods:

#### i. Assessment tools:

- 1. Written and oral examination
- 2. Assessment of practical skills)
- 3. Log book
- ii. Time schedule: At the end of the first part
- iii. Marks: 50

#### 8. List of references

#### i. Lectures notes

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

#### ii. Essential books

Katsong's Pharmacology

#### iii. Recommended books

Basic & Clinical Pharmacology, 14th Edition 2022. By Bertram Katzung, Anthony Trevor, Susan Masters.

#### iv. Periodicals, Web sites, ... etc

American Journal of internal Medicine

BMJ

NEJIM

#### v. others

None

9. Signature		
Course Coordinator:	Head of the Department:	
	Prof. Mohamed Alyamany	
Date:	Date:	

#### **Course 2 Anatomy and Histology**

Course 2 Unit 1 (Module1) (Anatomy)

Name of department: Internal Medicine

Faculty of medicine

Assiut University

#### 2021-2022/2022-2023

#### 1. Unit data

- **4 Unit Title:** Anatomy
- **4 Unit code:** MED218A#
- **4** Speciality : Internal Medicine
- Wumber of Credit points: lecture 1 credit point (100%) practical 0 hours , total 1.
- Department (s) delivering the course: Anatomy in conjunction with internal medicine

Coordinator (s): Staff members of Anatomy Department in conjunction with internal medicine department as annually approved by both departments councils

#### **4** Date last reviewed: 4 / 5 / 2022

- General Requirements (prerequisites) if any : None
- Requirements from the students to achieve course ILOs are clarified in the joining log book.

# 2. Unit Aims

The student should acquire the anatomic background which are appropriate to Internal medicine in clinical reasoning, diagnosis and management of systemic diseases.

**3. Intended learning outcomes (ILOs):** 

# A-Knowledge and understanding

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Describe Anatomic details of:	-Lectures	-Written
<ol> <li>Abdominal organs (liver, kidney, spleen,</li> </ol>		and oral
intestine, peritoneum)		examination
<ul> <li>Blood supply of abdominal organs</li> </ul>		- Log book
<ul><li>c. Chest (lungs, pleura, Mediastinum)</li></ul>		
d. Blood supply of chest organs		
<ul> <li>e. Cardiovascular anatomy (heart and great vessels)</li> </ul>		

#### **B-Intellectual outcomes**

ILOs	Methods of teaching/ learning	Methods of Evaluation
<ul> <li>A. Correlates the facts of anatomy with clinical reasoning, diagnosis and management of common diseases related to Internal Medicine</li> </ul>	Didactic (lectures, seminars, tutorial)	-Written and oral examination -Log book

**C- Practical skills = 0 hours** 

# D-General Skills Practice-Based Learning and Improvement

ILOs	Methods of	Methods of
	teaching/	Evaluation
	learning	
A-Use information technology to manage	e -Observation and	Oral Exam
information, access on-line medical information	; supervision	Logbook
and support their own education	-Written and oral	
	communication	

# Interpersonal and Communication Skills

ILOs	Methods of teaching/ Learning	Methods of Evaluation
B. Write a report in common condition mentioned in A.A.	-Observationandsupervision-Written-Writtenandcommunication	Log book

# Professionalism

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

#### **Systems-Based Practice**

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

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

#### **Time Schedule: First Part**

Торіс	Covered ILOs			
	Knowledge A	Intellectual B	Practical skill C	General Skills D
<ul> <li>Anatomic details of Abdominal organs (liver, kidney, spleen, intestine, peritoneum)</li> </ul>	A	A&B	-	A-D
Anatomic details of blood supply of abdominal organs	A	A&B	-	A-D
Anatomic details of Chest (lungs, pleura, Mediastinum)	A	A&B	-	A-D
Anatomic details of Cardiovascular anatomy (heart and great vessels)	A	A&B	-	A-D

**5. Course Methods of teaching/learning:** 

- 1. Didactic (lectures, seminars, tutorial)
- 2. Observation and supervision
- 3. Written & oral communication
- 4. Senior staff experience

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

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

#### 7. Course 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

#### 8. List of references

#### i. Lectures notes

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

#### ii. Essential books

 Fitzgerald M.J.T. (2005): 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. Sydny. Toronto.

#### iii. Recommended books

A colored Atlas of Human anatomy and Embryology

#### iv. Periodicals, Web sites, ... etc

American Journal of internal medicine BMJ

#### Course 2 Unit 2 Histology

Name of department: Internal medicine

Faculty of medicine

Assiut University

#### 2021-2022/2022-2023

1. Course data

🖊 Unit Title: Histology

**Unit code:** MED218A#

**4** Speciality : Internal Medicine

**Wumber of Credit points :** lecture 1 credit point (100%)

practical 0 hours, total 1.

Staff members of Histology Department as annually

approved by department councils

- **Jote last reviewed: 4 / 5 / 2022**
- Requirements (prerequisites) if any :None

### 2. Course aims

The student should acquire the histological facts necessary for Internal medicine.

# **3. Intended learning outcomes (ILOs):**

# A-Knowledge and understanding

0		
ILOs	Methods of	Methods of
	teaching/	Evaluation
	learning	
A. Describe histological Principles of:	-Didactic	- Written
- Cell structure	(lectures,	and oral
- Epithelium	seminars,	examination
<ul> <li>Connective tissue proper</li> </ul>	tutorial)	- Log book
- Blood cells		
<ul> <li>Blood vascular system</li> </ul>		
<ul> <li>Lymphatic organs</li> </ul>		
- Digestive system		
<ul> <li>Endocrine glands</li> </ul>		

#### **B-Intellectual outcomes**

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

C- Practical skills = 0 HOURS

#### D-General Skills Practice-Based Learning and Improvement

ILOs	Methods of	Methods of
	teaching/	Evaluation
	Learning	
A-Use information technology to manage	-Observation and	Oral Exam
information, access on-line medical	supervision	Logbook
information; and support their own education	-Written and oral	
	communication	

# Interpersonal and Communication Skills

ILOs	Methods of teaching/ Learning	Methods of Evaluation
B. Write a report in common condition mentioned in A.A.	-Observation and supervision -Written and oral communication	Log book

# Professionalism

ILOs	Methods of teaching/ learning	Methods of Evaluation
C. Demonstrate a commitment to ethical principles	-Observation -Senior staff	Oral Exam
	experience	2020000

#### **Systems-Based Practice**

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

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

#### **Time Schedule: First Part**

Торіс	Covered ILOs			
	Knowledge A	Intellectual B	Practical skill C	General Skills D
Principles of histology of:				
- Cell structure	A	А	-	A-D
- Epithelium	А	А	-	A-D
<ul><li>Connective tissue proper</li><li>Blood cell</li></ul>	A	А	-	A- <b>D</b>
- Blood vascular system	A	A	-	A-D
- Lymphatic organs	A	A	-	A- <b>D</b>
- Digestive system	A	А	-	A-D
- Endocrine glands	A	А	-	A-D
- Kidney	А	A	-	A-D

**5.** Course Methods of teaching/learning:

- 1 Didactic (lectures, seminars, tutorial)
- 2 Observation and supervision
- **3** Written & oral communication
- 4 Senior staff experience

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

 Extra Didactic (lectures, seminars, tutorial) according to their needs
7. Course assessment methods:	
i. Assessment tools:	
<ol> <li>Written and oral examination</li> </ol>	
2. Log book	
ii. Time schedule: At the end of the first part	
iii. Marks: 50	
8. References	
i. Lectures notes	
Course notes	
<ul> <li>Staff members print out of lectures and/or CD</li> </ul>	
copies	
ii. Essential books	
o Kaplan's	
iii. Recommended books	
Basic histology	
Oral anatomy, histology, and embryology	
iv. Periodicals. Web sites etc	
American Journal of internal Medicine	
BMI	
v others	
Q Signature	

Course Coordinator		
Unit 1 Coordinator:	Head of the Department:	
	Prof. Mohamed Alyamany	
Date:	Date:	
Unit 2 Coordinator:	Head of the Department: Prof.	
	Mohamed Alyamany	
Date:	Date:	

#### **Course 3 Physiology and biochemistry**

#### Course 3 Unit 1( Physiology)

#### 1. Unit data

- **Unit title : Physiology**
- **4** Unit code: MED218B#
- Speciality : internal medicine
- Number of Credit points: Didactic 1, (100%) practical 0
   (0%) total 1.
- Department (s) delivering the course: physiology in conjunction with internal medicine.
- Coordinator (s): Staff members of physiology Department in conjunction with internal medicine Department as annually approved by both departments councils
- **4** Date last reviewed: 4 / 5 / 2022
- Requirements (prerequisites) if any :
  - **4** None

# 2. Unit Aims

-The student should acquire the facts of physiology necessary for internal Medicine and in clinical reasoning, diagnosis and management .

3. Intended learning outcomes (ILOs):				
A-Knowledge and	understand	ing	,	
ILOs	Methods	of	Methods of	
	teaching/		Evaluation	
	learning			
A. Describe Physiologic Principles of	-Lectures		-Written	
Cardiovascular system:			and oral	
<ol> <li>Know the innervations of the heart</li> </ol>			examination	
<ol><li>Know the regulation of the heart rate.</li></ol>			- Log book	
3- Know the cardiac out put and its components.				
4-Know the arterial blood pressure and its				
regulation.				
5- Know pulmonary and coronary circulation.				
6- Know haemorrhage and its compensatory				
reaction.				
7- Know ECG and its clinical significant.				
Nervous system:				
1- Describe the structure and functions of the				
ANS				
2- Know its higher centers.				
3- Pain				
Blood:				
1- Know the general components of blood and its				
functions.				
2- Describe the mechanism of blood coagulation.				
3- Understand some of clinical conditions				
occurring due to abnormalities of one or more				
of the blood components.				
Endocrine:				

1- Regulation of blood glucose
2- Physiology of thyroid gland
3-Physiology of adrenal gland
4-Calcium homeostasis
GIT:
1- Gastrointestinal hormones
2-Physiology of digestion and absorption
Nephrology
1- Acid base balance (mechanisms and
abnormalities)
2- Urine formation
3- Hormones of the kidney
Metabolism:
Regulation of body temperature:
<ul> <li>Know the centre and mechanism for regulation</li> </ul>
of body temperature.
<ul> <li>Know the reaction of body on exposure to cold and hot</li> </ul>
<ul> <li>Know abnormalities of regulation of body</li> </ul>
temperature.
Respiratory System:
1- Know the regulation of normal respiration.
2- Gas transport in blood (oxygen dissociation
curve and CO2 curve)
3- Know the respiratory functions of the blood
and some disorders of the respiratory system
as dyspnea, hypoxia and cyanosis).

# **B-Intellectual outcomes**

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

## **C- Practical skills**

#### Practical: 0 hours

## **D-General Skills**

# **Practice-Based Learning and Improvement**

ILOs	Methods of	Methods of
	teaching/	Evaluation
	Learning	
A-Use information technology to manage	-Observation and	Oral Exam
information, access on-line medical	supervision	Logbook
information; and support their own	-Written and oral	
education	communication	

#### Interpersonal and Communication Skills

ILOs	Methods of	Methods of
	teaching/	Evaluation
	Learning	
B. Write a report in common condition	-Observation and	Log book
mentioned in A.A.	supervision	
	-Written and oral	
	communication	

#### Professionalism

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

## **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	360o global rating
	experience	J

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

#### Time Schedule: First Part

Торіс	Covered ILOs			
	Knowledge A	Intellectual B	Practical skill C	General Skills D
- Cardiovascular system:	А	А	-	A-D
- Blood	A	A	-	A-D
- Metabolism	А	А	-	A-D
- Endocrine	А	А	-	A-D
<ul> <li>Gastroenterology</li> <li>Kidney</li> </ul>	А	А	-	A-D
Respiratory System	A	А		
Nervous system	A	A		

### **5. Course Methods of teaching/learning:**

- 1. Didactic (lectures, seminars, tutorial)
- 2. Observation
- 3. Written & oral communication
- 4. Senior staff experience

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

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

7. Course 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

### 8. List of references

#### i. Lectures notes

- Lectures notes
- Staff members print out of lectures and/or CD copies
- Medical physiology books by Staff Members of the Department of Medical physiology -Assiut University.

### ii. Essential books

- Guyton AC, Hall JE: Textbook of Medical Physiology,
- 14<sup>th</sup> ed. Saunders, 2020.

## iii. Recommended books

Ganong's Review of medical physiology

#### iv. Periodicals, Web sites, ... etc

American Journal of internal Medicine

BMJ

NEJIM

v. others : None

#### **Course 3 Unit 2 Biochemistry**

- Unit2: Biochemistry
- **Course code:** MED218B#
- Speciality : internal medicine
- Number of Credit points: Didactic 1, (100%) practical 0 (0%) total 1.
- Department (s) delivering the course: Biochemistry in conjunction with Internal Medicine department.
- Coordinator (s): Staff members of Biochemistry Department in conjunction with internal medicine Department as annually approved by both departments councils
- **4** Date last reviewed: 4 / 5 / 2022
- Requirements (prerequisites) if any :None

# 2. Unit Aims

-The student should acquire the facts of biochemistry necessary for Internal medicine in clinical reasoning, diagnosis and management of systemic diseases including

# 3. Intended learning outcomes (ILOs):

# A-Knowledge and understanding

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Describe details of Biochemistry of:	-Lectures	-Written
- Diabetes mellitus		and oral
<ul> <li>Insulin, and growth hormones</li> </ul>		examination
- Essential amino acids		- Log book
- Essential fatty acids		
- Urea cycle		
- Uric acid		
- Atherosclerosis.		

## **B-Intellectual outcomes**

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

# **C-Practical skills**

Practical: 0 hours

## **D-General Skills**

## **Practice-Based Learning and Improvement**

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

# Interpersonal and Communication Skills

ILOs	Methods of teaching/ learning	Methods of Evaluation
B. Write a report in common condition mentioned in A.A.	-Observation and supervision -Written and oral communication	Log book

## Professionalism

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

## **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	360o global rating
	experience	

Course contents (topic s/modules/rotation	
Course Matrix	

#### Time Schedule: First Part

Торіс	Covered ILOs			
	Knowledge A	Intellectual B	Practical skill C	General Skills D
- Diabetes mellitus	А	А	-	A-D
Insulin, and growth	А	А	-	A-D
- Hormones				
- Essential amino acids	A	A	-	A-D
- Essential fatty acids	A	A	-	A-D
- Urea cycle	A	A	-	A-D
- Uric acid	A	А	-	A-D
Atherosclerosis.				

