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 by laws)

Internal medicine

Faculty of medicine

Aswan University

2019-2020

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Master degree of Internal Medicine

A. Basic Information

Program Title: Master degree of Internal Medicine for

2016-2017

- **Nature of the program: Single.**
- **Responsible Department: Internal Medicine**
- **Program Academic Director (Head of the Department):**
  Pr. Dr: Lobna Eltony
- **Principle coordinator:** Prof. Dr. Hanan Mahmoud
- **Assistant coordinators** Dr. Hala Mostafa. Imam.
  Dr.Zain El-Abdeen Ahmed.
  Dr.Lobna Abd El Wahid Ahmed.
  Dr.Manal Ez Eldeen
- **Internal evaluators:** Pr. Dr. howaida Nafady
- **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: 22 / 10 / 2017**
- **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 clinical experience and 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) *for the whole program*:

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.

2/3 Skills

2/3/1 Practical skills (Patient Care)

A. Obtain proper history and examine patients in caring and respectful behaviors.

B. Make informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, up-to-date scientific evidence, and clinical judgment for common conditions related to 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.

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 1st or 2nd parts.
- **Thesis**
  For the M Sc thesis;
  MSc thesis subject should be officially registered within 6 months from application to the MSc degree,
  Discussion and acceptance of the thesis could be set after 12 months from registering the MSc subject;
  It should be discussed and accepted before passing the second part of examination)
- **Part 2 (2 years)**

Program –related speciality courses and ILOs
Students are not allowed to sit the exams of these courses before 3 years from applying to the MSc degree.
The students pass if they get 50% from the written exams and 60% from oral and clinical/practical exams of each course and 60% of summation of the written exams, oral and clinical/practical exams of each course
Total degrees 1900 marks.
700 marks for first part
1200 for second part

Written exam 40% - 70%.
Clinical/practical and oral exams 30% - 60%.

D. Courses of the program:

Courses and student work load list	Course Code	Core CREDIT POINTs		
		Lectures	training	total
First Part				
Basic science courses (8CP) **5. Course 1 (Pharmacology)** **6. Course 2** **Unit (Module) 1 (Anatomy)** **Unit (Module) 2 (Histology)** **7. Course 3** **Unit (Module) 1 (Physiology)** **Unit (Module) 2 (Biochemistry)** **8. Course 4** **Unit (Module) 1 (Pathology)** **Unit (module) 2 (Bacteriology)** **Unit (Module) 3 (Clinical Pathology)**	MED206 MED218A# MED218B# MED218C#	1 1 1 1 1 1 1 1	- - - - - - - -	1 2 2 3
General clinical compulsory courses (6 points) **Course 5** **- Unit (Module) 1 Infection control** **Unit (Module) 2 Addiction.** **Course 6**	MED218D# MED218E	1 1 4		2 4

Basic of Internal medicine:				
Elective courses*	2CP			
Clinical training and scientific activities:				
Clinical training in General Clinical compulsory courses (10 CP) **Course 5:** **- Unit (Module) 1 Infection control** **Unit (Module) 2 Addiction.** **Course 6** **Basic of Internal medicine:**	MED218D# MED218E		1 1 8	2 8
Clinical training and scientific activities in Specialized course (14 CP) **Course 7: Internal medicine 2 Advanced**	MED218F		14	
Total of the first part		16	24	40
Second Part	Specialized courses 24 CP Specialized Clinical Work 96 CP			
Specialized Courses **7) Course 7 : internal medicine 2 Advanced**	MED218F	24		24
Training and practical activities in speciality (96 CP)			96	96
Total of the second part		**24**	**96**	**120**
Thesis	**20 CP**			
Total of the degree	**180**			

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

Student work load calculation:

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

Elective Courses#:

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

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

Thesis:

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

*Internal Medicine Course

Units' Titles' list	% from total Marks	Level (Year)	Core Credit points		
			Didactic	training	Total
Unit 1 Cardiovascular and Critical care	15%	1,2,3	3.6	16.5	20.1
Unit 2 Nephrology and dialysis	15%	1,2,3	3.6	16.5	20.1
Unit 3 Hematology and its critical care	15%	1,2,3	3.6	16.5	20.1
Unit 4 Endocrinology, diabetes and its critical care	15%	1,2,3	3.6	16.5	20.1
Unit 5 Gastroenterology & Hepatology and its Critical care	15%	1,2,3	2.4	11	13.4
Unit 6 Rheumatology and musculoskeletal diseases	10%	1,2,3	1.2	5.5	6.7
Unit 7 Chest disease	5%	2,3	1.2	5.5	6.7
Unit 8 Neurological disease	5%	2,3	1.2	5.5	6.7
Unit 9 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 :**
  - **General Requirements:**
    - MBBCh Degree from any Egyptian Faculties of Medicine
    - Equivalent Degree from medical schools abroad approved by the Ministry of Higher Education
  - **Specific Requirements:**
    - Fluent in English (study language)

VACATIONS AND STUDY LEAVE

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

FEES:

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

8-Progression and completion requirements

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

The students are offered the degree when:

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

9- Program assessment methods and rules (Annex IV)

Method	ILOs measured
Written examinations: Structured essay questions Objective questions: MCQ Problem solving	K & I
Clinical: Long/short cases OSCE	K ,I, P &G skills
Structured oral	K ,I &G skills
Logbook assessment	All
Research assignment	I &G skills

Weighting of assessments:

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

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

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

11-Declaration

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

All course specifications for this program are in place.

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**
- **Date last reviewed: 20 / 9 / 2017**
- **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 teaching/ learning	*Methods of Evaluation*
A. Mention *principles of pharmacology of:* • General pharmacology (pharmacokinetics, pharmacodynamics) • Treatment of ischaemic heart disease • Anticoagulants • 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	-Lectures	-Written and oral examination - Log book

B- Intellectual outcomes

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Correlates the facts of *pharmacology* with clinical reasoning, diagnosis and management of common diseases related to 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 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 experience	360o global rating

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

Time Schedule: First Part

Topic	Covered ILOs			
	Knowledge A	Intellectual B	Practical skill C	General Skills D
Principles of General pharmacology (pharmacokinetics, pharmacodynamics :	A	A	-	A-D
Anticoagulants	A	A	-	A-D
Antiplatelets	A	A	-	A-D
- Antiarrythmic drugs	A	A	-	A-D
- Insulin and Hypoglycemic drugs	A	A	-	A-D
- Antihypertensive	A	A	-	A-D
Treatment of hypo and hyperthyroidism	A	A	-	A-D
Inotropics				
- Corticosteroids	A	A	-	A-D
- Antibiotics	A	A	-	A-D
- Antiviral	A	A	-	A-D
- Antacids	A	A	-	A-D
- Diuretics	A	A	-	A-D
- Heart failure drugs	A	A	-	A-D
- Non-steroidal anti inflammatory drugs	A	A	-	A-D
-Disease modifying anti - rheumatic drugs	A	A	-	A-D
-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, 11th Edition. By Bertram Katzung, Anthony Trevor, Susan Masters.