**5. Course Methods of teaching/learning:** 

- 1. Observation
- 2. Didactic (lectures, seminars, tutorial)
- 3. Written & oral communication
- 4. Senior staff experience

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

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

7. Course 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
8. List of references
i. Lectures notes
Course notes
<ul> <li>Staff members print out of lectures and/or CD</li> </ul>
copies
ii. Essential books
Kaplan's 2021
iii. Recommended books
Synopsis of Biochemistry
Lippincott's illustrated Review: Biochemistry
iv. Periodicals, Web sites, etc
American Journal of internal Medicine
BMJ
NEJIM
v. others
None
9. Signature

Course Coordinator		
Unit 1 Coordinator:	Head of the Department:	
	Prof. Mohamed Alyamany	
Date:	Date:	
Unit 2 Coordinator:	Head of the Department:	
	Prof. Mohamed Alyamany	
Date:	Date:	

## Course 4 Pathology and Bacteriology and Clinical Pathology

# Course 4 Unit 1 (Pathology)

## **Coarse data**

- MODULE Title: Pathology
- **Gourse code: MED218C#**
- Speciality is Internal medicine
- Number of Credit point : lectures 1(100%) , practical
   0(50%)
- Department (s) delivering the course: Pathology in conjunction with internal medicine
- Coordinator (s): Staff members of Pathology Department in conjunction with Internal medicine Department as annually approved by both departments councils

**4** Date last reviewed: 4 / 5 / 2022

Requirements (prerequisites) if any :

**4** None

## 2. Course aims

The student should acquire the pathological facts necessary for Internal medicine

**3. Intended learning outcomes (ILOs):** 

# A-Knowledge and understanding

ILOs	Methods of	Methods of
	learning	Lvuluution
<ul> <li>A. Mention Principles of General Pathology of:</li> <li>-Thrombosis and embolism</li> <li>- Inflammation</li> <li>- Immunity &amp; hypersensitivity.</li> <li>- Tuberculosis &amp; Bilharziasis</li> <li>- Pathology of tumors</li> </ul>	-Lectures	-Written and oral examination - Log book
<ul> <li>B-Describe Pathologic Details of:</li> <li>A. Cardiovascular System: <ul> <li>Myocardial infarction</li> <li>Heart failure</li> <li>Hypertension</li> </ul> </li> <li>B. Gastrointestinal system: <ul> <li>Inflammatory bowel diseases</li> <li>Gastritis and peptic ulcer</li> <li>Hepatitis</li> <li>Gastrointestinal tumors</li> </ul> </li> </ul>	-Lectures	-Written and oral examination - Log book
C-Renal system: -glomerulonephritis D-Endocrine: -Thyroid & para-thyroid - Adrenal -Pancreas		

## **B-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 Internal Medicine	Didactic (lectures, seminars, tutorial)	-Written and oral examination -Log book

C- Practical skills		
ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Master of basic skills in the pathology of internal medicine diseases.	-Laboratory work	Assessment of practical skills -Log book
B. Use information technology to support decisions in common situations related to pathology of the internal medicine diseases.		
C. Examine Pathological slides of common internal medicine diseases		

# **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 and oral communication	Oral Exam Logbook

# Interpersonal and Communication Skills

ILOs	Methods of teaching/ learning	Methods of Evaluation
B. Write a report in common condition mentioned in A.A.	-Observation and supervision -Written and oral	Log book

## Professionalism

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

# **Systems-Based Practice**

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

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

## Time Schedule: First Part

Торіс	Covered ILOs			
	Knowledge	Intellectual	Practical skill	General Skills
Coneral Pathology	A	D	L	U
Thrombosis and embolism	A	A	A-C	A-D
- Inflammation	A	A	A-C	A-D
- Immunity &	A	A	A&B	A-D
hypersensitivity.				
- Tuberculosis & Bilharziasis	A	A	A-C	A-D
- Pathology of tumors	A	A	A-C	A-D
Pathologic details of:				
Cardiovascular System:				
- Myocardial infarction	В	A	A-C	A-D
- Heart failure	В	A	A&B	A-D
-Hypertension	В	A	A&B	A-D
B. Gastrointestinal system:				
-Inflammatory bowel	В	A	A-C	A-D
diseases				
-Gastritis and peptic ulcer	В	A	A-C	A-D
-Hepatitis	В	A	A-C	A-D
-Gastrointestinal tumors	В	A	A-C	A-D
C-Renal system:				
-Glomerulonephritis	В	A	A&B	A-D
Endocrine:	В	A	A&B	A-D
-Thyroid & para-thyroid	В	A	A&B	A-D
- Adrenal	В	A	A&B	A-D
-Pancreas	В	A	A&B	A-D

**5. Course Methods of teaching/learning:** 

- 1 Observation and supervision
- 2 Didactic (lectures, seminars, tutorial)
- 3 Written & oral communication
- 4 Senior staff experience

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

- Extra Didactic (lectures, seminars, tutorial) according to their needs
- **2.** Extra Laboratory work according to their needs

7. Course 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

### 8. List of references

#### Lectures notes

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

#### ii. Essential books

Kaplan's 2018

### iii. Recommended books

Robbins and Cotran's Pathologic basis of diseases Robbin's Basic Pathology

#### iv. Periodicals, Web sites, ... etc

www.biomedcentral.com

# Course 4 Unit (2) (Bacteriology)

### 1. Course data

- 4 Course Title: Bacteriology
- Course code: MED218C#
- Speciality is Internal medicine
- Number of credit points : lectures 1(100%), practical 0(0%).total 1

Department (s) delivering the course: Bacteriology in

conjunction with Internal medicine

- Coordinator (s): Staff members of Bacteriology
   Department in conjunction with Internal medicine
   Department as annually approved by both departments
   councils
   Date last reviewed: 4 / 5 / 2022
   Requirements (prerequisites) if any :
  - **4** None

## 2. Course aims

The student should acquire the facts of Bacteriology necessary for Internal medicine.

# 3. Intended learning outcomes (ILOs):

## A-Knowledge and understanding

ethods of	Methods of
aching/	Evaluation
arning	
ectures	-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 Internal Medicine	Didactic (lectures, seminars, tutorial)	-Written and oral examination -Log book

## **C-Practical skills**

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Master the basic skills in the microbiology related to internal medicine.	-Laboratory work	-Assessment of practical skills -Log book
B. Use information technology to support decisions in common situations related to microbiology related to internal medicine.		
C. Identify Pathogens of common infection in internal medicine by examining slides under the microscopy		

# **D-General Skills**

# **Practice-Based Learning and Improvement**

ILOs	Methods of	Methods of
	teaching/	Evaluation
	Learning	
A-Use information technology to manage	-Observation and	Oral Exam
information, access on-line medical	supervision	Logbook
information; and support their own education	-Written and oral	
	communication	

# **Interpersonal and Communication Skills**

ILOs		Methods teaching/ Learning	,	of	Methods of Evaluation
B. Write a report in common mentioned in A.A.	condition	-Observat supervisio -Written communio	ion on and cation	and oral	Log book

# Professionalism

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

# Systems-Based Practice

ILOs	Methods of teaching/ learning	Methods of Evaluation
D. Work effectively in relevant health care delivery	-Observation	3600 global
settings and systems.	experience	rating

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

## **Time Schedule: First Part**

Торіс		Covered	l ILOs	
	Knowledge A	Intellectual B	Practical skill C	General Skills D
4 General bacteriology				
<ul> <li>Bacterial infections (typhoid, tuberculosis, brucellosis,&amp; closteridial infection)</li> </ul>	A	A	A-C	A-D
<ul> <li>Antimicrobial agents</li> </ul>	А	A	A&B	A-D
<ul> <li>Opportunistic infection, nosocomial infection</li> </ul>	A	A	A-C	A-D
🖊 Immunology				
-				
- Basic immunology	А	А	A&B	A-D
<ul> <li>Immunologic diagnostic test and serology</li> </ul>	А	A	A&B	A-D
- Hypersensitivity	А		A&B	A-D
<ul> <li>Immunogenetics and transplantation immunology</li> </ul>	A	A	A&B	A-D
🖊 General virology	А	A	A&B	A-D
<ul> <li>Pathogenesis of viral diseases</li> </ul>				-
- Hepatitis	A	A	A&B	A-D
- Influenza viruses	A	A	A&B	A-D
Sterilization of endoscopy	A	A	A&B	A-D

**5. Course Methods of teaching/learning:** 

- 1. Didactic (lectures, seminars, tutorial)
- 2. Observation and supervision
- 3. Written & oral communication
- 4. Senior staff experience

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

- Extra Didactic (lectures, seminars, tutorial) according to their needs
- **2.** Extra Laboratory work according to their needs

7. Course 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

## 8. List of references

#### i.Lectures notes

- Course notes
- Staff members print out of lectures and/or CD copies
- ii. Essential books

Kaplan's 2018

iii. Recommended books

Synopsis of microbiology

iv. Periodicals, Web sites, ... etc

www.ASM.org

v. others

None

## Course 4 (Unit 3 )Clinical pathology

- **MODULE** Title: Clinical pathology
- **Gourse code: MED218C#**
- Speciality is internal medicine
- Number of credit point : lecture 1 (100%), practical 0 (0%) total 1 credit point.

Department (s) delivering the course: clinical pathology in conjunction with Internal medicine department

- Coordinator (s): Staff members of clinical pathology
   Department in conjunction with Internal medicine
   Department as annually approved by both departments
   councils
- **4** Date last reviewed: 4 / 5 / 2022
- Requirements (prerequisites) if any :

None

# 2. Unit Aims

The student should acquire the facts of clinical pathology necessary for Internal medicine.

3. Intended learning outcomes (ILOs):

# A-Knowledge and understanding

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Describe Principles of clinical pathology of :	-Lectures	-Written and
Electrolytes (Sodium, potassium, and calcium)	work	examination
Kers     Kers		of practical
Kidney function tests		- Log book
Liver function tests Proteinuria		
<ul> <li>Cerebrospinal fluid</li> <li>Acute phase reactants</li> </ul>		
Plasma proteins Leukemias		

## **B-Intellectual outcomes**

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

## **C- Practical skills**

ILOs	Methods of	Methods of
	teaching/	Evaluation
	learning	
A- Master the basic skills in clinical pathology	Laboratory	-Assessment
related to internal medicine	work	of practical
		skills
		-Logbook
B. Identify common problems of internal medicine by		
doing biochemical tests, microscopic examination		
and Training on pathologic slides of blood		
components, bone marrow biopsy and aspiration		
needles		

## **D-General Skills**

# **Practice-Based Learning and Improvement**

ILOs	Methods of	Methods of
	teaching/	Evaluation
	Learning	
A-Use information technology to manage	-Observation and	Oral Exam
information, access on-line medical	supervision	Logbook
information; and support their own education	-Written and oral	
	communication	

# **Interpersonal and Communication Skills**

ILOs			Methods		of	Methods of
			teaching/	,		Evaluation
			Learning			
B. Write a report in	common	condition	-Observat	ion	and	Log book
mentioned in A.A.			supervisio	on		
			-Written	and	oral	
			communi	cation		

# Professionalism

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

# Systems-Based Practice

ILOs	Methods of teaching/ learning	Methods of Evaluation
D. Work effectively in relevant health care delivery	-Observation	3600 global
settings and systems.	experience	rating

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

#### **Time Schedule: First Part**

Торіс	Covered ILOs			
	Knowledge A	Intellectual B	Practical skill C	General Skills D
🗷 Hepatitis markers	А	А	A & B	A-D
<ul> <li>Electrolytes</li> <li>(Sodium, potassium, and calcium)</li> </ul>	A	A	A &B	A-D
🗷 - Cardiac marker	A	A	A & B	A-D
🗷 - Hyperlipidemia	A	А	A & B	A-D
🗷 Diabetes mellitus	А	А	A & B	A-D
Kidney function tests	A	А	A & B	A-D
Liver function tests	A	А	A & B	A-D
🗷 Proteinuria	А	А	A -C	A-D
🗷 Cerebrospinal fluid	A	А	A & B	A-D
Acute phase reactants	A	А	A & B	A-D
🗷 Plasma proteins	А	А	A & B	A-D
🗷 Leukemias	A	А	A & B	A-D

## **5. Course Methods of teaching/learning:**

- 1 Senior staff experience
- 2 Didactic (lectures, seminars, tutorial)
- **3** Observation and supervision
- 4 Written & oral communication

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

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

#### 7. Course 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: 50

#### 8. List of references

#### i. Lectures notes

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

#### ii. Essential books

Crocker: The science of laboratory diagnosis Harr: clinical laboratory Science Review

#### iii. Recommended books

Tietz textbook of clinical chemistry and molecular

#### diagnosis

#### iv. Periodicals, Web sites, ... etc

www.biomedcentral.com

#### v. others : None

## 9. Signature

Course Coordinator		
Unit 1 Coordinator:	Head of the Department:	
	Prof Mohamed Alyamany	
Date:	Date:	
Unit 2 Coordinator:	Head of the Department:	
	Prof. Mohamed Alyamany	
Date:	Date:	
Unit 3 Coordinator:	Head of the Department:	
	Prof. Mohamed Alyamany	
Date:	Date:	

## **Course 5** Infection control and addiction

## **Course 5 (Unit 1) Infection Control**

- **4** MODULE Title: Infection Control
- **Course code: MED218D#**
- Speciality is internal medicine
- Number of credit point : lecture 1 (50%), practical 1 (50%) total 2 credit point.

Department (s) delivering the course: Microbiology and

immunology

Coordinator (s): Staff members of Microbiology in

conjunction with Internal medicine department

- Department as annually approved by both departments councils
- **4** Date last reviewed: 4 / 5 / 2022
- Requirements (prerequisites) if any :

**4** None

# 2. Unit Aims

The student should acquire the facts of Infection control necessary for Internal medicine.

3. Intended learning outcomes (ILOs):

# A-Knowledge and understanding

ILOs	Methods of	Methods of
	teaching/	Evaluation
	learning	
A. Describe Principles of :	-Lectures	-Written and
Fever		oral
PUO		examination
Common viral ,bacterial and parasitic infection		- Log book
Prevention of infectious diseases		
Vaccination		
AIDS		
Sterilization of instruments		
Hospital acquired infection		
Endoscope associated infection		
Resistance of antimicrobial		

## **B-Intellectual outcomes**

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

## **C- Practical skills**

ILOs	Methods of	Methods of
	teaching/	Evaluation
	learning	
A- Master the basic skills in infection control	-Observation	-Assessment
related to internal medicine.	and	of practical
-Disinfection and sterilization	supervision	skills
-Evaluation of efficiency of sterilization		-Logbook
-Methods of vaccinations		
-Recent advances in diagnosis of TB and viral		
hepatitis		
-Hospital acquired infections		

## **D-General Skills**

# **Practice-Based Learning and Improvement**

ILOs	Methods of	Methods of
	teaching/	Evaluation
	Learning	
A-Use information technology to manage	-Observation and	Oral Exam
information, access on-line medical	supervision	Logbook
information; and support their own education	-Written and oral	
	communication	

## **Interpersonal and Communication Skills**

ILOs	Methods of teaching/ Learning	Methods of Evaluation
B. Write a report in common condition mentioned in A.A.	-Observation and supervision -Written and oral communication	Log book

# Professionalism

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

# 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	360o global rating
	experience	

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

## **Time Schedule: First Part**

Торіс	Covered ILOs			
	Knowledge A	Intellectual B	Practical skill C	General Skills D
Fever	A	A	A	A-D
PUO	A	A	A	A-D
Common viral ,bacterial and parasitic infection	A	A	A	A-D
Prevention of infectious diseases	A	A	A	A-D
Vaccination	A	A	A	A-D
AIDS	A	A	A	A-D
Sterilization of instruments	A	A	A	A-D
Hospital acquired infection	A	A	A	A-D
Endoscope associated infection	A	A	A	A-D
Resistance of antimicrobial	A	A	A	A-D
-Disinfection and sterilization	A	A	A	A-D
Evaluation of efficiency of sterilization	A	A	A	A-D
Methods of vaccinations	В	A	A	A-D
-Recent advances in diagnosis of TB and viral hepatitis	В	A	A	A-D
Hospital acquired infections	В	A	А	A-D

**5. Course Methods of teaching/learning:** 

- 1 Senior staff experience
- 2 Didactic (lectures, seminars, tutorial)
- 3 Observation and supervision
- 4 Written & oral communication

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

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

7. Course 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

#### 8. List of references

#### i. Lectures notes

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

#### ii. Essential books

Crocker: The science of laboratory diagnosis Harr: clinical laboratory Science Review

#### iii. Recommended books

Tietz textbook of clinical chemistry and molecular

diagnosis

#### iv. Periodicals, Web sites, ... etc

www.biomedcentral.com

#### v. others : None
## Course 5 (Unit 2) Addiction

- 4 Unit Title: Addiction
- 4 Unit code: MED218D#
- **4** Speciality is internal medicine
- Number of credit point : lecture 1 (50%), practical 1 (50%) total 2 credit point.
- Department (s) delivering the unit: Forensic medicine and clinical toxicology
- Coordinator (s): Staff members of Forensic medicine and clinical toxicology in conjunction with Internal medicine department
- Department as annually approved by both departments councils
- **4** Date last reviewed: 4 / 5 / 2022
- Requirements (prerequisites) if any :

None

## 2. Unit Aims

The student should learn how to deal ethically with a case of addiction and how to make a diagnosis and management of suspected case.

**3. Intended learning outcomes (ILOs):** 

## A-Knowledge and understanding

ILOs	Methods of teaching/ learning	Methods of Evaluation
<ul> <li>A. Describe the etiology, clinical picture, diagnosis and management of the following diseases and clinical conditions:</li> <li>drug dependence e,g opium.</li> <li>Diagnosis of different drugs abuse</li> <li>Causes of abuse and addiction</li> </ul>		
B. State update and evidence based Knowledge of: Addiction, Abuse, Tolerance, Chemical dependence etc why addiction is a disease.	-Lectures	-Written and oral examination - Log book

#### **B-Intellectual outcomes**

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Correlates the facts of addiction with clinical reasoning, diagnosis and management of common disorders related to internal medicine	Didactic (lectures, seminars, tutorial)	-Written and oral examination -Log book

## **C- Practical skills**

ILOs	Methods of	Methods of
	teaching/	Evaluation
	learning	
A. Obtain proper history and examine patients in	-Observation	-Assessment
caring and respectful behaviors.	and	of practical
	supervision	skills
		-Logbook
B- Master the basic skills in Addiction related to	-Observation	-Assessment
internal medicine.	and	of practical
1-How to write a report about the case of addiction or	supervision	skills
toxicity of different abused drugs		-Logbook
2-How to identify shape, name characters of different		
drugs ,plants, chemicals lead to addiction		
3-Case report about signs ,symptoms of addiction and		
withdrawal symptoms help in diagnosis of the case.		
4-How to deal ethically with a case of addiction.		

# **D-General Skills**

## **Practice-Based Learning and Improvement**

ILOs	Methods of	Methods of
	teaching/	Evaluation
	Learning	
A-Use information technology to manage	-Observation and	Oral Exam
information, access on-line medical	supervision	Logbook
information; and support their own education	-Written and oral	
	communication	

#### Interpersonal and Communication Skills

ILOs	Methods of teaching/	Methods of
	Learning	Evaluation
B. Write a report in common condition mentioned in A.A.	-Observation and supervision	Log book
	-Written and oral communication	

## Professionalism

ILOs	Methods of teaching/ learning	Methods of Evaluation
C. Demonstrate a commitment to ethical principles	-Observation -Senior staff	Oral Exam Logbook
	experience	J

# **Systems-Based Practice**

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

Course contents (topic s/modules/rotation	
Course Matrix	

#### Time Schedule: First Part

Торіс	Covered ILOs			
	Knowledge A	Intellectual B	Practical skill C	General Skills D
drug dependence e,g opium.	А	А	A -B	A-D
Diagnosis of different drugs abuse	А	А	А -В	A-D
Causes of abuse and addiction	А	А	А -В	A-D
drug dependence e,g opium.	A	A	A -B	A-D
Addiction, Abuse, Tolerance, Chemical dependence etc	В	A	A -B	A-D
why addiction is a disease.	В	А	A -B	A-D

**5. Course Methods of teaching/learning:** 

- **1** Senior staff experience
- 2 Didactic (lectures, seminars, tutorial)
- **3** Observation and supervision
- 4 Written & oral communication

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

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

7. Course assessment methods:

#### i. Assessment tools:

- 3- Written and oral examination
- 1- Log book
- ii. Time schedule: At the end of the first part

iii. Marks: 50

#### 8. List of references

#### i. Lectures notes

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

#### ii. Essential books

-----

#### iii. Recommended books

-----

#### iv. Periodicals, Web sites, ... etc

v. others : None

# 9. Signature

Course Coordinator		
Unit 1 Coordinator:	Head of the Department:	
	Prof. Mohamed Alyamany	
Date:	Date:	
Unit 2 Coordinator:	Head of the Department:	
	Prof. Mohamed Alyamany	
Date:	Date:	

#### **Course 6 Basics of internal Medicine**

- **Course Title: Basics of internal Medicine**
- **Course code:** MED218E
- **4** Speciality is internal medicine
- Number of credit point : lecture 4 (33.3%), practical 8
   (66.7%) total 12 credit point.
- **Department (s) delivering the Course :** *Internal Medicine*
- **Coordinator (s):** Staff members of *Internal Medicine*
- **Jote last reviewed: 4 / 5 / 2022**
- Requirements (prerequisites) if any :

None

#### 2. Course aims

 To enable candidates to Acquire satisfactory level of clinical skills, bedside care skills, in addition to update medical knowledge as well as clinical experience and competence in Basics of internal Medicine Internal medicine and enabling the candidates of making appropriate referrals to a sub-specialist.
 Provide candidates with fundamental knowledge and skills of dealing with critically ill patients, with Internal medicine diseases.

#### A-Knowledge and understanding

ILOs	Methods of	Methods of
	teaching/	Evaluation
	learning	
<ul> <li>A. Describe the etiology, clinical picture, diagnosis and management of the following diseases and clinical conditions:</li> <li>Elderly with chronic illness</li> <li>Shocked cases and cases in need for Fluid therapy</li> <li>Correction of acid base disorders</li> <li>Poisoning</li> <li>Aging (Effect of aging on various systems)</li> </ul>	Didactic; -Lectures -Clinical rounds -Seminars -Clinical rotations (service teaching)	-OSCE at the end of each year -log book & portfolio - MCQ examination at the second year -Oral and written exam
-Over weight -Infectious Diseases		
<ul> <li>B. Mention the principles of :</li> <li>aBasis of Clinical examination in internal medicine</li> <li>b. Fluid therapy</li> <li>c. Acid base balance</li> </ul>		
C. State update and evidence based Knowledge of		
-Poisoning -Aging (Effect of aging on various systems)		
D. Memorize the facts and principles of the relevant basic and clinically supportive sciences related to Basics of internal Medicine		
E. Mention the basic ethical and medicolegal principles that should be applied in practice and are relevant to Basics of internal Medicine		
F. Mention the basics and standards of quality assurance to ensure good clinical practice in the field of Basics of internal Medicine		
G. Mention the ethical and scientific principles of medica research methodology.		
H. State the impact of common health problems in the f Basics of internal Medicine on the society and how go 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 Basics of internal Medicine	Clinical rounds Senior staff experience	Procedure/case presentation Log book
B. Demonstrate an investigatory and analytic thinking (problem solving) approaches to common clinical situations related to Basics of internal Medicine		
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 Basics of internal Medicine		
D-Formulate management plans and alternative decisions in different situations in the field of the Basics of internal Medicine		

# C-Practical skills (Patient Care)

ILOs	Methods of	Methods of
	teaching/	Evaluation
	learning	
A. Obtain proper history and examine patients in	-Didactic;	OSCE at the
caring and respectful behaviors.	-Lectures	end of each
	-Clinical	year
	rounds	-log book &
	-Seminars	portfolio
	-Clinical	- One MCQ
	rotations	examination
	(service	at the

	teaching)	second half of the second year and another one in the third year
B. Perform the following non invasive/invasive	Clinical	Procedure
Diagnostic and therapeutic procedures.	round with	presentation
-Blood gases	senior staff	- Log book
-CVP	-Perform	- Chick list
-venous blood sampling	under	
- Office analysis by dipsticks	of senior	
-Nasogastric tube insertion	staff	
-Intravenous line insertion	Starr	
C. Prescribe the following non invasive/invasive	Clinical	- Procedure
therapeutic procedures :	round with	presentation
-Prescribe proper treatment for conditions in A.A	senior staff	- Log book - Chick list
D. Carry out patient management plans for common	Clinical	
conditions related to Basics of internal Medicine .	round with	
	senior staff	
E. Use information technology to support patient care		
decisions and patient education in common clinical		
situations related to Basics of internal Medicine .		
F. write competently all forms of patient charts and		
sheets including reports evaluating these charts and shoots (Write a consultation note, inform national of a		
diagnosis and therapeutic plan completing and		
maintaining medical records)		

## D-General Skills Practice-Based Learning and Improvement

ILOs	Methods of	Methods of
	teaching/	Evaluation
	learning	
A. Perform practice-based improvement	-Case log	Procedure/case
activities using a systematic methodology (share	-Observation	presentation
in audit and risk management activities and use	and	-Log book and
logbook).	supervision	Portfolios
	-Written & oral	
	communication	
B. Appraises evidence from scientific	-Journal clubs	
studies(journal club)	- Discussions in	
	seminars and	
	clinical rounds	
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	Clinical rounds	
health care professionals including their	Senior staff	
evaluation and assessment.	experience	

# Interpersonal and Communication Skills

ILOs	Methods of teaching/	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 Portfolios Chick list and
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 common problems related to Basics of Internal Medicine	Clinical round Seminars	Clinical Exam
K. Write a report : -Patients medical report -Death report	Senior staff experience	Chick list
L. Council patients and families about: suspected cases with poisoning	Clinical round with 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	<ol> <li>Objective structured clinical examination</li> <li>Patient survey</li> </ol>
N. Demonstrate a commitment to ethical principles including provision or withholding of clinical care, confidentiality of patient information, informed consent, business practices		1. 360o global rating
O. Demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities		<ol> <li>Objective structured clinical examination</li> <li>3600 global rating</li> </ol>

# Systems-Based Practice

ILOs	Methods of teaching/	Methods of Evaluation
	learning	
P. Work effectively in relevant health care delivery	Observation	1. 3600
settings and systems including good administrative and	Senior staff	global rating
time management.	experience	
Q. Practice cost-effective health care and resource		1. Check list
allocation that does not compromise quality of care.		evaluation of
		live or
		recorded
		performance
R. Assist patients in dealing with system complexities.		1. 3600
		global rating
		2. Patient
		survey

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

#### **Time Schedule: First Part**

Торіс	Covered ILOs			
	Knowledge A	Intellectual B	Practical skill C	General Skills D
Elderly with chronic illness	A,D-H	A-D	A -F	A-R
- Shocked cases and cases in need for Fluid therapy	A,D-H	A-D	A –F	A-R
-Correction of acid base disorders	A,D-H	A-D	A -F	A-R
-Poisoning	A,C,D-H	A-D	A —F	A-R
-Aging (Effect of aging on various systems)	A,C,D-H	A-D	A -F	A-R
-Over weight	B,D-H	A-D	A –F	A-R
-Basis of Clinical examination in internal medicine	B,D-H	A-D	A -F	
Fluid therapy	B,D-H	A-D	A –F	A-R
Acid base balance	B,D-H	A-D	A -F	A-R

## **5. Course Methods of teaching/learning:**

- 1. Didactic (lectures, seminars, tutorial)
- 2. Outpatient
- 3. Inpatient
- 4. Case presentation
- 5. Direct observation
- 6. journal club
- 7. Critically appraised topic.
- 8. Educational prescription

- 9. Clinical rounds
- **10**. Clinical rotation
- **11**. Senior staff experience
- **12**. Postgraduate teaching

# 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
- Objective structure clinical examination (OSCE)
- 5. Procedure/case Log book and Portfolios
- 6. Simulation
- 7. Record review (report)
- 8. Patient survey
- 9. 3600 global rating
- 10. Check list evaluation of live or recorded performance
- 11. MCQ Exam
- ii. Time schedule: At the end of First part
- iii. Marks: 200

#### 8. List of references

#### i. Lectures notes

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

#### ii. Essential books

- 1- Cecil text book of Medicine, 25edition.
- 2- Oxford text book of Medicine,
- 3- Davidson24 edition.
- 4- Current Medical Diagnosis & treatment, 2022.
- 5- Hutchison's clinical methods

#### iii. Recommended books

- 1. Harrisons text book of Medicine ,20 edition
- iv. Periodicals, Web sites, ... etc
- American Journal of internal Medicine
- New England Journal of Medicine
- v. Others
- None

#### 9. Signatures

Course Coordinator:	Head of the Department:
Prof. Hannan Mahmoud	Prof: Mohamed Alyamany
Date:	Date:

# **Second Part**

## **Course 7 Internal medicine 2 Advanced**

Name of department: Internal medicine Faculty of medicine Assiut University

#### 2022-2023

#### 1. Course data

- Course Title: Internal medicine.
- **Course code: M**ED218F
- Speciality : Internal medicine
- Number of CREDIT POINT : Didactic 24 , (17,9 %) practical 110(82,1%) total 134
- Department (s) delivering the course: Department of

Internal medicine Faculty of Medicine- Assiut University.

Coordinator (s):

-Course coordinator:

Prof. Dr/Manal Ez Eldeen

Assistant coordinator Dr. Ahmed Abd El Fadeel

Maghraby

#### Date last reviewed: 4 / 5 / 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 9 units(Modules)

1-Unit (Module) 1 Cardivascular and critical care unit.

2- Unit (Module) 2 Nephrology.

3- Unit (Module) 3 Hematology and hematological critical care unit.

4- Unit (Module) 4 Endocrine , critical and diabetic emergency unit.

5-Unit(Module) 5 Gastroenterology, hepatology and GIT critical care unit.

6- Unit (Module)6 Rheumatology and musculoskeletal diseases.

7- Unit (Module)7 Chest diseases.

8-Unit (Module)8 Neurological diseases.

9-Unit (Module) 9 Radiology

#### Unit Coordinator (s):

Unit	Principle Coordinator	Assistant coordinators
1) Unit (Module) 1 Cardivascular and critical care unit.	Prof. Lobna Al-Tony	Prof. Mahmoud Ali M. Ashry
<ul> <li>4 2) Unit (Module) 2</li> <li>Nephrology.</li> <li>4 3) Unit (Module) 3</li> </ul>	Prof.Mohamed Abbas	Prof. Lobna Al- Tony
Hematology and hematological critical Care Medicine.	Prof. Esam Abdelmonem S. Albeh	Prof. Yosreia Abdelrahman Ahmed <b>Prof</b> Howaida Nafady Prof. Mahmoud Ali M. Ashry
<ul> <li>4) Unit (Module) 4</li> <li>Endocrine, critical care and diabetic emergency unit</li> <li>5) Unit (Module) 5</li> </ul>	Prof. Lobna Farag AL-Tony	Prof. Fatema Abubakr Prof. Mohamed
Gastroenterology, hepatology and GI critical care unit.	Dr. Nabila Faek Ameen	Zain EL-Den Hafez Dr.Ahmed Abd El
6) Unit (Module) 6 Rheumatology and	Prof. Nabawia M Tawfik	
Musculoskeletal disorders	According to the selected staff member According to the selected	
7)Module 7 Chest	staff member	
8)Module 8 Neurological diseases	staff member	
9)Module 9 Radiology		

#### 2. Course aims

 To enable candidates to Acquire satisfactory level of clinical skills, bedside care skills, in addition to update medical knowledge as well as clinical experience and competence in the Internal medicine and enabling the candidates of making appropriate referrals to a sub-specialist.

2. Provide candidates with fundamental knowledge and skills of dealing with critically ill patients, with Internal medicine diseases.

3- To improve knowledge of physiology about body temperature regulation and changes on exposure to cold and hot weather.

4-To demonstrate the ability to provide patient-centered care that is appropriate, compassionate, and effective for treatment of Internal medicine and the promotion of health.

5-To give opportunities to evaluate and manage a broad variety of Internal medicine diseases.

6-To learn candidates to develop skills for using diagnostic tools (as paracentesis , abdominal US, Liver biopsy, etc--- ).

92

# 3. Course intended learning outcomes (ILOs):

Unit 1 Cardiovascular and critical care unit

## **C- Knowledge and understanding**

ILOs	Methods of	Methods of
	teaching/	Evaluation
	Learning	
<ul> <li>A. Describe the etiology, clinical picture, diagnosis and management of the following diseases and clinical conditions: <ul> <li>a Myocardial ischemia syndromes like chronic stable angina, acute coronary syndromes, coronary artery spasm, and others.</li> <li>b. Hypertension and hypertensive heart diseases.</li> <li>c. Rheumatic fever and rheumatic heart diseases.</li> <li>d. Different pericardial diseases, whether acute or chronic.</li> <li>e. Acute and chronic diseases of the myocardial muscle.</li> <li>f. Coma</li> <li>g. Hypertensive emergencies</li> <li>h. Acute coronary syndromes</li> <li>i. Arrhythmias</li> <li>j. Pulmonary embolism</li> <li>k. Cardiogenic shock</li> </ul> </li> </ul>	Didactic; -Lectures -Clinical rounds -Seminars -Clinical rotations (service teaching)	-OSCE at the end of each year -log book & portfolio - MCQ examination at the second year -Oral and written exam
B. Mention the principles of :		
d Disturbances of the cardiac rhythm and all		
types of both tachycardias & bradycardias.		
e. Interrelation ship between the heart and other		
body systems.		
t. Drug and non drug therapy of different cardiac diseases.		
g. Central venous line placement		

h. Noninvasive mechanical ventilation	
i. Airway management	
j. Endotracheal intubation	
k. Hemodynamic monitoring	
C. State update and evidence based Knowledge of	
a Myocardial ischemia syndromes like chronic	
stable angina, acute coronary syndromes,	
coronary artery spasm, and others.	
b. Hypertensive emergencies	
c. Acute coronary syndromes	
d. Arrhythmias	
e. Pulmonary embolism	
f. Cardiogenic shock	
D. Memorize the facts and principles of the relevant	
basic and clinically supportive sciences related to	
Cardiovascular system	
E. Mention the basic ethical and medicolegal	
principles that should be applied in practice and are	
relevant to Cardiovascular system	
F. Mention the basics and standards of quality	
assurance to ensure good clinical practice in the field	
of Cardiovascular system	
G. Mention the ethical and scientific principles of med	
research methodology.	
H. State the impact of common health problems in the	
of Hepatology on the society and how good clinical pro-	
improve these problems.	