iv. Periodicals, Web sites, … etc

American Journal of internal Medicine
BMJ
NEJIM

v. others

None

Course 2 Anatomy and Histology

Course 2 Unit 1 (Module1) (Anatomy)

Name of department: Internal Medicine
Faculty of medicine
Assiut University
2016-2017/2017-2018

1. Unit data

- **Unit Title:** Anatomy
- **Unit code:** MED218A#
- **Speciality :** Internal Medicine
- **Number 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
- **Date last reviewed: 20 / 9 / 2017**
- **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: a. Abdominal organs (liver, kidney, spleen, intestine, peritoneum) b. Blood supply of abdominal organs c. Chest (lungs, pleura, Mediastinum) d. Blood supply of chest organs e. Cardiovascular anatomy (heart and great vessels)	-Lectures	-Written and oral examination - Log book

B- Intellectual outcomes

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Correlates the facts of anatomy with clinical reasoning, diagnosis and management of common diseases related to 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 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 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 experience	360o global rating

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

Time Schedule: First Part

Topic	Covered ILOs			
	Knowledge A	Intellectual B	Practical skill C	General Skills D
- Anatomic details of Abdominal organs (liver, kidney, spleen, intestine, peritoneum)	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, Aswan 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

2016-2017/2017-2018

1. Course data

- **Unit Title: Histology**
- **Unit code:** MED218A#
- **Speciality :** Internal Medicine
- **Number of Credit points :** lecture 1 credit point (100%) practical 0 hours , total 1 .
- **Staff members of Histology Department as annually approved by department councils**
- **Date last reviewed: 20 / 9 / 2017**
- **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

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

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 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 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 experience	360o global rating

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

Time Schedule: First Part

Topic	Covered ILOs			
	Knowledge A	**Intellectual B**	**Practical skill C**	**General Skills D**
Principles of histology of:				
- Cell structure	A	A	-	A-D
- Epithelium	A	A	-	A-D
- Connective tissue proper - Blood cell	A	A	-	A-**D**
- Blood vascular system	A	A	-	A-**D**
- Lymphatic organs	A	A	-	A-**D**
- Digestive system	A	A	-	A-**D**
- Endocrine glands	A	A	-	A-D
- Kidney	A	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

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. References

i. Lectures notes

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

ii. Essential books

- Kaplan's

iii. Recommended books

Basic histology

Oral anatomy, histology, and embryology

iv. Periodicals, Web sites, … etc

- American Journal of internal Medicine
- BMJ
- NEJIM

v. others

Course 3 Physiology and biochemistry

Course 3 Unit 1(Physiology)

1. Unit data

- **Unit title : Physiology**
- **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**
- **Date last reviewed: 20 / 9 / 2017**
- **Requirements (prerequisites) if any :**
  - **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 understanding

ILOs	**Methods of teaching/ learning**	***Methods of Evaluation***
A. Describe Physiologic Principles of Cardiovascular system: 1- Know the innervations of the heart 2- Know the regulation of the heart rate. 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:	-Lectures	-Written and oral examination - Log book

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: • Know the centre and mechanism for regulation of body temperature. • Know the reaction of body on exposure to cold and hot • Know abnormalities of regulation of body 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 *physiology* 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 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 experience	360o global rating

Course contents (topic s/modules/rotation
Course Matrix

Time Schedule: First Part

Topic	Covered ILOs			
	Knowledge A	Intellectual B	Practical skill C	General Skills D
- Cardiovascular system:	A	A	-	A-D
- Blood	A	A	-	A-D
- Metabolism	A	A	-	A-D
- Endocrine	A	A	-	A-D
- Gastroenterology Kidney	A	A	-	A-D
Respiratory System	A	A		
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 -Aswan University.

ii. Essential books

- Guyton AC, Hall JE: Textbook of Medical Physiology, 11th ed. Saunders, 2006.

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**
- **Date last reviewed: 20 / 9 / 2017**
- **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:* - Diabetes mellitus - Insulin, and growth hormones - Essential amino acids - Essential fatty acids - Urea cycle - Uric acid - Atherosclerosis.	-Lectures	-Written and oral examination - Log book

B- Intellectual outcomes

ILOs	**Methods of teaching/ learning**	**Methods of Evaluation**
A. Correlates the facts of *Biochemistry* 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 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 experience	360o global rating

Course contents (topic s/modules/rotation
Course Matrix

Time Schedule: First Part

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

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

ii. Essential books

Kaplan's

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

Course 4 Pathology and Bacteriology and Clinical Pathology

Course 4 Unit 1 (Pathology)

Coarse data

- MODULE Title: Pathology
- Course 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
- Date last reviewed: September 2017
- Requirements (prerequisites) if any :
  - 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 teaching/ learning	*Methods of Evaluation*
A. Mention Principles of General Pathology of: -Thrombosis and embolism - Inflammation - Immunity & hypersensitivity. - Tuberculosis & Bilharziasis - Pathology of tumors	-Lectures	-Written and oral examination - Log book
B-Describe Pathologic Details of: A. Cardiovascular System: - Myocardial infarction - Heart failure -Hypertension B. Gastrointestinal system: -Inflammatory bowel diseases -Gastritis and peptic ulcer -Hepatitis -Gastrointestinal tumors C-Renal system: -glomerulonephritis D-Endocrine: -Thyroid & para-thyroid - Adrenal -Pancreas	-Lectures	-Written and oral examination - Log book

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 communication	Log book

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 experience	360o global rating

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

Time Schedule: First Part

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

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. 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

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

- **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: 20 / 9 / 2017**
- **Requirements (prerequisites) if any :**
  - **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

ILOs	Methods of teaching/ learning	*Methods of Evaluation*
A. Describe Principles of Microbiology of: - General bacteriology - Bacterial infections (typhoid, tuberculosis, brucellosis,& closteridial infection) - Antimicrobial agents - Opportunistic infection, nosocomial infection - Immunology - Basic immunology - Immunologic diagnostic test and serology - Hypersensitivity - Immunogenetics and transplantation immunology - General virology - Pathogenesis of viral diseases - Hepatitis - Influenza viruses - Sterilization of endoscopy	-Lectures -	-Written and oral examination - Log book

B- Intellectual outcomes

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Correlates the facts of microbiology with clinical reasoning, diagnosis and management of common diseases related to 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 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 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 experience	360o global rating