#### **D-Intellectual outcomes**

ILOs	Methods of	Methods of
	teaching/	Evaluation
	Learning	
A. Correlates the facts of relevant basic and	Clinical	Procedure/case
clinically supportive sciences with clinical	rounds	presentation
reasoning, diagnosis and management of common	Senior staff	Log book
diseases related to Cardiovascular system	experience	
B. Demonstrate an investigatory and analytic		
thinking (problem solving) approaches to common		
clinical situations related to Cardiovascular system		
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 Cardiovascular system		
D-Formulate management plans and alternative decisions in different situations in the field of the		
Cardiovascular system		

# **C-Practical skills (Patient Care)**

ILOs	Methods of	Methods of
	teaching/	Evaluation
	learning	
A. Obtain proper history and examine	-Didactic;	OSCE at the end
patients in caring and respectful behaviors.	-Lectures	of each year
	-Clinical rounds	-log book &
	-Seminars	portfolio
	-Clinical rotations	- One MCQ
	(service teaching)	examination at
		the second half of
		the second year
		and another one
		in the third year

<ul> <li>B. Order the following non invasive/invasive diagnostic procedures</li> <li>-Routine appropriate Lab investigations related to conditions mentioned in A.A</li> <li>-X ray chest</li> <li>-cardiac markers</li> <li>-ECG</li> </ul>	Clinical round with senior staff Observation Post graduate teaching Hand on workshops	-Procedure presentation - Log book - Chick list
C. Interpret the following non invasive/invasive diagnostic procedures -Routine appropriate Lab investigations related to conditions mentioned in A.A -X ray chest -cardiac markers -ECG Echocardiography Blood gases	Clinical round with senior staff	Procedure presentation - Log book - Chick list
<ul> <li>D. Perform the following non invasive/invasive Diagnostic and therapeutic procedures.</li> <li>-ECG</li> <li>-Echocardiography</li> <li>-Blood gases</li> <li>-CVP</li> </ul>	Clinical round with senior staff -Perform under supervision of senior staff	Procedure presentation - Log book - Chick list
<ul><li>E. Prescribe the following non invasive/invasive therapeutic procedures :</li><li>-Prescribe proper treatment for conditions in A.A</li></ul>	Clinical round with senior staff	<ul> <li>Procedure</li> <li>presentation</li> <li>Log book</li> <li>Chick list</li> </ul>
<ul><li>F. Carry out patient management plans for common conditions related to cardiology.</li><li>G. Use information technology to support patient care decisions and patient education in common clinical situations related to cardiology.</li></ul>	Clinical round with senior staff	

H-Provide health care services aimed at	
preventing health problems related to	
cardiology like:	
a. Myocardial ischemia syndromes like	
chronic stable angina, acute	
coronary syndromes, coronary	
artery spasm, and others.	
b. Hypertension and hypertensive	
heart diseases.	
I-Provide patient-focused care in common	
conditions related to cardiology while	
working with health care professionals,	
including those from other disciplines like:	
Conditions mentioned in A.A.	
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	Methods of
	teaching/	Evaluation
	Learning	
A. Perform practice-based improvement	-Case log	Procedure/case
activities using a systematic methodology (share	-Observation	presentation
in audit and risk management activities and use	and	-Log book and
logbook).	supervision	Portfolios
	-Written & oral	
	communication	
B. Appraises evidence from scientific	-Journal clubs	
studies(journal club)	- Discussions in	
	seminars and	
	clinical rounds	
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	Clinical rounds	
health care professionals including their	Senior staff	
evaluation and assessment.	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 Portfolios Chick list and
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 common problems related to cardiology	Clinical round Seminars	Clinical Exam
K. Write a report : -Patients medical report -Death report	Senior staff experience	Chick list
L. Council patients and families about: -Hypertension Myocardial ischemia -Congenital heart diseases	Clinical round with senior staff	

## Professionalism

ILOs	Methods of	Methods of
	teaching/	Evaluation
	learning	
M. Demonstrate respect, compassion, and	Observation	1. Objective
integrity; a responsiveness to the needs of	Senior staff	structured clinical
patients and society	experience	examination
	Case taking	2. Patient survey
N. Demonstrate a commitment to ethical		1. 360o global
principles including provision or withholding of		rating
clinical care, confidentiality of patient		
information, informed consent, business		
practices		
O. Demonstrate sensitivity and responsiveness		1. Objective
to patients' culture, age, gender, and		structured clinical
disabilities		examination
		2. 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	1. 360o global rating
Q. Practice cost-effective health care and resource allocation that does not compromise quality of care.		<ol> <li>Check list</li> <li>evaluation of</li> <li>live or</li> <li>recorded</li> <li>performance</li> </ol>
R. Assist patients in dealing with system complexities.		<ol> <li>360o global rating</li> <li>Patient survey</li> </ol>

# Unit (Module) 2 Nephrology and dialysis

# A-Knowledge and understanding

ILOs	Methods of	Methods of
	teaching/	Evaluation
	Learning	
A. Describe the etiology, clinical picture, diagnosis and	Didactic;	-OSCE at the
management of the following diseases and clinical	-Lectures	end of each
conditions:	-Clinical	year
a Glomerulonephritis	rounds	-log book &
b. Nephrotic syndrome	-Seminars	portfolio
c. Tubulo interstitial disease	-Clinical	- MCQ
d. Renal failure	rotations	examination
e. UTI	(service	-Oral and
f. Kidney in systemic disease.	teaching)	written exam
B. Mention the principles of :		
a. Renal vascular disease		
b. Dialysis		
C. State update and evidence based Knowledge of		
a Nephrotic syndrome		
b. Renal failure		
c. Kidney in systemic disease.		
D. Memorize the facts and principles of the relevant basic		
and clinically supportive sciences related to nephrology.		
E. Mention the basic ethical and medicolegal principles		
that should be applied in practice and are relevant to		
nephrology.		
F. Mention the basics and standards of quality assurance		
to ensure good clinical practice in the field of nephrology.		
G. Mention the ethical and scientific principles of medical		
research methodology.		
H. State the impact of common health problems in the field		
nephrology on the society and how good clinical practice		
improve these problems.		

#### **B-Intellectual outcomes**

ILOs	Methods of teaching/	Methods of Evaluation
	Learning	
A. Correlates the facts of relevant basic and	Clinical	Procedure/case
clinically supportive sciences with clinical	rounds	presentation
reasoning, diagnosis and management of common	Senior staff	Log book
diseases related to Nephrology.	experience	
B. Demonstrate an investigatory and analytic thinking (problem solving) approaches to common clinical situations related to Nephrology.		
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 Nephrology		
D-Formulate management plans and alternative decisions in different situations in the field of the Nephrology		

# **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 -Clinical rounds -Seminars -Clinical rotations (service teaching)	OSCE at the end of each year -log book & portfolio - One MCQ examination at the second half of the second year and another one in the
<ul> <li>B. Order the following non invasive/invasive diagnostic procedures</li> <li>Routine appropriate Lab investigations related to conditions mentioned in A.A:</li> <li>-Abdominal Ultrasonography</li> <li>-CT abdomen</li> <li>-urine analysis</li> <li>-blood gases</li> <li>-dialysis</li> </ul>	Clinical round with senior staff Observation Post graduate teaching Hand on workshops	-Procedure presentation - Log book - Chick list
<ul> <li>C. Interpret the following non invasive/invasive diagnostic procedures</li> <li>Routine appropriate Lab investigations related to conditions mentioned in A.A</li> <li>-chest X ray .</li> <li>-Abdominal Ultrasonography.</li> </ul>	Clinical round with senior staff	Procedure presentation - Log book - Chick list

-blood gases		
<ul> <li>D. Perform the following non invasive/invasive</li> <li>Diagnostic and therapeutic procedures.</li> <li>Abdominal Ultrasonography</li> <li>-urine analysis</li> <li>-blood gases</li> <li>-dialysis</li> </ul>	Clinical round with senior staff -Perform under supervision of senior staff	Procedure presentation - Log book - Chick list
<ul> <li>E. Prescribe the following non invasive/invasive therapeutic procedures :</li> <li>Prescribe proper treatment for conditions mentioned in A.A</li> <li>-Urinary catheter.</li> <li>-dialysis</li> </ul>	Clinical round with senior staff	<ul> <li>Procedure presentation</li> <li>Log book</li> <li>Chick list</li> </ul>
F. Carry out patient management plans for common conditions related to Nephrology.	Clinical round with senior staff	
G. Use information technology to support patient care decisions and patient education in common clinical situations related to Nephrology.		
health problems related to Nephrology.		
I-Provide patient-focused care in common conditions related to Nephrology. , while working with health care professionals, including those from other disciplines like: Conditions mentioned in A.A.		
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	Methods of
	teaching/	Evaluation
	Learning	
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	Procedure/case presentation -Log book and Portfolios
	-Written & oral communication	
B. Appraises evidence from scientific	-Journal clubs	
studies(journal club)	seminars and	
	clinical rounds	
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	Clinical rounds	
other health care professionals including their	Senior staff	
evaluation and assessment.	experience	

#### Interpersonal and Communication Skills

ILOs	Methods of teaching/	Methods of Evaluation
	Learning	
F. Maintain therapeutic and ethically sound	Simulations	Global rating
relationship with patients.	Clinical	Procedure/case
	round	presentation
	Seminars	Log book
	Lectures	Portfolios
	Case	Chick list
	presentation	and
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 common problems related to	Clinical	Clinical Exam
Nephrology.	round	
	Seminars	
K. Write a report :	Senior staff	Chick list
-Patients medical report	experience	
-Abdominal ultrasonography report		
-Death report		
L. Council patients and families about:	Clinical	
-Hereditary renal diseases.	round with	
	senior staff	

## Professionalism

ILOs	Methods of	Methods of
	teaching/	Evaluation
	Learning	
M. Demonstrate respect, compassion, and integrity;	Observation	1. Objective
a responsiveness to the needs of patients and society	Senior staff	structured
	experience	clinical
	Case taking	examination
		2. Patient
		survey
N. Demonstrate a commitment to ethical principles		1.3600
including provision or withholding of clinical care,		global
confidentiality of patient information, informed		rating
consent, business practices		
O. Demonstrate sensitivity and responsiveness to		1. Objective
patients' culture, age, gender, and disabilities		structured
		clinical
		examination
		2.3600
		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	1. 360o global rating
Q. Practice cost-effective health care and resource allocation that does not compromise quality of care.		1. Check list evaluation of live or recorded performance
R. Assist patients in dealing with system complexities.		<ol> <li>3600</li> <li>global rating</li> <li>Patient</li> <li>survey</li> </ol>
# Unit (Module) 3 Haematological Critical Care Unit

# A-Knowledge and understanding

teaching/ Evaluation	
learning	
<ul> <li>A. Describe the etiology, clinical picture, diagnosis and management of the following diseases and clinical conditions: <ul> <li>a. Anemias (Iron deficiency, Megaloblastic, Hemolytic)</li> <li>b. Hemoglobinopathies</li> <li>c. Bone marrow aplasia</li> <li>d. Myelodysplastic syndromes</li> <li>e. Acute leukemias</li> <li>f. Chronic leukemias</li> <li>j. Clotting disorders</li> <li>k. Thrombophilia (predisposition, causes)</li> <li>l. Abnormalities in Granulocytes (neutropenia, leukomoid reaction)</li> <li>m. Disorders of Bleeding (platelet function and number disorders) Vascular disorders</li> <li>n. Neutropenic patients</li> <li>p. Hypovolaemic shock</li> </ul></li></ul>	<sup>ຼ</sup> nd m
B. Mention the principles of :	
a. Blood transfusion	
c. Noninvasive mechanical ventilation	

d. Airway management	
e. Endotracheal intubation	
f. Hemodynamic monitoring	
C. State update and evidence based Knowledge of	
a. Anemias (Iron deficiency, Megaloblastic,	
Hemolytic)	
b. Acute leukemias	
c. Chronic leukemias	
d. Lymphomas	
e. Myeloproliferative disorder	
D. Memorize the facts and principles of the	
relevant basic and clinically supportive sciences	
related to Hematological diseases.	
E. Mention the basic ethical and medicolegal	
principles that should be applied in practice and	
are relevant to Hematological diseases.	
F. Mention the basics and standards of quality	
assurance to ensure good clinical practice in the	
field of Hematological diseases.	
G. Mention the ethical and scientific principles of m	
research methodology.	
H. State the impact of common health problems in	
the field of Hematological diseases 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 Hematological diseases	Clinical rounds Senior staff experience	Procedure/case presentation Log book
B. Demonstrate an investigatory and analytic thinking (problem solving) approaches to common clinical situations related to Hematological diseases		
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 Hematological diseases.		
D-Formulate management plans and alternative decisions in different situations in the field of the Hematological diseases.		

# **C-Practical skills (Patient Care)**

ILOs	Methods of teaching/	Methods of Evaluation
	learning	
A. Obtain proper history and examine patients in	-Didactic;	OSCE at the
caring and respectful behaviors.	-Lectures	end of each
	-Clinical	year
	rounds	-log book &
	-Seminars	portfolio
	-Clinical	- MCQ
	rotations	examination
	(service	
	teaching)	
B. Order the following non invasive/invasive	Clinical	-Procedure
diagnostic procedures	round with	presentation
Routine appropriate Laboratory investigations related	senior staff	- Log book
to conditions mentioned in A.A and A.B as	Observation	- Chick list
-CBC, Blood film	Post	
-Liver function tests	graduate	
- Abdominal Ultrasonography	teaching	
-CT abdomen	Hand on	
-Platelet function.	workshops	
-Coagulation profile.		
C. Interpret the following non invasive/invasive	Clinical	-Procedure
diagnostic procedures	round with	presentation
-Routine appropriate Lab investigations	senior staff	- Log book
related to conditions mentioned in A.A and		- Chick list
A.B		

D. Perform the following non invasive/invasive	Clinical	-Procedure
Diagnostic and therapeutic procedures.	round with	presentation
-Plasmapharesis	senior staff	- Log book
	-Perform	- Chick list
	under	
	supervision	
	of senior	
	staff	
E. Prescribe the following non invasive/invasive	Clinical	- Procedure
therapeutic procedures:	round with	presentation
-Prescribe proper treatment for conditions mentioned	senior staff	- Log book
in A.A and A.B		- Chick list
-Application of Intravenous cannula.		
F. Carry out patient management plans for common	Clinical	
conditions related to Hematological diseases.	round with	
	senior staff	
G. Use information technology to support patient care		
decisions and patient education in common clinical		
situations related to Hematological diseases.		
H-Provide health care services aimed at preventing		
health problems related to Hematological diseases.		
<u>like:</u>		
-Delayed diagnosis of neoplastic blood diseases.		
- Anemia.		
I-Provide patient-focused care in common conditions		
related to Hematological diseases. , while working		
with health care professionals, including those from		
other disciplines like:		
Conditions mentioned in A.A.		
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	Methods of
	teaching/	Evaluation
	Learning	
A. Perform practice-based improvement	-Case log	Procedure/case
activities using a systematic methodology (share	-Observation	presentation
in audit and risk management activities and use	and	-Log book and
logbook).	supervision	Portfolios
	-Written & oral	
	communication	
B. Appraises evidence from scientific	-Journal clubs	
studies(journal club)	- Discussions in	
	seminars and	
	clinical rounds	
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	Clinical rounds	
other health care professionals including their	Senior staff	
evaluation and assessment.	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 Portfolios Chick list and
<ul><li>G. Elicit information using effective nonverbal, explanatory, questioning, and writing skills.</li><li>H. Provide information using effective nonverbal,</li></ul>	•	
<ul><li>explanatory, questioning, and writing skills.</li><li>I. Work effectively with others as a member of a health care team or other professional group.</li></ul>		
J. Present a case in common problems related to Hematological diseases.	Clinical round Seminars	Clinical Exam
K. Write a report : -Patients medical report - Discharge report -Death report	Senior staff experience	Chick list
L. Council patients and families about: -Conditions mentioned in A.A - Hazards of blood transfusion -Haemolytic blood disease	Clinical round with senior staff	

#### Professionalism

ILOs	Methods of teaching/	Methods of Evaluation
M. Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society	Observation Senior staff experience Case taking	1. Objective structured clinical examination 2. Patient survey
N. Demonstrate a commitment to ethical principles including provision or withholding of clinical care, confidentiality of patient information, informed consent, business practices		1. 360o global rating
O. Demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities		<ol> <li>Objective structured clinical examination</li> <li>3600 global rating</li> </ol>

# 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	1. 360o global rating
Q. Practice cost-effective health care and resource allocation that does not compromise quality of care.		<ol> <li>Check list evaluation of live or recorded performance</li> </ol>
R. Assist patients in dealing with system complexities.		<ol> <li>3600 global rating</li> <li>Patient survey</li> </ol>

#### Unit (Module) 4 Endocrine , critical and diabetic emergency Unit

#### A-Knowledge and understanding

ILOs	Methods of	Methods of
	teaching/	Evaluation
	Learning	
A. Describe the etiology, clinical picture, diagnosis	Didactic;	-log book
and management of the following diseases and	Lectures	- one MCQ
clinical conditions:	Clinical	examination
a. Diabetes mellitus	rounds	at the
b. Thyroid and parathyroid diseases		second year
c. Adrenal gland diseases		-Oral and
d. Obesity		written
e. pituitary gland diseases		exam
f. Diabetes insipidus		
g. Short stature		
h. Diabetes insipidus		
i. Osteoporosis		
j. Growth disorder		
k. Ca homeostasis		
I. Endocrine Emergencies		
m.Update in endocrine disorders		
In critical care and diabetic emergency unit:		
1. Fellows will be able to access information and		
evaluate the medical literature.		
2. Fellows must demonstrate habits consistent		
with life-long learning.		
3. Fellows will demonstrate mastery of the basic		
and clinical science elements for systemic		
disorders, interventions and techniques		
including:		
a. Diabetic emergencies		
b. Cerebrovascular strock		

c. Thromboembolic disorders	
d. Uraemic encephalopathy	
e. Hypertensive emergencies	
f. Central venous line placement	
g. Noninvasive mechanical ventilation	
h. Airway management	
i. Endotracheal intubation	
j. Hemodynamic monitoring	
B. Mention the principles of :	
a. Central venous line placement	
b. Noninvasive mechanical ventilation	
c. Airway management	
d. Endotracheal intubation	
e. Hemodynamic monitoring	
C. State update and evidence based Knowledge of	
endocrinal diseases.	
D. Memorize the facts and principles of the relevant	
basic and clinically supportive sciences related to	
endocrinal diseases.	
E. Mention the basic ethical and medicolegal	
principles that should be applied in practice and are	
relevant to endocrinal diseases.	
F. Mention the basics and standards of quality	
assurance to ensure good clinical practice in the field	
of endocrinal diseases.	
G. Mention the ethical and scientific principles of med	
research methodology.	
H. State the impact of common health problems in the	
of endocrinology on the society and how good clinical	
practice improve these problems.	

#### **B-Intellectual outcomes**

ILOs	Methods of	Methods of
	teaching/	Evaluation
	Learning	
A. Correlates the facts of relevant basic and	Clinical	Procedure/case
clinically supportive sciences with clinical	rounds	presentation
reasoning, diagnosis and management of common	Senior staff	Log book
diseases related to endocrinal diseases.	experience	
B. Demonstrate an investigatory and analytic		
thinking (problem solving) approaches to common		
clinical situations related to endocrinal diseases.		
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 endocrinal diseases.		
D-Formulate management plans and alternative		
decisions in different situations in the field of the		
endocrinal diseases.		

# **C-Practical skills (Patient Care)**

ILOs	Methods of	Methods of
	teaching/	Evaluation
	learning	
A. Obtain proper history and examine patients in	-Didactic;	-log book
caring and respectful behaviors.	-Lectures	- One MCQ
	-Clinical	examination
	rounds	at the
	-Seminars	second half
	-Clinical	of the
	rotations	second year
	(service	
	teaching)	
B. Order the following non invasive/invasive	-Clinical	- Log book
diagnostic procedures	round with	- Chick list
-Routine appropriate Laboratory investigations	senior staff	
related to conditions mentioned in A.A .	Observation	
-Urine and stool analysis	Post	
	graduate	
-Measure the blood sugar.	teaching	
-Oltrasonography		
C. Interpret the following non invasive/invasive	Clinical	-Procedure
diagnostic procedures	round with	presentation
-Routine appropriate Lab investigations	senior staff	- Log book
related to conditions mentioned in A.A		- Chick list
- Liver function tests		
-Results of Urine analysis		
-Abdominal Ultrasonography.		
-kianey function test		
-Kandom blood sugar.		

D. Perform the following non invasive/invasive	Clinical	-Procedure
diagnostic and therapeutic procedures.	round with	presentation
- Blood sugar estimation	senior staff	- Log book
-Urinalysis	-Perform	- Chick list
-Application of intravenous cannula.	under	
-Abdominal US under supervision.	supervision	
-Insulin administration.	of senior	
	staff	
E. Prescribe the following non invasive/invasive	Clinical	- Procedure
therapeutic procedures:	round with	presentation
-Prescribe proper treatment for conditions mentioned	senior staff	- Log book
in A.A		- Chick list
E Carry out natient management plans for common	Clinical	
conditions related to Endocrinal diseases.	round with	
	senior staff	
G. Use information technology to support patient care		
decisions and patient education in common clinical		
situations related to Endocrinal diseases.		
H-Provide health care services aimed at preventing		
health problems related to Endocrinal diseases.		
I-Provide patient-focused care in common conditions		
related to Endocrinal diseases., while working with		
health care professionals, including those from other		
disciplines like:		
Conditions mentioned in A.A.		
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	Methods of
	teaching/	Evaluation
	Learning	
A. Perform practice-based improvement	-Case log	Procedure/case
activities using a systematic methodology (share	-Observation	presentation
in audit and risk management activities and use	and	-Log book and
logbook).	supervision	Portfolios
	-Written & oral	
	communication	
B. Appraises evidence from scientific	-Journal clubs	
studies(journal club)	- Discussions in	
	seminars and	
	clinical rounds	
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	Clinical rounds	
other health care professionals including their	Senior staff	
evaluation and assessment.	experience	

# Interpersonal and Communication Skills

ILOs	Methods of teaching/	Methods of Evaluation
	Learning	
F. Maintain therapeutic and ethically sound	Simulations	Global rating
relationship with patients.	Clinical	Procedure/case
	round	presentation
	Seminars	Log book and
	Lectures	Portfolios
	Case	Chick list
	presentation	
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 common problems related to	Clinical	Clinical Exam
Endocrinal diseases.	round	
	Seminars	
K. Write a report :	Senior staff	Chick list
-Patients medical report	experience	
-Abdominal Ultrasonography report		
- Discharge report		
-Death report		
L. Council patients and families about:	Clinical	
-Diabetes.	round with	
-Diabetic foot.	senior staff	

#### Professionalism

ILOs	Methods of teaching/	Methods of Evaluation
	Learning	
M. Demonstrate respect, compassion, and integrity;	Observation	1. Objective
a responsiveness to the needs of patients and society	Senior staff	structured
	experience	clinical
	Case taking	examination
		2. Patient
		survey
N. Demonstrate a commitment to ethical principles		1.3600
including provision or withholding of clinical care,		global
confidentiality of patient information, informed		rating
consent, business practices		
O. Demonstrate sensitivity and responsiveness to		1. Objective
patients' culture, age, gender, and disabilities		structured
		clinical
		examination
		2. 3600
		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	1. 360o global rating
Q. Practice cost-effective health care and resource allocation that does not compromise quality of care.		<ol> <li>Check list evaluation of live or recorded performance</li> </ol>
R. Assist patients in dealing with system complexities.		<ol> <li>3600 global rating</li> <li>Patient survey</li> </ol>

# Unit (Module) 5 Gastroenterology, hepatology and GIT critical care unit

#### A-Knowledge and understanding

ILOs	Methods of	Methods of
	teaching/	Evaluation
	Learning	
A. Describe the etiology, clinical picture, diagnosis	Didactic;	-OSCE at
and management of the following diseases and	Lectures	the end of
clinical conditions:	Seminars	each year
a. Malabsorption		-log book &
b. Acute and chronic diarrhea		portfolio
c. Acid pepsin disorder and peptic ulcer		- one MCQ
d. GIT malignancy		examination
e. GIT motility disorders		at the
f. Esophageal disorders		second year
g. Acute and chronic hepatitis		-Oral and
h. Liver cirrhosis		written
i. Hepatic encephalopathy		exam
j. NASH		
k. Hepatic malignancy		
<ol> <li>Acute and chronic pancreatitis</li> </ol>		
<b>m.</b> Tumors of the pancreas		
<ul> <li>n. Hepatic encephalopathy</li> </ul>		
<ul> <li>Acute gastrointestinal bleeding</li> </ul>		
<ul> <li>p. Acute pancreatitis</li> </ul>		
<ul><li>q. Hepatorenal syndrome</li></ul>		
B. Mention the principles of :		
1. Cholangitis		
2. Medical acute abdomen		
3. Acute liver cell failure.		
4. Central venous line placement		
5. Noninvasive mechanical ventilation		
6. Airway management		

7. Endotracheal intubation	
8. Hemodynamic monitoring	
C. State update and evidence based Knowledge of	
a. Malabsorption	
b. Acute and chronic diarrhea	
c. GIT malignancy	
d. GIT motility disorders	
e. Acute and chronic hepatitis	
f. Liver cirrhosis	
g. Hepatic encephalopathy	
h. NASH	
i. Hepatic malignancy	
j. Acute and chronic pancreatitis	
k. Tumors of the pancreas	
I. Jaundice	
m.Ascites	
D. Memorize the facts and principles of the relevant	
basic and clinically supportive sciences related to	
gastroenterology and hepatic diseases.	
E. Mention the basic ethical and medicolegal	
principles that should be applied in practice and are	
relevant to gastroenterology and hepatic diseases.	
F. Mention the basics and standards of quality	
assurance to ensure good clinical practice in the field	
of gastroenterology and hepatic diseases.	
G. Mention the ethical and scientific principles of med	
research methodology.	
H. State the impact of common health problems in the	
of gastroenterology and hepatic diseases on the socie	
how good clinical practice improve these problems.	

#### **B-Intellectual outcomes**

ILOs	Methods of	Methods of
	Learning	Evaluation
A. Correlates the facts of relevant basic and clinically supportive sciences with clinical reasoning, diagnosis and management of common diseases related to gastroenterology and hepatic diseases.	-Clinical rounds -Senior staff experience	Procedure/case presentation Log book
B. Demonstrate an investigatory and analytic thinking (problem solving) approaches to common clinical situations related to gastroenterology and hepatic diseases.		
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 gastroenterology and hepatic diseases.		
decisions in different situations in the field of the gastroenterology and hepatic diseases.		

# **C-Practical skills (Patient Care)**

ILOs	Methods of teaching/	Methods of Evaluation
A. Obtain proper history and examine patients in caring and respectful behaviors.	-Didactic; -Lectures -Clinical rounds -Seminars -Clinical rotations (service teaching)	-OSCE at the end of each year -log book & portfolio - One MCQ examination at the second half of the
B. Order the following non invasive/invasive diagnostic procedures Stool analysis Liver function test Chest X ray Barium studies Abdominal US Abdominal CT & MRI Upper and lower GI endoscopy GIT motility study	Clinical round with senior staff Observation Post graduate teaching	-Procedure presentation - Log book - Chick list
<ul> <li>C. Interpret the following non invasive/invasive diagnostic procedures</li> <li>-Results of Routine appropriate Lab investigations related to conditions mentioned in A.A.</li> <li>-Abd. Ultrasound</li> </ul>		

D. Perform the following non invasive and invasive	Clinical	-Procedure
diagnostic and therapeutic procedures.	round with	presentation
-Abdominal US .	senior staff	- Log book
-Liver biopsy under supervision	-Perform	- Chick list
-Abdominal Paracentesis	under	
-Nasogastric tube and sungestaken tube application	supervision	
-Central venous catheter	of senior	
	staff	
E. Prescribe the following non invasive and invasive	Clinical	- Procedure
therapeutic procedures:	round with	presentation
-Application of Intravenous catheter.	senior staff	- Log book
-Prescribe proper treatment for conditions mentioned	Perform	- Chick list
in A.A	under	
-Proper drug regimens for	supervision	
GIT diseases	of senior	
Abdominal paracentesis	staff	
F. Carry out patient management plans for common	Clinical	
conditions related to Gastroenterology and	round with	
hepatology.	senior staff	
G. Use information technology to support patient care		
decisions and patient education in common clinical		
situations related to Gastroenterology and		
hepatology.		
H. Provide health care services aimed at preventing		
health problems related to Gastroenterology and		
hepatology		
I. Provide patient-focused care in common conditions		
related to Gastroenterology and hepatology		
I. Write competently all forms of patient charts and		
sheets including reports evaluating these charts		
and sneets (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	Methods of
	teaching/	Evaluation
	Learning	
A. Perform practice-based improvement	-Case log	Procedure/case
activities using a systematic methodology (share	-Observation	presentation
in audit and risk management activities and use	and	-Log book and
logbook).	supervision	Portfolios
	-Written & oral	
	communication	
B. Appraises evidence from scientific	-Journal clubs	
studies(journal club)	- Discussions in	
	seminars and	
	clinical rounds	
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	Clinical rounds	
other health care professionals including their	Senior staff	
evaluation and assessment.	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	Global rating Procedure/case presentation Log book Portfolios 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 common problems related to hepatology and gastroenterology	Clinical round Seminars	Clinical Exam
K. Write a report : -Patients medical report -Abdominal Ultrasonography report - Discharge report -Death report	Senior staff experience	Chick list
L. Council patients and families about diseases related to Gastroenterology and hepatology.	Clinical round with senior staff	

#### Professionalism

ILOs	Methods of teaching/	Methods of Evaluation
	Learning	
M. Demonstrate respect, compassion, and integrity;	Observation	1. Objective
a responsiveness to the needs of patients and society	Senior staff	structured
that supersedes self-interest; and demonstrate	experience	clinical
sensitivity and responsiveness to patients' culture,	Case taking	examination
age, gender, and		2. Patient
		survey
N. Demonstrate a commitment to ethical principles		1.3600
including provision or withholding of clinical care,		global
confidentiality of patient information, informed		rating
consent, business practices		
O. Demonstrate sensitivity and responsiveness to		1. Objective
patients' culture, age, gender, and disabilities		structured
		clinical
		examination
		2. 3600
		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	1. 360o global rating
Q. Practice cost-effective health care and resource allocation that does not compromise quality of care.		<ol> <li>Check list evaluation of live or recorded performance</li> </ol>
R. Assist patients in dealing with system complexities.		<ol> <li>3600 global rating</li> <li>Patient survey</li> </ol>

# Unit (Module)6 Rheumatology, and muscloskeletal disorders

# A-Knowledge and understanding

ILOs	Methods of teaching/	Methods of Evaluation
	Learning	
<ul> <li>A. Describe the etiology, clinical picture, diagnosis and management of the following diseases and clinical conditions:</li> <li>a. Rheumatoid arthritis</li> <li>b. SLE</li> <li>c. Crystal induced arthropathy</li> <li>d. Systemic sclerosis</li> <li>e. Dermatomyositis and polymyositis</li> <li>f. Osteoarthritis</li> <li>g. Seronegative arthropathy</li> <li>h. Arthritis in systemic diseases</li> <li>i. Infective arthritis</li> <li>j. Antiphospholipid syndrome</li> </ul>	Didactic; Lectures Seminars	-OSCE at the end of each year -log book & portfolio - one MCQ examination at the second year -Oral and written exam
B. Mention the principles of : -Hematological and gastroenterology changes in Rheumatologic diseases.	Didactic; Lectures Seminars	-OSCE at the end of each year -log book & portfolio - one MCQ examination at the second year -Oral and written exam

C. State update and evidence based Knowledge of	
1. Rheumatoid arthritis	
2. SLE	
3. Arthritis in systemic diseases	
4. Infective arthritis	
5. Antiphospholipid syndrome	
D. Memorize the facts and principles of the relevant	
basic and clinically supportive sciences related to	
rheumatologic diseases.	
E. Mention the basic ethical and medicolegal	
principles that should be applied in practice and are	
relevant to rheumatologic diseases	
F. Mention the basics and standards of quality	
assurance to ensure good clinical practice in the field	
of rheumatologic diseases	
G. Mention the ethical and scientific principles of med	
research methodology.	
H. State the impact of common health problems in the	
of Rheumatology on the society and how good clinical	
practice improve these problems.	