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

Time Schedule: First Part

Topic	Covered ILOs			
	Knowledge A	Intellectual B	Practical skill C	General Skills D
General bacteriology				
- Bacterial infections (typhoid, tuberculosis, brucellosis,& closteridial infection)	A	A	A-C	A-D
- Antimicrobial agents	A	A	A&B	A-D
- Opportunistic infection, nosocomial infection	A	A	A-C	A-D
Immunology				
-				
- Basic immunology	A	A	A&B	A-D
- Immunologic diagnostic test and serology	A	A	A&B	A-D
- Hypersensitivity	A		A&B	A-D
- Immunogenetics and transplantation immunology	A	A	A&B	A-D
General virology	A	A	A&B	A-D
- Pathogenesis of viral diseases				
- 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

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- 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

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**
- **Course 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**
- **Date last reviewed: 20 / 9/ 2017**
- **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 : ☒ -Hepatitis markers ☒ Electrolytes (Sodium, potassium, and calcium) ☒ Cardiac markers ☒ Hyperlipidemia ☒ Diabetes mellitus ☒ Kidney function tests ☒ Liver function tests ☒ Proteinuria ☒ Cerebrospinal fluid ☒ Acute phase reactants ☒ Plasma proteins ☒ Leukemias	-Lectures -Laboratory work	-Written and oral examination -Assessment of practical skills - Log book

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 teaching/ learning	Methods of Evaluation
A- Master the basic skills in clinical pathology related to internal medicine	Laboratory work	-Assessment 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 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 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 experience	360o global rating

Course contents (topic s/modules/rotation
Course Matrix

Time Schedule: First Part

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

Course 5 Infection control and addiction

Course 5 (Unit 1) Infection Control

- **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**
- **Date last reviewed: September 2017**
- **Requirements (prerequisites) if any :**
  - **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 teaching/ learning	*Methods of Evaluation*
A. Describe Principles of : Fever PUO Common viral ,bacterial and parasitic infection Prevention of infectious diseases Vaccination AIDS Sterilization of instruments Hospital acquired infection Endoscope associated infection Resistance of antimicrobial	-Lectures	-Written and oral examination - Log book

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

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 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 experience	360o global rating

Course contents (topic s/modules/rotation
Course Matrix

Time Schedule: First Part

Topic	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	B	A	A	A-D
-Recent advances in diagnosis of TB and viral hepatitis	B	A	A	A-D
Hospital acquired infections	B	A	A	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

- **Unit Title: Addiction**
- **Unit code: MED218D#**
- **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**
- **Date last reviewed: 20 / 9 / 2017**
- **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*
A. Describe the etiology, clinical picture, diagnosis and management of the following diseases and clinical conditions: drug dependence e,g opium. Diagnosis of different drugs abuse Causes of abuse and addiction		
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 teaching/ learning	Methods of Evaluation
A. Obtain proper history and examine patients in caring and respectful behaviors.	-Observation and supervision	-Assessment of practical skills -Logbook
B- Master the basic skills in Addiction related to internal medicine. 1-How to write a report about the case of addiction or toxicity of different abused drugs 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.	-Observation and supervision	-Assessment of practical skills -Logbook

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 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 experience	360o global rating

Course contents (topic s/modules/rotation
Course Matrix

Time Schedule: First Part

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

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iii. Recommended books

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iv. Periodicals, Web sites, … etc

v. others : None

Course 6 Basics of internal Medicine

- **Course Title: Basics of internal Medicine**
- **Course code: MED218E**
- **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***
- **Date last reviewed: 20 / 9 / 2017**
- **Requirements (prerequisites) if any :**

  None

2. Course aims

1. 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.
2. Provide candidates with fundamental knowledge and skills of dealing with critically ill patients, with Internal medicine diseases.

A- Knowledge and understanding

ILOs	Methods of teaching/ learning	*Methods of Evaluation*
A. Describe the etiology, clinical picture, diagnosis and management of the following diseases and clinical conditions: Elderly with chronic illness - Shocked cases and cases in need for Fluid therapy -Correction of acid base disorders -Poisoning -Aging (Effect of aging on various systems) -Over weight -Infectious Diseases	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 : a. -Basis of Clinical examination in internal medicine b. Fluid therapy c. Acid base balance		
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 fi 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 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	OSCE at the end of each year -log book & portfolio - One MCQ examination at the

	teaching)	second half of the second year and another one in the third year
B. Perform the following non invasive/invasive Diagnostic and therapeutic procedures. -Blood gases -CVP -Venous blood sampling - Urine analysis by dipsticks -Airway suctioning -Nasogastric tube insertion -Intravenous line insertion	Clinical round with senior staff -Perform under supervision of senior staff	Procedure presentation - Log book - Chick list
C. Prescribe the following non invasive/invasive therapeutic procedures : -Prescribe proper treatment for conditions in A.A	Clinical round with senior staff	- Procedure presentation - Log book - Chick list
D. Carry out patient management plans for common conditions related to Basics of internal Medicine .	Clinical 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 sheets (Write a consultation note, Inform patients of a diagnosis and therapeutic plan, completing and maintaining medical records).		

D-General Skills

Practice-Based Learning and Improvement

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

Interpersonal and Communication Skills

ILOs	Methods of teaching/ learning	Methods of Evaluation
F. Maintain therapeutic and ethically sound relationship with patients.	Simulations Clinical round Seminars Lectures Case presentation Hand on workshops	Global rating Procedure/case presentation Log book 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	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		1. Objective 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 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.		1. 360o global rating 2. Patient survey

Course contents (topic s/modules/rotation
Course Matrix

Time Schedule: First Part

Topic	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
4. Objective structure clinical examination (OSCE)
5. Procedure/case Log book and Portfolios
6. Simulation
7. Record review (report)
8. Patient survey
9. 360o 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, 22edition.
2- Oxford - text book of Medicine,
3- Davidson20 edition.
4- Current Medical Diagnosis & treatment, 2003.
5- Hutchison's clinical methods

iii. Recommended books

1. Harrisons - text book of Medicine ,15 edition

iv. Periodicals, Web sites, … etc

- American Journal of internal Medicine
- New England Journal of Medicine

v. Others

None

Second Part

Course 7 Internal medicine 2 Advanced

Name of department: Internal medicine
Faculty of medicine
Assiut University

2016-2017

1. Course data

- Course Title: Internal medicine.
- Course code: MED218F
- 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. Salwa Salah ELgendy.
- Assistant coordinator Dr. Hala M. Imam.
  Dr.Manal Ez-Eldin.
  Dr. Zain El-Abdeen Ahmed.
  Dr. Lobna Abd El Wahid Ahmed.

- Date last reviewed: **20 / 9 / 2017**
- General requirements (prerequisites) if any

  None
- Requirements from the students to achieve course ILOs are clarified in the joining log book.

This course consists of 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
2) Unit (Module) 2 Nephrology.	Prof.Mohamed Abbas	Prof. Lobna Al-Tony
3) Unit (Module) 3 Hematology and hematological critical Care Medicine.	Prof. Esam Abdelmonem S. Albeh	Prof. Yosreia Abdelrahman Ahmed **Prof** Howaida Nafady Prof. Mahmoud Ali M. Ashry
4) Unit (Module) 4 Endocrine, critical care and diabetic emergency unit	Prof. Lobna Farag AL-Tony	Prof. Fatema Abubakr
5) Unit (Module) 5 Gastroenterology, hepatology and GI critical care unit.	Dr. Nabila Faek Ameen	Dr. Mohamed Zain EL-Den Hafez
6) Unit (Module) 6 Rhumatology and Muscluskeletal disorders	Prof.ELbadry Abou Elnour and Prof. Nabawia…MTawfik…….	
7)Module 7 Chest	According to the selected staff member	
8)Module 8 Neurological diseases	According to the selected staff member	
9)Module 9 Radiology	According to the selected staff member	

2. Course aims

1. 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---).

3. Course intended learning outcomes (ILOs):

Unit 1 Cardiovascular and critical care unit

C- Knowledge and understanding

ILOs	Methods of teaching/ learning	*Methods of Evaluation*
A. Describe the etiology, clinical picture, diagnosis and management of the following diseases and clinical conditions: a. - Myocardial ischemia syndromes like chronic stable angina, acute coronary syndromes, coronary artery spasm, and others. b. Hypertension and hypertensive heart diseases. c. Rheumatic fever and rheumatic heart diseases. d. Different pericardial diseases, whether acute or chronic. e. Acute and chronic diseases of the myocardial muscle. f. Coma g. Hypertensive emergencies h. Acute coronary syndromes i. Arrhythmias j. Pulmonary embolism k. Cardiogenic shock	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. f. 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 pra improve these problems.		

D-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 Cardiovascular system	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 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 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 third year

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

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

Interpersonal and Communication Skills

ILOs	Methods of teaching/ learning	Methods of Evaluation
F. Maintain therapeutic and ethically sound relationship with patients.	Simulations Clinical round Seminars Lectures Case presentation Hand on workshops	Global rating Procedure/case presentation Log book 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 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	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		1. Objective 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 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.		1. 360o global rating 2. Patient survey

Unit (Module) 2 Nephrology and dialysis

A-Knowledge and understanding

ILOs	Methods of teaching/ learning	*Methods of Evaluation*
A. Describe the etiology, clinical picture, diagnosis and management of the following diseases and clinical conditions: a. - Glomerulonephritis b. Nephrotic syndrome c. Tubulo interstitial disease d. Renal failure e. UTI f. Kidney in systemic disease.	Didactic; -Lectures -Clinical rounds -Seminars -Clinical rotations (service teaching)	-OSCE at the end of each year -log book & portfolio - MCQ examination -Oral and 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/ 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 Nephrology.	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 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 third year
B. Order the following non invasive/invasive diagnostic procedures - Routine appropriate Lab investigations related to conditions mentioned in A.A: -Abdominal Ultrasonography -CT abdomen -urine analysis -blood gases -dialysis	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 -chest X ray . -Abdominal Ultrasonography.	Clinical round with senior staff	Procedure presentation - Log book - Chick list

-blood gases		
D. Perform the following non invasive/invasive Diagnostic and therapeutic procedures. - Abdominal Ultrasonography -urine analysis -blood gases –dialysis	Clinical round with senior staff -Perform under supervision of senior staff	Procedure presentation - Log book - Chick list
E. Prescribe the following non invasive/invasive therapeutic procedures : - Prescribe proper treatment for conditions mentioned in A.A -Urinary catheter. -dialysis	Clinical round with senior staff	- Procedure presentation - Log book - Chick list
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.		
H-Provide health care services aimed at preventing 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 teaching/ learning	Methods of Evaluation
A. Perform practice-based improvement activities using a systematic methodology (share in audit and risk management activities and use logbook).	-Case log -Observation and supervision -Written & oral communication	Procedure/case presentation -Log book and Portfolios
B. Appraises evidence from scientific studies(journal club)	-Journal clubs - 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 health care professionals including their evaluation and assessment.	Clinical rounds Senior staff experience	

Interpersonal and Communication Skills

ILOs	Methods of teaching/ learning	Methods of Evaluation
F. Maintain therapeutic and ethically sound relationship with patients.	Simulations Clinical round Seminars Lectures Case presentation	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 Nephrology.	Clinical round Seminars	Clinical Exam
K. Write a report : -Patients medical report -Abdominal ultrasonography report -Death report	Senior staff experience	Chick list
L. Council patients and families about: -Hereditary renal diseases.	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	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		1. Objective 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 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.		1. 360o global rating 2. Patient survey

Unit (Module) 3 Haematological Critical Care Unit

A-Knowledge and understanding

ILOs	Methods of teaching/ learning	*Methods of Evaluation*
A. Describe the etiology, clinical picture, diagnosis and management of the following diseases and clinical conditions: a. Anemias (Iron deficiency, Megaloblastic, Hemolytic) b. Hemoglobinopathies c. Bone marrow aplasia d. Myelodysplastic syndromes e. Acute leukemias f. Chronic leukemias g. Lymphomas h. Myeloproliferative disorders i. Plasma cell disorders (Multiple myeloma) j. Clotting disorders k. Thrombophilia (predisposition, causes) l. Abnormalities in Granulocytes (neutropenia, leukomoid reaction) m. Disorders of Bleeding (platelet function and number disorders) Vascular disorders n. Neutropenic patients o. Critically thrombocytopenic patients p. Hypovolaemic shock	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 : a. Blood transfusion b. Central venous line placement 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/ 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 - MCQ examination
B. Order the following non invasive/invasive diagnostic procedures Routine appropriate Laboratory investigations related to conditions mentioned in A.A and A.B as -CBC, Blood film -Liver function tests - Abdominal Ultrasonography -CT abdomen -Platelet function. -Coagulation profile.	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 and A.B	Clinical round with senior staff	-Procedure presentation - Log book - Chick list

D. Perform the following non invasive/invasive Diagnostic and therapeutic procedures. -Plasmapharesis	Clinical round with senior staff -Perform under supervision of senior staff	-Procedure presentation - Log book - Chick list
E. Prescribe the following non invasive/invasive therapeutic procedures: -Prescribe proper treatment for conditions mentioned in A.A and A.B -Application of Intravenous cannula.	Clinical round with senior staff	- Procedure presentation - Log book - Chick list
F. Carry out patient management plans for common conditions related to Hematological diseases.	Clinical 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. **like:** -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 teaching/ learning	Methods of Evaluation
A. Perform practice-based improvement activities using a systematic methodology (share in audit and risk management activities and use logbook).	-Case log -Observation and supervision -Written & oral communication	Procedure/case presentation -Log book and Portfolios
B. Appraises evidence from scientific studies(journal club)	-Journal clubs - 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 health care professionals including their evaluation and assessment.	Clinical rounds Senior staff experience	