#### **B-Intellectual outcomes**

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

# C-Practical skills (Patient Care)

ILOs	Methods of teaching/	Methods of Evaluation
	learning	
A. Obtain proper history and examine patients in	-Didactic;	-OSCE
caring and respectful behaviors.	-Lectures	-log book &
	-Clinical	portfolio
	rounds	-Clinical
	-Seminars	exam in this
	-Clinical	branch.
	rotations	
	(service	
	teaching)	
B. Order the following non invasive/invasive	-Clinical	-Procedure
diagnostic procedures:	round with	presentation
-Routine appropriate Lab investigations	senior staff	- Log book
related to conditions mentioned in A.A	Observation	- Chick list
-ECG	-Post	
-Chest X-ray	graduate	
- ESR, blood culture.	teaching	
-Echocardiography.		
-Blood picture		
-Blood chemistry		
-Metabolic profile:[i.e. serum electrolytes]		
-Endocrinal profile		
Rheumatoid factor, ANF, LE cells.		
C. Interpret the following non invasive/invasive	Clinical	Procedure
alagnostic proceaures	round with	presentation
-Routine appropriate Lab investigations	senior staff	- LOG DOOK
related to conditions mentioned in A.A		- CNICK list
-Chest X-ray		

- ESR, blood culture.	
-Echocardiography.	
-Blood picture	
-Blood chemistry	
-Metabolic profile:[i.e. serum electrolytes]	
-Endocrinal profile	
Rheumatoid factor, ANF, LE cells.	

#### D-General Skills Practice-Based Learning and Improvement

	Methods of	Methods of
	teeshing/	
	teaching/	Evaluation
	Learning	
A. Perform practice-based improvement	-Case log	Procedure/case
activities using a systematic methodology (share	-Observation	presentation
in audit and risk management activities and use	and	-Log book and
logbook).	supervision	Portfolios
	-Written & oral	
	communication	
B. Appraises evidence from scientific	-Journal clubs	
studies(journal club)	- Discussions in	
	seminars and	
	clinical rounds	
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	Clinical rounds	
other health care professionals including their	Senior staff	
evaluation and assessment.	experience	

# Interpersonal and Communication Skills

ILOs	Methods of teaching/	Methods of Evaluation
	Learning	
F. Maintain therapeutic and ethically sound	Clinical	Global rating
relationship with patients.	round	Procedure/case
	Seminars	presentation
	Lectures	Log book
	Case	Portfolios
	presentation	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 common problems related to	Clinical	Clinical Exam
rheumatologic diseases.	round	
	Seminars	
K. Write a report :	Senior staff	Chick list
-Patients medical report	experience	
- Discharge report		
-Death report		
L. Council patients and families about:	Clinical	
Condition mentioned in A.A	round with	
	senior staff	

#### Professionalism

ILOs	Methods of teaching/	Methods of Evaluation
	Learning	
M. Demonstrate respect, compassion, and integrity;	Observation	1. Objective
a responsiveness to the needs of patients and society	Senior staff	structured
	experience	clinical
	Case taking	examination
		2. Patient
		survey
N. Demonstrate a commitment to ethical principles		1.3600
including provision or withholding of clinical care,		global
confidentiality of patient information, informed		rating
consent, business practices		
O. Demonstrate sensitivity and responsiveness to		1. Objective
patients' culture, age, gender, and disabilities		structured
		clinical
		examination
		2. 3600
		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	1. 360o global rating
Q. Practice cost-effective health care and resource allocation that does not compromise quality of care.		1. Check list evaluation of live or recorded performance
R. Assist patients in dealing with system complexities.		<ol> <li>3600 global rating</li> <li>Patient survey</li> </ol>
# Unit (Module)7 CHEST DISEASES

# A-Knowledge and understanding

ILOs	Methods teaching/ Learning	of	Methods of Evaluation
<ul> <li>A. Describe the etiology, clinical picture, diagnosis and management of the following diseases and clinical conditions: <ul> <li>a. COPD</li> <li>b. Lung cancer</li> <li>c. Pleural effusion</li> <li>d. Interstitial pulmonary fibrosis</li> </ul> </li> </ul>	Didactic; Lectures Seminars		-OSCE at the end of each year -log book & portfolio - one MCQ examination at the second year -Oral and written exam
B. Mention the principles of : a. Respiratory failure			
<ul> <li>C. State update and evidence based Knowledge of :</li> <li>a. COPD</li> <li>b. Lung cancer</li> <li>D. Memorize the facts and principles of the relevant</li> </ul>			
basic and clinically supportive sciences related to Chest.			
E. Mention the basic ethical and medicolegal principles that should be applied in practice and are relevant to Chest.			
F. Mention the basics and standards of quality			

assurance to ensure good clinical practice in the field	
of Chest.	
G. Mention the ethical and scientific principles of med	
research methodology.	
H. State the impact of common health problems in the	
of Chest on the society and how good clinical practice	
improve these problems.	

# **B-Intellectual outcomes**

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

# **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 -Clinical rounds -Seminars -Clinical rotations (service teaching)	-OSCE at the end of each year -log book & portfolio - One MCQ examination at the second half of the second year
<ul> <li>B. Order the following non invasive/invasive diagnostic procedures</li> <li>Routine appropriate Lab investigations related to conditions mentioned in A.A</li> <li>ECG</li> <li>Chest X-ray <ul> <li>ESR, blood culture.</li> <li>Echocardiography.</li> </ul> </li> <li>Blood picture</li> <li>Blood chemistry</li> <li>Sputum culture</li> <li>chest CT SCAN</li> <li>Bronchoscope</li> </ul>	Clinical round with senior staff Observation Post graduate teaching	-Procedure presentation - Log book - Chick list
<ul> <li>C. Interpret the following non invasive/invasive diagnostic procedures</li> <li>Routine appropriate Lab investigations related to conditions mentioned in A.A</li> <li>-ECG</li> </ul>	Clinical round with senior staff	-Procedure presentation - Log book - Chick list

-Chest X-ray - ESR, blood culture. -Echocardiography. -Blood picture		
-Blood chemistry -Sputum culture		
<ul> <li>D. Prescribe the following non invasive/invasive therapeutic procedures:</li> <li>-Prescribe proper treatment for conditions mentioned in A.A</li> </ul>	Clinical round with senior staff Perform under supervision of senior staff	<ul> <li>Procedure presentation</li> <li>Log book</li> <li>Chick list</li> </ul>
E. Carry out patient management plans for common conditions related to Chest.	Clinical round with senior staff	
F. Use information technology to support patient care decisions and patient education in common clinical situations related to Chest.		
G. Provide health care services aimed at preventing health problems related to Chest.		
H. Provide patient-focused care in common conditions related Chest., while working with health care professionals, including those from other disciplines like: Conditions mentioned in A.A.		
I. 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**

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

# Interpersonal and Communication Skills

ILOs	Methods of teaching/ Learning	Methods of Evaluation
F. Maintain therapeutic and ethically sound relationship with patients.	Clinical round Seminars Lectures Case presentation	Global rating Procedure/case presentation Log book Portfolios 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 common problems related to chest diseases	Clinical round Seminars	Clinical Exam

# Professionalism

ILOs	Methods of	Methods of
	teaching/	Evaluation
	Learning	
M. Demonstrate respect, compassion, and integrity;	Observation	1. Objective
a responsiveness to the needs of patients and society	Senior staff	structured
	experience	clinical
	Case taking	examination
		2. Patient
		survey
N. Demonstrate a commitment to ethical principles		1.3600
including provision or withholding of clinical care,		global
confidentiality of patient information, informed		rating
consent, business practices		
O. Demonstrate sensitivity and responsiveness to		1. Objective
patients' culture, age, gender, and disabilities		structured
		clinical
		examination
		2. 3600
		global
		rating

### **Systems-Based Practice**

ILOs	Methods of teaching/ Learning	Methods of Evaluation
P. Work effectively in relevant health care delivery	Observation	1. 3600
settings and systems.	Senior staff	global rating
	experience	
Q. Practice cost-effective health care and resource allocation that does not compromise quality of care.		1. Check list evaluation of live or recorded performance
R. Assist patients in dealing with system complexities.		<ol> <li>360o</li> <li>global rating</li> <li>Patient</li> <li>survey</li> </ol>

# Unit (Module)8 Neurology

# A-Knowledge and understanding

ILOs	Methods of teaching/ Learning	Methods of Evaluation
<ul> <li>A. Describe the etiology, clinical picture, diagnosis and management of the following diseases and clinical conditions:</li> <li>Stroke</li> <li>coma</li> <li>Neuropathy</li> <li>Myopathy and neuromuscular junctional disorder</li> <li>Infections of nervous system</li> </ul>	Didactic; Lectures Seminars	-OSCE at the end of each year -log book & portfolio - one MCQ examination at the second year -Oral and written exam
<ul> <li>B. Mention the principles of :</li> <li>-Anatomic Principles of central and peripheral nervous system</li> <li>Physiology of neurological reflexes and their centers</li> <li>-Interpretation of investigations as CT brain.</li> <li>Involuntary movement</li> <li>C. State update and evidence based Knowledge of</li> </ul>		
1-Stroke 2-Coma 3-Neuropathy		
D. Memorize the facts and principles of the relevant basic and clinically supportive sciences related to neurological disorders related to internal medicine		

E. Mention the basic ethical and medicolegal principles that should be applied in practice and are relevant to neurological disorders related to internal medicine	
F. Mention the basics and standards of quality assurance to ensure good clinical practice in the field of neurological disorders.	
G. Mention the ethical and scientific principles of medical research methodology.	
H. State the impact of common health problems in the field neurology on the society and how good clinical practice improve these problems.	

# **B-Intellectual outcomes**

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

# C-Practical skills (Patient Care)

ILOs	Methods of	Methods of
	teaching/	Evaluation
	learning	
A. Obtain proper history and examine patients in	-Didactic;	-OSCE
caring and respectful behaviors.	-Lectures	-log book &
	-Clinical	portfolio
	rounds	-Clinical
	-Seminars	exam in this
	-Clinical	branch.
	rotations	
	(service	
	teaching)	
B. Order the following non invasive/invasive	-Clinical	-Procedure
diagnostic procedures:	round with	presentation
-Routine appropriate Lab investigations	senior staff	- Log book
related to conditions mentioned in A.A	Observation	- Chick list
- CT and MRI brain	-Post	
-ECG	graduate	
-Blood chemistry	teaching	
- Serum electrolytes		
-EEG		
C. Interpret the following non invasive/invasive	Clinical	-Procedure
diagnostic procedures	round with	presentation
- ECG	senior staff	- Log book
-Blood chemistry		- Chick list
- Serum electrolytes		
-		

## **D-General Skills**

### **Practice-Based Learning and Improvement**

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

# Interpersonal and Communication Skills

ILOs	Methods of teaching/	Methods of Evaluation
F. Maintain therapeutic and ethically sound relationship with patients.	Clinical round Seminars Lectures Case presentation	Global rating Procedure/case presentation Log book Portfolios 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 common problems related to neurological diseases	Clinical round Seminars	Clinical Exam
K. Write a report : -Patients medical report in ICU - Discharge report -Death report	Senior staff experience	Chick list
L. Council patients and families about the conditions mentioned in A,A	Clinical round with senior staff	

# Professionalism

ILOs	Methods of	Methods of	
	teaching/	Evaluation	
	learning		
M. Demonstrate respect, compassion, and	Observation	1. Objective	
integrity; a responsiveness to the needs of	Senior staff	structured	
patients and society	experience	clinical	
	Case taking	examination	
		2. Patient survey	
N. Demonstrate a commitment to ethical		1. 360o global	
principles including provision or withholding of		rating	
clinical care, confidentiality of patient			
information, informed consent, business practices			
O. Demonstrate sensitivity and responsiveness to		1. Objective	
patients' culture, age, gender, and disabilities		structured	
		clinical	
		examination	
		2. 360o global	
		rating	

# Systems-Based Practice

ILOs	Methods of teaching/ Learning	Methods of Evaluation
P. Work effectively in relevant health care delivery	Observation	1. 3600
settings and systems.	Senior staff	global rating
	experience	
Q. Practice cost-effective health care and resource		1. Check list
allocation that does not compromise quality of care.		evaluation
		of live or
		recorded
		performance
R. Assist patients in dealing with system		1. 3600
complexities.		global rating
		2. Patient
		survev

# Unit (Module)9 Radiology

# A-Knowledge and understanding

ILOs	Methods of	Methods of
	teaching/	Evaluation
	Learning	
A- Describe the anatomic and pathological entity of:	Didactic;	-OSCE at
a-X-ray of the bone	Lectures	the end of
b-Plain urinary tract with and without contrast.	Seminars	each year
c-Barium swallow, meal and enema.		-log book &
d-Ultrasonography of the abdomen.		portfolio
e-Computed tomography		-Oral
B. Mention the basic ethical and medicolegal principles		
that should be applied in practice and are relevant to		
related to Radiology.		
C. Mention the basics and standards of quality		
assurance to ensure good clinical practice in the field		
of Radiology.		
D. Mention the ethical and scientific principles of		
medical research methodology.		

### **B-Intellectual outcomes**

ILOs	Methods of	Methods of
	teaching/	Evaluation
	Learning	
A. Correlates the facts of relevant basic and	-Clinical	-Logbook and
clinically supportive sciences with clinical	rounds	Portfolios
reasoning, diagnosis and management of common	Senior staff	-Procedure and
diseases related to internal medicine	experience	case
		presentation
B. Demonstrate an investigatory and analytic		
thinking (problem solving) approaches to common		
clinical situations related to internal medicine		
C. Design and present seminars in Radiology		
related to internal medicine		

# C-Practical skills (Patient Care)

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Obtain proper history and examine patients in	-Didactic;	-OSCE
caring and respectful behaviors.	-Lectures	-log book &
	-Clinical	portfolio
	rounds	-Oral Exam.
	-Seminars	
	-Clinical	
	rotations	
	(service	
	teaching)	
B. Order the following non invasive/invasive	Clinical	-Procedure
diagnostic procedures	round with	presentation
a-X-ray of the bone	senior staff	- Log book
b-Plain urinary tract with and without contrast.	Observation	- Chick list
c-Barium swallow, meal and enema.	Post	
d-Ultrasonography of the abdomen.	graduate	
e-Computed tomography	teaching	
C. Interpret the following non invasive/invasive	Clinical	-Procedure
diagnostic procedures	round with	presentation
-	senior staff	- Log book
X-ray of the bone		- Chick list
b-Plain urinary tract with and without contrast.		
c-Barium swallow, meal and enema.		
d-Ultrasonography of the abdomen.		

### **D-General Skills**

#### **Practice-Based Learning and Improvement**

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

# Interpersonal and Communication Skills

ILOs	Methods of	Methods of
	Learning	Evaluation
F. Maintain therapeutic and ethically sound	Clinical	Global rating
relationship with patients.	round	Procedure/case
	Seminars	presentation
	Lectures	Log book
	Case	Portfolios
	presentation	Chick list
G. Elicit 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 seminar in common problems related to	Clinical	Clinical Exam
general diseases	round	
	Seminars	
K. Write a report :	Senior staff	Chick list
-Patients X ray report.	experience	
-Abdominal Ultrasonography report		
L. Council patients and families about:	Clinical	
-Result of radiological investigation.	round with	
	senior staff	

# Professionalism

ILOs	Methods of teaching/	Methods of Evaluation
	Learning	
M. Demonstrate respect, compassion, and integrity;	Observation	1. Objective
a responsiveness to the needs of patients and society	Senior staff	structured
	experience	clinical
	Case taking	examination
		2. Patient
		survey
N. Demonstrate a commitment to ethical principles		1.3600
including provision or withholding of clinical care,		global
confidentiality of patient information, informed		rating
O. Demonstrate sensitivity and responsiveness to		1. Objective
patients' culture, age, gender, and disabilities		structured
		clinical
		examination
		2. 3600
		global
		rating

#### **Systems-Based Practice**

ILOs	Methods of	Methods of
	teaching/	Evaluation
	Learning	
P. Work effectively in relevant health care delivery	Observation	1. 3600
settings and systems.	Senior staff	global rating
	experience	
Q. Practice cost-effective health care and resource		1. Check list
allocation that does not compromise quality of care.		evaluation
		of live or
		recorded
		performance

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

# Time Schedule: Second part

Торіс		Covered	l ILOs		
	Knowledge A	Intellectual B	Practical skill C	General Skills D	
Unit 1 Cardiovascular and its critical care					
- Myocardial ischemia syndromes like chronic stable angina, acute coronary syndromes, coronary artery spasm, and others.	A,C,D-H	A-D	А,,В,С,Н	A-R	
Hypertension and hypertensive heart diseases.	A,C,D-H	A-D	А,,В,С,Н	A-R	
Rheumatic fever and rheumatic heart diseases.	A,C,D-H	A-D	A-J	A-K,M-R	
Different pericardial diseases, whether acute or chronic.	A,D-H	A-D	A-J	A-K, M-R	
Acute and chronic diseases of the myocardial muscle.	A,D-H	A-D	А,,В,С,Н	A-K, M-R	
Coma	A,D,-H	A-D	A-J	A-R	
Hypertensive emergencies	A,C,D-H	A-D	A,,B,C,H	A-R	
Acute coronary syndromes	A,CD-H	A-D	A,,B,C,H	A-K, M-R	
Arrhythmias	А,С,-Н	A-D	A-J	A-K, M-R	
Pulmonary embolism	A,C,D-H	A-D	A-J	A-K, M-R	
Cardiogenic shock	A,D-H	A-D	A-J	A-L, M-R	

Disturbances of the	В, D-Н	A-D	A-J	A-L, M-R
cardiac rhythm and all				
types of both tachycardias				
& bradycardias.				
Interrelation ship between	B,D-H	A-D	A-J	A-L, M-R
the heart and other body				
systems.				
Drug and non drug	B,D-H	A-D	A-J	A-K, M-R
therapy of different				
cardiac diseases.				
Central venous line	B,D-H	A-D	A-J	A-K, M-R
placement				
Noninvasive mechanical	B,D-H	A-D	A-J	A-K, M-R
ventilation				
Airway management	B,D-H	A-D	A-J	A-K, M-R
Endotracheal intubation	B,D-H	A-D	A-J	A-K, M-R
Hemodynamic monitoring	B,D-H	A-D	A-J	A-K, M-R
Disturbances of the	B,D-H	A-D	A-J	A-K, M-R
cardiac rhythm and all				
types of both tachycardias				
& bradycardias.				
Interrelation ship between	B,D-H	A-D	A-J	A-K, M-R
the heart and other body				
systems.				
Drug and non drug	B,D-H	A-D	A-J	A-K, M-R
therapy of different				
cardiac diseases.				
Central venous line	B,D-H	A-D	A-J	A-K, M-R
placement				
Noninvasive mechanical	B,D-H	A-D	A-J	A-K, M-R
ventilation				
Airway management	B,D-H	A-D	A-J	A-K, M-R
Endotracheal intubation	B,D-H	A-D	A-J	A-K, M-R
Hemodynamic monitoring	B,D-H	A-D	A-J	A-K, M-R

# **Unit 2 Nephrology and dialysis**

Glomerulonephritis	A, D-H	A-D	A-J	A-R
Nephrotic syndrome	A,C, D-H	A-D	A-J	A-R
Tubulo interstitial disease	A, D-H	A-D	A-J	A-R
Renal failure	A,C, D-H	A-D	A-J	A-R
UTI	А <i>,</i> D-Н	A-D	A-J	A-R
Kidney in systemic disease.	A,C, D-H	A-D	A-J	A-R
Renal vascular disease	A, D-H	A-D	A-J	A-R
Dialysis	В <i>,</i> D-Н	A-D	A-J	A-R

# **Unit 3 Haematological and Critical Care Unit**

Anemias (Iron deficiency,	A,C,D-H	A-D	A-J	A-R
Megaloblastic, Hemolytic)				
Hemoglobinopathies	A,C,D-H	A-D	A-J	A-R
Bone marrow aplasia	A,C,D-H	A-D	A-J	A-R
Myelodysplastic	A,D-H	A-D	A-J	A-R
syndromes				
Acute leukemias	A,C,D-H	A-D	A-J	A-R
Chronic leukemias	A,C,D-H	A-D	A-J	A-R
Lymphomas	A,C,D-H	A-D	A-J	A-R
Myeloproliferative	A,C,D-H	A-D	A-J	A-R
disorders				
Plasma cell disorders	A,D-H	A-D	A-J	A-R
(Multiple myeloma)				
Clotting disorders	A,D-H	A-D	A-J	A-R
Thrombophilia	A,D-H	A-D	A-J	A-R
(predisposition, causes)				
Abnormalities in	A,D-H	A-D	A-J	A-R

Granulocytes (neutropenia, leukomoid reaction)				
Disorders of Bleeding (platelet function and number disorders) Vascular disorders	A,D-H	A-D	A-J	A-R
Neutropenic patients	A,D-H	A-D	A-J	A-R
Critically thrombocytopenic patients	A,D-H	A-D	A-J	A-R
Hypovolaemic shock	A,D-H	A-D	A-J	A-R
Blood transfusion	В <b>,D-Н</b>	A-D	A-J	A-R
Central venous line placement	В <b>,D-Н</b>	A-D	A-J	A-R
Noninvasive mechanical ventilation	В <b>,D-Н</b>	A-D	A-J	A-R
Airway management	В <b>,D-Н</b>	A-D	A-J	A-R
Endotracheal intubation	В <b>,D-Н</b>	A-D	A-J	A-R
Hemodynamic monitoring	В <b>,D-Н</b>	A-D	A-J	A-R

# $Unit\ 3$ Endocrine , critical and diabetic emergency Unit

Diabetes mellitus	А, С-Н	A-D	A-J	A-R
Thyroid and parathyroid	А, С-Н	A-D	A-J	A-R
diseases				
Adrenal gland diseases	А, С-Н	A-D	A-J	A-R
Obesity	А, С-Н	A-D	A-J	A-R
pituitary gland diseases	А, С-Н	A-D	A-J	A-R
Diabetes insipidus	А, С-Н	A-D	A-J	A-R
Short stature	А, С-Н	A-D	A-J	A-R
Diabetes insipidus	А, С-Н	A-D	A-J	A-R
Osteoporosis	А, С-Н	A-D	A-J	A-R
Growth disorder	А, С-Н	A-D	A-J	A-R

Ca homeostasis	А, С-Н	A-D	A-J	A-R
Endocrine Emergencies	А, С-Н	A-D	A-J	A-R
Update in endocrine	А, С-Н	A-D	A-J	A-R
disorders				
Diabetic emergencies	А, С-Н	A-D	A-J	A-R
Cerebrovascular strock	А, С-Н	A-D	A-J	A-R
Thromboembolic disorders	А, С-Н	A-D	A-J	A-R
Uraemic encephalopathy	А, С-Н	A-D	A-J	A-R
Hypertensive emergencies	А, С-Н	A-D	A-J	A-R
Central venous line	В,С-Н	A-D	A-J	A-R
placement				
Noninvasive mechanical	В,С-Н	A-D	A-J	A-R
ventilation				
Airway management	В,С-Н	A-D	A-J	A-R
Endotracheal intubation	В,С-Н	A-D	A-J	A-R
Hemodynamic monitoring	В,С-Н	A-D	A-J	A-R
Central venous line	B,C-H	A-D	A-J	A-R
placement				

# $Unit \; 5 \; \text{Gastroenterology}, \; \text{hepatology} \; \text{and} \; \text{GIT} \; \text{critical} \; \text{care} \; \text{unit}$

Malabsorption	A,C,D-H	A-D	A-J	A-R
Acute and chronic diarrhea	A,C,D-H	A-D	A-J	A-R
Acid pepsin disorder and peptic ulcer	A,C,D-H	A-D	A-J	A-R
GIT malignancy	A,C,D-H	A-D	A-J	A-R

GIT motility disorders	A,D-H	A-D	A-J	A-R
Esophageal disorder	A,D-H	A-D	A-J	A-R
Acute and chronic hepatitis	A,B,C,D-H	A-D	A-J	A-R
Liver cirrhosis	A,D-H	A-D	A-J	A-R
Hepatic encephalopathy	A,C,D-H	A-D	A-J	A-R
NASH	A,C,D-H	A-D	A-J	A-R
Hepatic malignancy	A,C,D-H	A-D	A-J	A-R
Acute and chronic pancreatitis	A,C,D-H	A-D	A-J	A-R
Tumors of the pancreas	A,C,D-H	A-D	A-J	A-R
Jundice	A,D-H	A-D	A-J	A-R
Acute gastrointestinal bleeding	A,C,D-H	A-D	A-J	A-R
Ascitis	A,C,D-H	A-D	A-J	A-R
Hepatorenal syndrome	A,D-H	A-D	A-J	A-R
Cholangitis	B,D-H	A-D	A-J	A-R
Medical acute abdomen	B,D-H	A-D	A-J	A-R
Central venous line placement	B,D-H	A-D	A-J	A-R
Noninvasive mechanical ventilation	B,D-H	A-D	A-J	A-R
Airway management	B,D-H	A-D	A-J	A-R

Endotracheal intubation	B,D-H	A-D	A-J	A-R
Hemodynamic monitoring	B,D-H	A-D	A-J	A-R

# Unit 6 Rheumatology, and muscloskeletal disorders

Rheumatoid arthritis	A-C,D-H	A-D	A-C	A-R
SLE	A-c	A-D	A-C	A-R
Crystal induced arthropathy	A,D-H	A-D	A-C	A-R
Systemic sclerosis	A,D-H	A-D	A-C	A-R
Dermatomyositis and	A,D-H	A-D	A-C	A-R
polymyositis				
Osteoarthritis	A,D-H	A-D	A-C	A-R
Seronegative arthropathy	A,D-H	A-D	A-C	A-R
Arthritis in systemic diseases	A-C,D-H	A-D	A-C	A-R
Infective arthritis	A-C,D-H	A-D	A-C	A-R
Antiphospholipid syndrome	A-C,D-H	A-D	A-C	A-R
Hematological and	B,D-H	A-D	A-C	A-R
gastroenterology changes in				
Rheumatologic diseases.				

# Unit 7 CHEST DISEASES

COPD	A, D-H	A-D	A-I	A-R
Lung cancer	A, D-H	A-D	A-I	A-R
Pleural effusion	A, D-H	A-D	A-I	A-R
Interstitial pulmonary	A, D-H	A-D	A-I	A-R
fibrosis				
Respiratory failure	В <i>,</i> D-Н	A-D	A-I	A-R
COPD	С, D-Н	A-D	A-I	A-R
Lung cancer	С, D-Н	A-D	A-I	A-R

# **Unit 8 Neurology**

Stroke	A,C,D-H	A-D	A-C	A-R
coma	A,C,D-H	A-D	A-C	A-R
Neuropathy	A,C, D-H	A-D	A-C	A-R
Myopathy and	A, D-H	A-D	A-C	A-R
neuromuscular junctional				
disorder				
Infections of nervous system	A,D-H	A-D	A-C	A-R

# **Unit 10 Radiology, US And CT**

X-ray of the bone	A-D	A-C	A-C	A-Q
Plain urinary tract with and	A-D	A-C	A-C	A-Q
without contrast				
Barium swallow, meal and	A-D	A-C	A-C	A-Q
enema				
Ultrasonography of the	A-D	A-C	A-C	A-Q
abdomen				
Computed tomography	A-D	A-C	A-C	A-Q

## **5. Course Methods of teaching/learning:**

- 1. Didactic (lectures, seminars, tutorial)
- 2. Outpatient
- 3. Inpatient
- 4. Case presentation
- 5. Direct observation
- 6. journal club
- 7. Critically appraised topic.

- 8. Educational prescription
- 9. Clinical rounds
- 10. Clinical rotation
- **11**. Senior staff experience
- 12. Case log
- **13**. Observation and supervision
- 14. Written & oral communications
- **15.** Simulation
- **16**. Hand on work shop
- 17. Service teaching
- **18**. Perform under supervision of senior staff
- **19**. Postgraduate teaching

# 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
  - Objective structure clinical examination (OSCE)
  - 5. Procedure/case Log book and Portfolios
  - 6. Simulation
  - 7. Record review (report)

- 8. Patient survey
- 9. 3600 global rating
- 10. Check list evaluation of live or recorded performance
- 11. MCQ Exam

ii. Time schedule: At the end of second part

#### iii. Marks: 1200

#### 8. List of references

#### i. Lectures notes

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

#### ii. Essential books

- 6- Cecil text book of Medicine, 25edition.
- 7- Oxford text book of Medicine,
- 8- Davidson24 edition.
- 9- Current Medical Diagnosis & treatment, 2022.
- 10- Breinerwold text book of cardiology 2018
- 11- Essential haematology 8<sup>th</sup> edition 2019.
- 12- Brenner's text book of nephrology2019
- 13- William's text book of endocrinology 14<sup>th</sup> ed 2019
- 14- Hutchison's clinical methods
- 15- Clinical gastroenterology and hepatology (Wilfred M. Weinstein)
- Dacie and lewis of practictal haematology.12<sup>th</sup> ed
   2017
- 17- Bisset Khan Abdominal U/S
- 18- Infectious disease hard book

#### iii. Recommended books

- 2. Harrisons text book of Medicine ,20 edition
- 3. Hurst text book of cardiology
- 4. Macloid clinical methods.14<sup>th</sup> ed 2019
- 5. Oxford clinical haematology

iv. Periodicals, Web sites, ... etc

- American Journal of internal Medicine
- New England Journal of Medicine
- American Journal Of Gastroenterology
- BMJ
- Egyptian Heart Journal
- v. Others

None

# 9. Signatures

Course Coordinator:	Head of the Department:
Prof. Dr/Manal Ez Eldeen	Prof. Mohamed Alyamany
Date:	Date:

# ANNEX 2 Program Academic Reference Standards (ARS)

+1- Graduate attributes for master degree in Internal 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 Internal 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 *Internal 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 *Internal Medicine*.

**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 Internal 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 *Internal 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 Internal 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 Internal Medicine

2-1-D- Ethical and medicolegal principles relevant to practice in *in Internal Medicine* 

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

**2.2- C-** Demonstrating systematic approach in studying clinical problems relevant to *Internal Medicine* 

2-2-D- Making alternative decisions in different situations in *Internal 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 *Internal Medicine* for patients with common diseases and problems.
2-3- C- Write and evaluate reports for situations related to the

field of Internal 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.