Interpersonal and Communication Skills

ILOs	Methods of teaching/ learning	Methods of Evaluation
F. Maintain therapeutic and ethically sound relationship with patients.	Simulations Clinical round Seminars Lectures Case presentation Hand on workshops	Global rating Procedure/case presentation Log book 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 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/ 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	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		1. Objective 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 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.		1. 360o global rating 2. Patient survey

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

A-Knowledge and understanding

ILOs	Methods of teaching/ learning	*Methods of Evaluation*
A. Describe the etiology, clinical picture, diagnosis and management of the following diseases and clinical conditions: a. Diabetes mellitus b. Thyroid and parathyroid diseases c. Adrenal gland diseases d. Obesity e. pituitary gland diseases f. Diabetes insipidus g. Short stature h. Diabetes insipidus i. Osteoporosis j. Growth disorder k. Ca homeostasis l. Endocrine Emergencies m. Update in endocrine disorders **<u>In critical care and diabetic emergency unit:</u>** 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	Didactic; Lectures Clinical rounds	-log book - one MCQ examination at the second year -Oral and written exam

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 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 endocrinal 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 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 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)	-log book - One MCQ examination at the second half of the second year
B. Order the following non invasive/invasive diagnostic procedures -Routine appropriate Laboratory investigations related to conditions mentioned in A.A . -Urine and stool analysis -Measure the blood sugar. -Ultrasonography	-Clinical round with senior staff Observation Post graduate teaching	- Log book - Chick list
C. Interpret the following non invasive/invasive diagnostic procedures -Routine appropriate Lab investigations related to conditions mentioned in A.A - Liver function tests -Results of Urine analysis -Abdominal Ultrasonography. -kidney function test -Random blood sugar.	Clinical round with senior staff	-Procedure presentation - Log book - Chick list

D. Perform the following non invasive/invasive diagnostic and therapeutic procedures. - Blood sugar estimation -Urinalysis -Application of intravenous cannula. -Abdominal US under supervision. -Insulin administration.	Clinical round with senior staff -Perform under supervision of senior staff	-Procedure presentation - Log book - Chick list
E. Prescribe the following non invasive/invasive therapeutic procedures: -Prescribe proper treatment for conditions mentioned in A.A	Clinical round with senior staff	- Procedure presentation - Log book - Chick list
F. Carry out patient management plans for common conditions related to Endocrinal diseases.	Clinical 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 teaching/ learning	Methods of Evaluation
A. Perform practice-based improvement activities using a systematic methodology (share in audit and risk management activities and use logbook).	-Case log -Observation and supervision -Written & oral communication	Procedure/case presentation -Log book and Portfolios
B. Appraises evidence from scientific studies(journal club)	-Journal clubs - 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 health care professionals including their evaluation and assessment.	Clinical rounds Senior staff experience	

Interpersonal and Communication Skills

ILOs	Methods of teaching/ learning	Methods of Evaluation
F. Maintain therapeutic and ethically sound relationship with patients.	Simulations Clinical round Seminars Lectures Case presentation	Global rating Procedure/case presentation Log book and 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 Endocrinal diseases.	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: -Diabetes. -Diabetic foot.	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	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		1. Objective 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 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.		1. 360o global rating 2. Patient survey

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

A-Knowledge and understanding

ILOs	Methods of teaching/ learning	*Methods of Evaluation*
A. Describe the etiology, clinical picture, diagnosis and management of the following diseases and clinical conditions: a. Malabsorption b. Acute and chronic diarrhea c. Acid pepsin disorder and peptic ulcer d. GIT malignancy e. GIT motility disorders f. Esophageal disorders g. Acute and chronic hepatitis h. Liver cirrhosis i. Hepatic encephalopathy j. NASH k. Hepatic malignancy l. Acute and chronic pancreatitis **m.** Tumors of the pancreas **n.** Hepatic encephalopathy **o.** Acute gastrointestinal bleeding **p.** Acute pancreatitis **q.** Hepatorenal syndrome	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 : 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 l. 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 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 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.		
D-Formulate management plans and alternative decisions in different situations in the field of the gastroenterology and hepatic diseases.		

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
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
C. Interpret the following non invasive/invasive diagnostic procedures -Results of Routine appropriate Lab investigations related to conditions mentioned in A.A. -Abd. ultrasound		

D. Perform the following non invasive and invasive diagnostic and therapeutic procedures. -Abdominal US . -Liver biopsy under supervision -Abdominal Paracentesis -Nasogastric tube and sungestaken tube application -Central venous catheter	Clinical round with senior staff -Perform under supervision of senior staff	-Procedure presentation - Log book - Chick list
E. Prescribe the following non invasive and invasive therapeutic procedures: -Application of Intravenous catheter. -Prescribe proper treatment for conditions mentioned in A.A -Proper drug regimens for GIT diseases Abdominal paracentesis	Clinical round with senior staff Perform under supervision of senior staff	- Procedure presentation - Log book - Chick list
F. Carry out patient management plans for common conditions related to Gastroenterology and hepatology.	Clinical round with 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 sheets (Write a consultation note, Inform patients of a diagnosis and therapeutic plan, completing and maintaining medical records).		

D-General Skills

Practice-Based Learning and Improvement

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

Interpersonal and Communication Skills

ILOs	Methods of teaching/ learning	Methods of Evaluation
F. Maintain therapeutic and ethically sound relationship with patients.	Simulations Clinical round Seminars Lectures Case presentation	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/ learning	Methods of Evaluation
M. Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society that supersedes self-interest; and demonstrate sensitivity and responsiveness to patients' culture, age, gender, and	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		1. Objective 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 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.		1. 360o global rating 2. Patient survey

Unit (Module)6 Rheumatology, and muscloskeletal disorders

A-Knowledge and understanding

ILOs	Methods of teaching/ learning	*Methods of Evaluation*
A. Describe the etiology, clinical picture, diagnosis and management of the following diseases and clinical conditions: a. Rheumatoid arthritis b. SLE c. Crystal induced arthropathy d. Systemic sclerosis e. Dermatomyositis and polymyositis f. Osteoarthritis g. Seronegative arthropathy h. Arthritis in systemic diseases i. Infective arthritis j. Antiphospholipid syndrome	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 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 rheumatology.	-Clinical rounds Senior staff experience	-Logbook and Portfolios -Procedure and 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/ 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 -log book & portfolio -Clinical exam in this branch.
B. Order the following non invasive/invasive diagnostic procedures: -Routine appropriate Lab investigations related to conditions mentioned in A.A -ECG -Chest X-ray - ESR, blood culture. -Echocardiography. -Blood picture -Blood chemistry -Metabolic profile:[i.e. serum electrolytes] -Endocrinal profile Rheumatoid factor, ANF, LE cells.	-Clinical round with senior staff Observation -Post graduate teaching	-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 -ECG -Chest X-ray	Clinical round with senior staff	Procedure presentation - Log book - Chick list