## **4** 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
#### Practice- Interpersonal Professionalis Patient Medical Systemsknowledge based and based care m learning/ communicati practice Improveme on skills nt Didactic Х Х Х Х Х (lectures, seminars, tutorial) journal club, Х Х Х Educational Х Х Х Х Х Х prescription Х Х Х Х Present a Х case (true or simulated) in a grand round Observation Х Х Х Х Х and supervision conferences Х Х Х Х Х Х Х Х Written Х Х assignments Oral Х Х Х Х Х Х assignments

#### Annex 3, Methods of teaching/learning

#### 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

#### <u>Annex 4, ILOs evaluation methods for Master Degree</u> <u>students.</u>

Method	Practical skills	К	Intellectual		Gener	al skills	
	Patient care	к		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	Х	х	Х	Х	Х	Х	Х
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

#### <u>Annex 4, Glossary of Master Degree doctors assessment</u> <u>methods</u>

- 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 decisionmaking.
- 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	Reports	#
Unit	Field visits	
External Evaluator	Reports	#
(s):According to	Field visits	
department		
council		
External Examiner		
(s): According to		
department		
council		
Stakeholders	Reports	#
	Field visits	
	questionnaires	
Senior students	questionnaires	#
Alumni	questionnaires	#

## Annex 6, program Correlations:

مصفوفة توافق المعايير القومية القياسية العامة لبرامج الماجستير مع المعايير الأكاديمية المعتمدة من كلية الطب 🗌 جامعة أسيوط لدرجة الماجستير في أمراض الباطنة

أمراض الباطنة 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 <i>internal medicine</i> .	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 <i>internal medicine</i> .	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 <i>internal</i> <i>medicine</i> .	3-تطبيق المعارف المتخصصة و دمجها مع المعارف ذات العلاقة في ممارسته المهنية
<ul> <li>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.</li> </ul>	4-إظهار وعيا بالمشاكل الجارية و الرؤى الحديثة في مجال التخصص
5- Identify and share to solve health problems in <i>internal medicine</i>	5-تحديد المشكلات المهنية و إيجاد حلولا لها
6- Acquire all competencies that enable him to provide safe, scientific, ethical and evidence based clinical care including update use of new technology in <i>internal</i> <i>medicine</i> .	6-إتقان نطاق مناسب من المهارات المهنية المتخصصة، واستخدام الوسائل التكنولوجية المناسبة بما يخدم ممارسته المهنية

<ul> <li>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.</li> <li>8- Function as supervisor, and trainer in relation to colleagues, medical students and other health professions.</li> </ul>	7-التواصل بفاعلية و القدرة على قيادة فرق العمل
9- Acquire decision making capabilities in different situations related to <i>internal</i> <i>medicine</i> .	8–اتخاذ القرار في سياقات مهنية مختلفة
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.	9- توظيف الموارد المتاحة بما يحقق أعلي استفادة و الحفاظ عليها
11- Be aware of public health and health policy issues and share in system-based improvement of health care.	10-إظهار الوعي بدوره في تنمية المجتمع و الحفاظ على البيئة في ضوء المتغيرات العالمية و الإقليمية
12- Show appropriate attitudes and professionalism.	11-التصرف بما يعكس الالتزام بالنزاهة و المصداقية و الالتزام بقواعد المهنة
13- Demonstrate skills of lifelong learning and maintenance of competence and ability for continuous medical education and learning in subsequent stages in <i>internal medicine</i> . or one of its subspecialties.	12-تنمية ذاته أكاديميا و مهنيا و قادرا علي التعلم المستمر

#### 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.	2–1–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 <i>internal medicine</i> . 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 <i>internal medicine</i> .	1-2-ج-التطورات العلمية في مجال التخصص.
2.1. D- Ethical and medicolegal principles relevant to practice in the <i>internal medicine</i> .	2–1–د–المبادئ الأخلاقية و القانونية للممارسة المهنية في مجال التخصص.
2.1. E-Quality assurance principles related to the good medical practice in <i>internal medicine</i> .	2–1–ه– مبادئ و أساسيات الجودة في الممارسة المهنية في مجال التخصص
2.1. F- Ethical and scientific basics of medical research.	2-1-و- أساسيات وأخلاقيات البحث العلمي
<ul> <li>2.2. A-Correlation of different relevant sciences in the problem solving and management of common diseases of <i>internal medicine</i>.</li> <li>2.2. B- Problem solving skills based on data analysis and evaluation (even in the absence of some) for common clinical situations related to <i>internal medicine</i>.</li> </ul>	2–2–أ– تحليل و تقييم المعلومات في مجال التخصص والقياس عليها لحل المشاكل

2.2. B- Problem solving skills based on data analysis and evaluation (even in the absence of some) for common clinical situations related to <i>internal</i> <i>medicine.</i>	2-2-ب- حل المشاكل المتخصصة مع عدم توافر بعض المعطيات
2.2. A-Correlation of different relevant sciences in the problem solving and management of common diseases of <i>internal medicine</i> .	2-2-ج- الربط بين المعارف المختلفة لحل المشاكل المهنية
2.2. C- Demonstrating systematic approach in studying clinical problems relevant to the <i>internal medicine</i> .	2-2-د- إجراء دراسة بحثية و /أو كتابة دراسة علمية منهجية حول مشكلة بحثية
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	2–2هـ- تقييم المخاطر في الممارسات المهنية في مجال التخصص
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	2–2–و– التخطيط لتطوير الأداء في مجال التخصص
2.2.D- Making alternative decisions in different situations in the field of <i>internal medicine</i> .	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-أ- إتقان المهارات المهنية الأساسية و الحديثة في مجال التخصص
2.3.B- Demonstrate patient care skills relevant to <i>internal</i> <i>medicine.</i> for patients with common diseases and problems.	

2.3.C- Write and evaluate reports for Situation related to <i>internal medicine</i> .	2–3–ب– كتابة و تقييم التقارير المهنية
<ul> <li>2.3.A- provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health.</li> <li>2.3.B- Demonstrate patient care skills relevant to that speciality for patients with common diseases and problems.</li> </ul>	2-3-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–أ–التواصل الفعال بأنواعه المختلفة
<ul> <li>2.4.A-Demonstrate practice-based</li> <li>learning and improvement skills that <ul> <li>investigation and involves</li> <li>evaluation of their own patient care,</li> <li>appraisal and assimilation of scientific</li> <li>evidence, improvements in patient care</li> <li>and risk management</li> </ul> </li> <li>2.4.B- Use all information sources and</li> <li>technology to improve his practice.</li> </ul>	4-2-ب- استخدام تكنولوجيا المعلومات بما يخدم الممارسة المهنية
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-ج- التقييم الذاتي وتحديد احتياجاته التعلمية الشخصية
2.4.B- Use all information sources and technology to improve his practice.	
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.	
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-د- استخدام المصادر المختلفة للحصول على المعلومات و المعارف
2.4. C- Demonstrate skills of teaching and evaluating others.	2–4–ه– وضع قواعد ومؤشرات تقييم أداء الآخرين
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-و - العمل في فريق ، وقيادة فرق في سياقات مهنية مختلفة
2.4.G- Demonstrate skills of effective time management.	2-4-ز - إدارة الوقت بكفاءة
2.4.H- Demonstrate skills of self and continuous learning.	2–4–ح– التعلم الذاتي و المستمر

### Comparison between ARS and ILOS for master degree in internal medicine.

(ARS)	(ILOs)
2-1- Knowledge and understanding	2-1- Knowledge and understanding
2-1-A- Established basic, biomedical, clinical, epidemiological and behavioral sciences related conditions, problem and topics.	<ul> <li>2-1-A- Explain the essential facts and principles of relevant basic sciences including, pharmacology, Anatomy and Histology, Physiology, Biochemistry, Pathology, Microbiology, Clinical pathology related to <i>internal medicine</i></li> <li>2-1-B- Mention <u>essential facts</u> of clinically supportive sciences including and basics of internal medicine and infection control and addiction related to <i>internal medicine</i>.</li> <li>2-1-C- Demonstrate sufficient knowledge of etiology, clinical picture, diagnosis, prevention and treatment of the common diseases and situations related to <i>internal medicine</i>.</li> </ul>
<b>2-1-B</b> The relation between good clinical care of common health problem in the <i>internal medicine</i> society.	2-1-H- State the impact of common health problems in the field of <i>internal</i> <i>medicine</i> on the society and how good clinical practice improve these problems.
2-1-C- Up to date and recent developments in common problems related to the field of <i>internal</i> <i>medicine</i> .	<ul> <li>2-1-C- Demonstrate sufficient knowledge of etiology, clinical picture, diagnosis, prevention and treatment of the common diseases and situations related <i>internal medicine</i>.</li> <li>2-1-D- Give the recent and update developments in the pathogenesis, diagnosis, prevention and treatment of common diseases related to <i>internal medicine</i>.</li> </ul>
<b>2-1-D-</b> Ethical and medicolegal Principles relevant to	<b>2-1-E-</b> Mention the basic ethical and medicolegal principles that should be applied in practice and

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

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

continuous

continuous

<u>2-4- General skills</u>	<u>2/3/2 General skills</u>
<b>2-4-A-</b> 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	<ul> <li>2-3-2-A- Perform practice-based improvement activities using a systematic methodology (share in audits and risk management activities and use logbooks).</li> <li>2-3-2-B- Appraises evidence from scientific studies.</li> <li>2-3-2-C- Conduct epidemiological studies and surveys.</li> </ul>
<ul> <li>2-4-B- Use all information sources and technology to improve his practice.</li> <li>2-4-C- Demonstrate skills of teaching and evaluating others.</li> </ul>	<ul> <li>2-3-2-C- Conduct epidemiological studies and surveys.</li> <li>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.</li> <li>2-3-2-E- Facilitate learning of students other health care professionals including their evaluation and assessment.</li> </ul>
<ul> <li>2-4-D- Demonstrate interpersonal and communication skills that result in effective information exchange and teaming with patients, their families, and other health professionals.</li> <li>2-4-E-Demonstrate professionalism</li> </ul>	<ul> <li>2-3-2-F- Maintain therapeutic and ethically sound relationship with patients.</li> <li>2-3-2-G- Elicit information using effective nonverbal, explanatory, questioning, and writing skills.</li> <li>2-3-2-H- Provide information using effective nonverbal, explanatory, questioning, and writing skills.</li> <li>2-3-2-I- Work effectively with others as a member of a health care team or other professional group.</li> <li>2-3-2-J- Demonstrate respect, compassion, and</li> </ul>
behaviors, as manifested through a commitment to carrying out professional	<ul> <li>integrity; a responsiveness to the needs of patients and society.</li> <li>2-3-2-K- Demonstrate a commitment to</li> </ul>

responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population.	<ul> <li>ethical principles including provision or withholding of clinical care, confidentiality of patient information, informed consent, business practices.</li> <li>2-3-2-L-Demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities.</li> </ul>
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.	<ul> <li>2-3-2-M-Work effectively in relevant health care delivery settings and systems including good administrative and time management</li> <li>2-3-2-N- Practice cost-effective health care and resource allocation that does not compromise quality of care.</li> <li>2-3-2-O- Assist patients in dealing with system complexities.</li> </ul>
<b>2-4-G</b> - Demonstrate skills of effective time management	<b>2-3-2-M</b> -Work effectively in relevant health care delivery settings and systems including good administrative and time management
<b>2-4-H-</b> Demonstrate skills of self and continuous learning.	<b>2-3-2-A-</b> Perform practice-based improvement activities using a systematic methodology (share in audits and risk management activities and use logbooks).

Course	Programs 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 : (Pharmacology)	$\checkmark$							
course 2 Anatomy and	~							
Histology								
course 3: Physiology and	✓							
Biochemistry								
Course 4 : Pathology	√							
Bacteriology and clinical								
pathology								
Course 5 Infection	✓							
control and addiction								
Course 6 Basics of	✓	✓	✓	✓	✓	✓	✓	✓
Internal medicine								
Course 7 Internal	~	~	~	~	~	$\checkmark$	~	✓
medicine <b>2 advanced</b>								

#### III-Program matrix Knowledge and Understanding

#### Intellectual

Course	Programs covered ILOs						
	2/2/A	2/2/B	2/2/C	2/2/D			
Course 1 (Pharmacology)	~						
course 2 Anatomy and	$\checkmark$						
Histology							
course 3: Physiology and	$\checkmark$						
Biochemistry							
Course 4 : Pathology	$\checkmark$						
Bacteriology and clinical							
pathology							
Course 5 Infection control and	$\checkmark$						
addiction							
Course 6 Basics of Internal	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$			
medicine							
Course 7 Internal medicine	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$			
2 advanced							

#### Practical Skills (Patient Care)

Course	Programs covered ILOs							
	2/3	2/3/1/	2/3/1/	2/3/1/	2/3/1/	2/3/1/	2/3/1/	2/3/1/
	/1/ A	В	Ľ	U	E	F	G	н
Course 1								
(Pharmacolo عر)								
course 2								
Anatomy and								
Histology								
course 3:								
Physiology and								
Biochemistry								
Course 4 :								
Pathology								
Bacteriology								
and clinical								
pathology								
Course 5				~	~			
Infection								
control and								
addiction								

Course 6 Basics	~		$\checkmark$	$\checkmark$	$\checkmark$			$\checkmark$
<i>of</i> Internal								
medicine								
Course 7	$\checkmark$	✓	✓	✓	✓	✓	~	✓
Internal								
medicine								
2 advanced								

#### **General Skills**

Course	Programs covered ILOs								
	2/3/2	2/3/2	2/3/2	2/3/2	2/3/2	2/3/2	2/3/2	2/3/2	
	/A	/B	/C	/D	/E	/F	/G	/H	
Course 1 (Pharmaco logy)				~				~	
course 2				$\checkmark$				$\checkmark$	
Anatomy and									
Histology									
course 3:				$\checkmark$				$\checkmark$	
Physiology and									
Biochemistry									
Course 4 :				$\checkmark$				$\checkmark$	
Pathology									
Bacteriology and									
clinical pathology									
Course 5				$\checkmark$				✓	
Infection control									
and addiction									
Course 6 Basics	✓	✓	✓	✓	✓	✓	✓	✓	
of Internal									
medicine									
Course 7 Internal	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	
medicine									
2 advanced									

#### **General Skills**

Course	Programs covered ILOs								
	2/3/2/1	2/3/2/J	2/3/2/	2/3/2/	2/3/2/	2/3/2/	2/3/2/		
			К	L	М	Ν	0		
Course 1 (Pharmaco logy)			✓		✓				
course 2			$\checkmark$		$\checkmark$				
Anatomy and									
Histology									
course 3:			$\checkmark$		$\checkmark$				
Physiology and									
Biochemistry									
Course 4 :			$\checkmark$		$\checkmark$				
Pathology									
Bacteriology and									
clinical pathology									
Course 5			~		<ul> <li>✓</li> </ul>				
Infection control									
and addiction									
Course 6 Basics	~	~	$\checkmark$	$\checkmark$	~	~	~		
of Internal									
medicine									
Course 7 Internal	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$		
medicine									
2 advanced									

# Annex 7, Additional information:

#### **Equipments and Specialized Units:**

- Patients' wards: 166 beds.

- Daily Internal medicine out patients' clinics (new patients,

follow up post discharge appointments, discharged critical care patients Follow up clinic)

- Weekly nephrology out patient clinic.

-Twice weekly gastroenterology and hepatology out patients clinic.

-Once weekly gastrointestinal motility out patients clinic.

-Trice weekly hematology out patient clinic.

-Twice weekly cardiology out patient clinic.

- Twice weekly endocrinology out patient clinic.

-Once weekly obesity out patient clinic .

- Gastroenterology and hepatology ICU (14 beds)

- Echo cardiology unit.

-Diagnostic and therapeutic (liver and kidney biopsy)

Abdominal ultrasonography unit.

-Motility study unit .

-Diagnostic and therapeutic Endoscopy and ERCP unit.

-Renal dialysis unit.

-ICU (12 beds ).

-ICU ( 8 beds ).

-Hematology ICU (8 beds ).

-Hematology unit (16 beds).

-Internal medicine beds (110 beds).

- Scientific Library (Internal Medicine Text Books and periodicals), MD, MSc thesis,

- Seminar room with data show.

- Electronic Library of Scientific Seminars, case presentations.

- Minor procedures skill teaching unit (Liver and renal biopsy., Diagnostic and therapeutic ascetic fluid tapping,)

- Data base filing of all the cases, procedures and out patient clinic data.

#### Staff members:

#### **Opportunities within the department**

-Internal medicine beds (110 beds).

Gastroenterology and hepatology ICU (14 beds)

-ICU (12 beds ).

-ICU ( 8 beds ).

-Hemalology ICU (8 beds).

-Hematology unit (16 beds).

- Scientific Library

- Seminar room with data show

- Electronic Library of Scientific Seminars, case presentations.

- Data base filing of all the cases, procedures and out patient clinic data.

### Department quality control insurance for completing the program

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

#### (End of the program specifications)