- 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

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

Interpersonal and Communication Skills

ILOs	Methods of teaching/ learning	Methods of Evaluation
F. Maintain therapeutic and ethically sound relationship with patients.	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 rheumatologic 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: Condition mentioned in A.A	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	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		1. Objective 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 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.		1. 360o global rating 2. Patient survey

Unit (Module)7 CHEST DISEASES

A-Knowledge and understanding

ILOs	**Methods of teaching/ learning**	***Methods of Evaluation***
A. Describe the etiology, clinical picture, diagnosis and management of the following diseases and clinical conditions: a. COPD b. Lung cancer c. Pleural effusion d. Interstitial pulmonary fibrosis	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		
C. State update and evidence based Knowledge of : a. COPD b. Lung cancer		
D. Memorize the facts and principles of the relevant 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 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 chest.	-Clinical rounds Senior staff experience	-Logbook and Portfolios -Procedure and 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
B. Order the following non invasive/invasive diagnostic procedures - Routine appropriate Lab investigations related to conditions mentioned in A.A -ECG -Chest X-ray - ESR, blood culture. -Echocardiography. -Blood picture -Blood chemistry -Sputum culture -chest CT SCAN -Bronchoscope	Clinical round with senior staff Observation Post graduate teaching	-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 -ECG	Clinical round with senior staff	-Procedure presentation - Log book - Chick list

-Chest X-ray - ESR, blood culture. -Echocardiography. -Blood picture -Blood chemistry -Sputum culture		
D. Prescribe the following non invasive/invasive therapeutic procedures: -Prescribe proper treatment for conditions mentioned in A.A	Clinical round with senior staff Perform under supervision of senior staff	- Procedure presentation - Log book - Chick list
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

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

Interpersonal and Communication Skills

ILOs	Methods of teaching/ learning	Methods of Evaluation
F. Maintain therapeutic and ethically sound relationship with patients.	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 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	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		1. Objective 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 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.		1. 360o global rating 2. Patient survey

Unit (Module)8 Neurology

A-Knowledge and understanding

ILOs	Methods of teaching/ learning	*Methods of Evaluation*
A. Describe the etiology, clinical picture, diagnosis and management of the following diseases and clinical conditions: ▪ Stroke ▪ coma ▪ Neuropathy ▪ Myopathy and neuromuscular junctional disorder ▪ Infections of nervous system	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 : -Anatomic Principles of central and peripheral nervous system Physiology of neurological reflexes and their centers -Interpretation of investigations as CT brain. Involuntary movement		
C. State update and evidence based Knowledge of 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 teaching/ learning	Methods of Evaluation
A. Correlates the facts of relevant basic and clinically supportive sciences with clinical reasoning, diagnosis and management of common neurological diseases related to internal medicine	-Clinical rounds Senior staff experience	-Logbook and Portfolios -Procedure and 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 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 -log book & portfolio -Clinical exam in this branch.
B. Order the following non invasive/invasive diagnostic procedures: -Routine appropriate Lab investigations related to conditions mentioned in A.A - CT and MRI brain -ECG -Blood chemistry - Serum electrolytes -EEG	-Clinical round with senior staff Observation -Post graduate teaching	-Procedure presentation - Log book - Chick list
C. Interpret the following non invasive/invasive diagnostic procedures - ECG -Blood chemistry - Serum electrolytes -	Clinical round with senior staff	-Procedure presentation - Log book - Chick list

D-General Skills

Practice-Based Learning and Improvement

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

Interpersonal and Communication Skills

ILOs	Methods of teaching/ learning	Methods of Evaluation
F. Maintain therapeutic and ethically sound relationship with patients.	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 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	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		1. Objective 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 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.		1. 360o global rating 2. Patient survey

Unit (Module)9 Radiology

A-Knowledge and understanding

ILOs	Methods of teaching/ learning	Methods of Evaluation
A- Describe the anatomic and pathological entity of: a-X-ray of the bone b-Plain urinary tract with and without contrast. c-Barium swallow, meal and enema. d-Ultrasonography of the abdomen. e-Computed tomography	Didactic; Lectures Seminars	-OSCE at the end of each year -log book & portfolio -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 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 internal medicine	-Clinical rounds Senior staff experience	-Logbook and Portfolios -Procedure and 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 caring and respectful behaviors.	-Didactic; -Lectures -Clinical rounds -Seminars -Clinical rotations (service teaching)	-OSCE -log book & portfolio -Oral Exam.
B. Order the following non invasive/invasive diagnostic procedures a-X-ray of the bone b-Plain urinary tract with and without contrast. c-Barium swallow, meal and enema. d-Ultrasonography of the abdomen. e-Computed tomography	Clinical round with senior staff Observation Post graduate teaching	-Procedure presentation - Log book - Chick list
C. Interpret the following non invasive/invasive diagnostic procedures - X-ray of the bone b-Plain urinary tract with and without contrast. c-Barium swallow, meal and enema. d-Ultrasonography of the abdomen.	Clinical round with senior staff	-Procedure presentation - Log book - Chick list

D-General Skills

Practice-Based Learning and Improvement

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

Interpersonal and Communication Skills

ILOs	Methods of teaching/ learning	Methods of Evaluation
F. Maintain therapeutic and ethically sound relationship with patients.	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.		
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 general diseases	Clinical round Seminars	Clinical Exam
K. Write a report : -Patients X ray report. -Abdominal Ultrasonography report	Senior staff experience	Chick list
L. Council patients and families about: -Result of radiological investigation.	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	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		1. Objective 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 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

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

Time Schedule: Second part

Topic	Covered 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	A,,B,C,H	A-R
Hypertension and hypertensive heart diseases.	A,C,D-H	A-D	A,,B,C,H	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	A,,B,C,H	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	A,C,-H	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 cardiac rhythm and all types of both tachycardias & bradycardias.	B,D-H	A-D	A-J	A-L, M-R
Interrelation ship between the heart and other body systems.	B,D-H	A-D	A-J	A-L, M-R
Drug and non drug therapy of different cardiac diseases.	B,D-H	A-D	A-J	A-K, M-R
Central venous line placement	B,D-H	A-D	A-J	A-K, M-R
Noninvasive mechanical ventilation	B,D-H	A-D	A-J	A-K, M-R
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 cardiac rhythm and all types of both tachycardias & bradycardias.	B,D-H	A-D	A-J	A-K, M-R
Interrelation ship between the heart and other body systems.	B,D-H	A-D	A-J	A-K, M-R
Drug and non drug therapy of different cardiac diseases.	B,D-H	A-D	A-J	A-K, M-R
Central venous line placement	B,D-H	A-D	A-J	A-K, M-R
Noninvasive mechanical ventilation	B,D-H	A-D	A-J	A-K, M-R
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	A, D-H	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	B, D-H	A-D	A-J	A-R
Unit 3 Haematological and Critical Care Unit				
Anemias (Iron deficiency, Megaloblastic, Hemolytic)	A,C,D-H	A-D	A-J	A-R
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 syndromes	A,D-H	A-D	A-J	A-R
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 disorders	A,C,D-H	A-D	A-J	A-R
Plasma cell disorders (Multiple myeloma)	A,D-H	A-D	A-J	A-R
Clotting disorders	A,D-H	A-D	A-J	A-R
Thrombophilia (predisposition, causes)	A,D-H	A-D	A-J	A-R
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	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 3 Endocrine , critical and diabetic emergency Unit				
Diabetes mellitus	A, C-H	A-D	A-J	A-R
Thyroid and parathyroid diseases	A, C-H	A-D	A-J	A-R
Adrenal gland diseases	A, C-H	A-D	A-J	A-R
Obesity	A, C-H	A-D	A-J	A-R
pituitary gland diseases	A, C-H	A-D	A-J	A-R
Diabetes insipidus	A, C-H	A-D	A-J	A-R
Short stature	A, C-H	A-D	A-J	A-R
Diabetes insipidus	A, C-H	A-D	A-J	A-R
Osteoporosis	A, C-H	A-D	A-J	A-R
Growth disorder	A, C-H	A-D	A-J	A-R

Ca homeostasis	A, C-H	A-D	A-J	A-R
Endocrine Emergencies	A, C-H	A-D	A-J	A-R
Update in endocrine disorders	A, C-H	A-D	A-J	A-R
Diabetic emergencies	A, C-H	A-D	A-J	A-R
Cerebrovascular strock	A, C-H	A-D	A-J	A-R
Thromboembolic disorders	A, C-H	A-D	A-J	A-R
Uraemic encephalopathy	A, C-H	A-D	A-J	A-R
Hypertensive emergencies	A, C-H	A-D	A-J	A-R
Central venous line placement	B,C-H	A-D	A-J	A-R
Noninvasive mechanical ventilation	B,C-H	A-D	A-J	A-R
Airway management	B,C-H	A-D	A-J	A-R
Endotracheal intubation	B,C-H	A-D	A-J	A-R
Hemodynamic monitoring	B,C-H	A-D	A-J	A-R
Central venous line placement	B,C-H	A-D	A-J	A-R
Unit 5 Gastroenterology, hepatology and GIT critical care 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 polymyositis	A,D-H	A-D	A-C	A-R
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 gastroenterology changes in Rheumatologic diseases.	B,D-H	A-D	A-C	A-R
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 fibrosis	A, D-H	A-D	A-I	A-R
Respiratory failure	B, D-H	A-D	A-I	A-R
COPD	C, D-H	A-D	A-I	A-R
Lung cancer	C, D-H	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 neuromuscular junctional disorder	A, D-H	A-D	A-C	A-R
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 without contrast	A-D	A-C	A-C	A-Q
Barium swallow, meal and enema	A-D	A-C	A-C	A-Q
Ultrasonography of the abdomen	A-D	A-C	A-C	A-Q
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
4. Objective structure clinical examination (OSCE)
5. Procedure/case Log book and Portfolios
6. Simulation
7. Record review (report)

8. Patient survey
9. 360o 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, 22edition.
7- Oxford - text book of Medicine,
8- Davidson20 edition.
9- Current Medical Diagnosis & treatment, 2003.
10- Breinerwold text book of cardiology
11- Essential haematology 2006.
12- Brenner's text book of nephrology
13- William's text book of endocrinology
14- Hutchison's clinical methods
15- Clinical gastroenterology and hepatology (Wilfred M. Weinstein)
16- Dacie and lewis of practictal haematology.
17- Bisset – Khan Abdominal U/S
18- Infectious disease hard book

iii. Recommended books

2. Harrisons - text book of Medicine ,15 edition
3. Hurst text book of cardiology
4. Macloid clinical methods.
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

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.

- ***Competency-based objectives for Professionalism***

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

- ***Competency-based objectives for Systems-based Practice***

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

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

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

Annex 3, Methods of teaching/learning

Annex 3, Methods of teaching/learning

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

Teaching methods for knowledge

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

Teaching methods for patient care

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

Teaching methods for other skills

- Written communication (e.g., orders, progress note, transfer note, discharge summary, operative reports, and diagnostic reports).

- Oral communication (e.g., presentations, transfer of care, interactions with patients, families, colleagues, members of the health care team) and/or non verbal skills (e.g., listening, team skills)

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

Annex 4, Assessment methods

Annex 4, ILOs evaluation methods for Master Degree students.

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

Annex 4, Glossary of Master Degree doctors assessment methods

- Record Review – Abstraction of information from patient records, such as medications or tests ordered and comparison of findings against accepted patient care standards.

- Chart Stimulated Recall – Uses the MSc doctor's patient records in an oral examination to assess clinical decision-making.

- Mini clinical evaluation: Evaluation of Live/Recorded Performance (single event) – A single resident interaction with a patient is evaluated using a checklist. The encounter may be videotaped for later evaluation.

- Standardized Patients (SP) – Simulated patients are trained to respond in a manner similar to real patients. The standardized patient can be trained to rate MSc doctor's performance on checklists and provide feedback for history taking, physical examination, and communication skills. Physicians may also rate the MSc doctor's performance.

- Objective Structured Clinical Examination (OSCE) – A series of stations with standardized tasks for the MSc doctors to perform. Standardized patients and other assessment methods often are combined in an OSCE. An observer or the standardized patient may evaluate the MSc doctors.

- Procedure or Case Logs – MSc doctors prepare summaries of clinical experiences including clinical data. Logs are useful to document educational experiences and deficiencies.

- PSQs – Patients fill out Patient Survey questionnaires (PSQs) evaluating the quality of care provided by a MSc doctors.

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

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

Annex 5, Program evaluation tools

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

Annex 6, Program Correlations:

مصفوفة توافق المعايير القومية القياسية العامة لبرامج الماجستير مع المعايير الأكاديمية المعتمدة من كلية الطب – جامعة أسيوط لدرجة الماجستير في 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 *internal medicine*.	1- إجادة تطبيق أساسيات و منهجيات البحث العلمي و استخدام أدواته المختلفة
2- Appraise and utilise scientific knowledge to continuously update and improve clinical practice in *internal medicine*.	2-تطبيق المنهج التحليلي و استخدامه 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 *internal medicine*.	3-تطبيق المعارف المتخصصة و دمجها مع المعارف ذات العلاقة في ممارسته المهنية
4- Provide patient care that is appropriate, effective and compassionate for dealing with common health problems and health promotion using evidence-based and update information.	4-إظهار وعيا بالمشاكل الجارية و الرؤى الحديثة في مجال التخصص
5- Identify and share to solve health problems in *internal medicine*..	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 *internal medicine*.	6-إتقان نطاق مناسب من المهارات المهنية المتخصصة، واستخدام الوسائل التكنولوجية المناسبة بما يخدم ممارسته المهنية

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.	7–التواصل بفاعلية و القدرة على قيادة فرق العمل
9- Acquire decision making capabilities in different situations related to *internal medicine.*	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 *internal medicine.* 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 *internal medicine*. and the welfare of society.	2-1-ب-التأثير المتبادل بين الممارسة المهنية وانعكاسها علي البيئة.
2.1. C- Up to date and recent developments in common problems related to *internal medicine*.	2-1-ج-التطورات العلمية في مجال التخصص.
2.1. D- Ethical and medicolegal principles relevant to practice in the *internal medicine*.	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 *internal medicine*.	2-1-هـ- 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
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-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 *internal medicine*.	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 *internal medicine*.	2-2-ج- الربط بين المعارف المختلفة لحل المشاكل المهنية
2.2. C- Demonstrating systematic approach in studying clinical problems relevant to the *internal medicine*.	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 *internal medicine*.	2-2-ز- اتخاذ القرارات المهنية في سياقات مهنية متنوعة
2.3.A- provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health. 2.3.B- Demonstrate patient care skills relevant to *internal medicine*. for patients with common diseases and problems.	2-3-أ- إتقان المهارات المهنية الأساسية و الحديثة في مجال التخصص

2.3.C- Write and evaluate reports for Situation related to *internal medicine*.	2-3-ب- كتابة و تقييم التقارير المهنية
2.3.A- provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health. 2.3.B- Demonstrate patient care skills relevant to that speciality for patients with common diseases and problems.	2-3-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
2.4.A-Demonstrate practice-based learning and improvement skills that investigation and involves 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-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.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	2-4-ج- التقييم الذاتي وتحديد احتياجاته التعلمية الشخصية

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-هـ- 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-A-** Established basic, biomedical, clinical, epidemiological and behavioral sciences related conditions, problem and topics.	***2-1- Knowledge and understanding*** **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 *internal medicine* **2-1-B-** Mention essential facts of clinically supportive sciences including and basics of internal medicine and infection control and addiction related to *internal medicine.* **2-1-C-** Demonstrate sufficient knowledge of etiology, clinical picture, diagnosis, prevention and treatment of the common diseases and situations related to *internal medicine.*
2-1-B The relation between good clinical care of common health problem in the *internal medicine* society.	**2-1-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.
2-1-C- Up to date and recent developments in common problems related to the field of *internal medicine.*	**2-1-C-** Demonstrate sufficient knowledge of etiology, clinical picture, diagnosis, prevention and treatment of the common diseases and situations related *internal medicine.* **2-1-D-** Give the recent and update developments in the pathogenesis, diagnosis, prevention and treatment of common diseases related to *internal medicine.*
2-1-D- Ethical and medicolegal Principles relevant to	**2-1-E-** Mention the basic ethical and medicolegal principles that should be applied in practice and

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

continuous (ARS)	continuous (ILOs)
2-3- Clinical skills:	***2/3/1/Practical skills (Patient Care :)***
2-3-A- Provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health.	**2-3-1-A-** Obtain proper history and examine patients in caring and respectful behaviors.
2-3-B- Demonstrate patient care skills relevant to that *internal medicine.* for patients with common diseases and problems.	**2-3-1-B-** Make informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, up-to-date scientific evidence, and clinical judgment for common conditions related to *internal medicine.*
	2-3-1-C- Carry out patient management plans for common conditions related to *internal medicine.*
	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 situations related to the field of *internal medicine.*	**-3-1-H** Write competently all forms of patient charts and sheets including reports evaluating these charts and sheets. (Write a consultation note, Inform patients of a diagnosis and therapeutic plan, completing and maintaining medical records).

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

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

III-Program matrix
Knowledge and Understanding

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**)	✓							
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 medicine ***2 advanced***	✓	✓	✓	✓	✓	✓	✓	✓

Intellectual

Course	Programs covered ILOs			
	2/2/A	2/2/B	2/2/C	2/2/D
Course 1 (**Pharmacology**)	✓			
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 medicine ***2 advanced***	✓	✓	✓	✓

Practical Skills (Patient Care)

Course	Programs covered ILOs							
	2/3/1/A	2/3/1/B	2/3/1/C	2/3/1/D	2/3/1/E	2/3/1/F	2/3/1/G	2/3/1/H
Course 1 (**Pharmacology**)								
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 medicine ***2 advanced***	✓	✓	✓	✓	✓	✓	✓	✓

General Skills

Course	Programs covered ILOs							
	2/3/2 /A	2/3/2 /B	2/3/2 /C	2/3/2 /D	2/3/2 /E	2/3/2 /F	2/3/2 /G	2/3/2 /H
Course 1 (Pharmaco logy)				✓				✓
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 medicine *2 advanced*	✓	✓	✓	✓	✓	✓	✓	✓

General Skills

Course	Programs covered ILOs						
	2/3/2/I	2/3/2/J	2/3/2/K	2/3/2/L	2/3/2/M	2/3/2/N	2/3/2/O
Course 1 (Pharmacology)			✓		✓		
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 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:

أ.د/ محمد عباس صبح
أ.د/ محمد على تهامى
أ.د/ ماهر عبد الجابر عبد الناصر
أ.د/ يسرية عبد الرحمن أحمد
أ.د/ عبد الله اسماعيل على كيلانى
أ.د/ نبويه محمود توفيق
أ.د/ إيناس أحمد رضا الكريمى
أ.د/ البدرى ابراهيم ابو النور
أ.د/ نور الدين عبد العظيم الحفني
أ.د/ محمد مصطفى عشماوى
أ.د/ عصام عبد المنعم صادق البيه
أ.د/ لبنى فرج التونى
أ.د/ فاطمة ابو بكر عبد المعز
أ.د/ محمد حسام الدين حسن مغربى
أ.د./ اشرف انور ثابت الشاذلى
أ.د./ محمود على محمود عشرى
أ.د./ علاء الدين عبد المنعم
أ.د./ سلوى صلاح الجندى
أ.د./ هالة خلف الله الشريف
أ.د./ نبيلة فائق أمين
أ.د./ محمد اليمنى قبيص
أ.د./ حسين احمد الامين همام
أ.د./ اسامه احمد ابراهيم
د./ رفعت فتحى عبد العال
أ.د././هويدا عبد الحكيم نفادي
أ.د././ مصطفى عبد الله هريدى
د./ عمر محمد عمر شحات
أ.د././ هالة مصطفى كامل
د./عادل حسن مكاوي
د./ منى محمد سليمان
د./ عفت عبد الهادى تونى
د./ عصام الدين عبد المحسن محمد
د./منال السيد عز الدين
د./ محمد رمضان عبد الحميد
د./زين العابدين أحمد سيد
د./محمد زين الدين حافظ
د./لبنى عبد الواحد أحمد
د./أحمد فراج ثابت

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

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

(End of the program specifications)