### UNIVERSITY DEVELOPMENT CENTER

### **Template for Course Specifications**

**Faculty:** Mansoura Faculty of Medicine

**Department:** Internal Medicine

#### **Course Specifications**

Programme(s) on which the course is given : MBBCh Major or minor element of programme : Major

Department offering the programme : Department offering the course :

Internal Medicine (including the following:

Gastroenterology and hepatology

Endocrinology, diabetes, metabolism

Nephrology

Rheumatology and immunology

Medical oncology

Hematology

Geriatrics

General internal medicine

Critical care medicine

Cardiovascular Medicine Department.

Neurology

Chest medicine

**Psychiatry** 

Title:

Lecture:

Rheumatology & Rehabilitation

Dermatology, Andrology & STDs

Tropical Medicine Department

Diagnostic radiology

Clinical Pathology

Academic year / level: Fifth year 2015/2016

Internal medicine and its specialties:

Date of specification approval: Department council August 2016

Tutorial: Practical 362 Lecture: 92 270 (15weeks) Total: Title: Cardiology Lecture: 18 Tutorial: Practical 54 (3weeks) Total: 72 Title: Dermatology Tutorial: Practical 54(3weeks) Total: 78 Lecture: 24 Title: Clinical pathology Tutorial: Lecture: 16 Practical Total: 16 Title: Chest 72 Lecture: 18 Tutorial: Practical 54(3weeks) Total: Title: Neurology Lecture: Tutorial: Practical Total: 72 18 54(3weeks) Tropical medicine Title: Tutorial: Lecture: 12 Practical 36(2weeks) Total: 48 Title: **Psychiatry** 

Title: Rheumatology and rehabilitation

Tutorial:

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18(1weeks)

Total:

24

Practical

Lecture: 6 Tutorial: Practical 18(1weeks) Total: 24

Title: Diagnostic radiology

Lecture: 6 Tutorial: Practical 18(1weeks) Total: 24

#### **A- Professional Information**

#### 1 - Overall Aims of Course

Overall Aims of Course is to provide the student with:

- 1. Basic Knowledge and clinical Skills essential for dealing with common diseases and life threatening illnesses related to internal medicine and their prevention and management.
- 2. ATTITUDES that foster patient centered care and support the highest standards of the medical profession
- 3. Basic knowledge and skills to diagnose and manage stable cardiovascular diseases states as well as acute states
- 4. Basic amount of knowledge and skills needed for general practitioners for dealing with tropical, infectious and endemic diseases and their proper management
- 5. Basic knowledge & skills when dealing with the psychosocial effects of medical illness and to detect and manage common psychological health problems encountered in all specialties.
- 6. Knowledge & skills for undertaking advanced training in psychiatry
- 7. Basic knowledge, skills and attitude essential for the practice of Rheumatology, Physical medicine and Rehabilitation necessary to be able to examine, diagnose, advice and treat patients with common rheumatic disorders correctly.
- 8. Knowledge, clinical skills and ethical attitude about common disorders of skin, andrology and sexually transmitted diseases (STDs) likely to be seen by general practitioner.
- 9. Basic knowledge and skills necessary to make an essential radiologic framework, determine the essential radiological approaches needed in common emergencies and radiological interpretation of various diseases affecting the different body systems, including congenital, inflammatory, traumatic, neoplastic and functional disorders.
- 10. The ability to be proficient in thorough Neurology history taking, comprehensive physical and mental state examination, diagnosis and management of neurological diseases
- 11. Basic knowledge, cilinical skill and attitude to diagnose and treat different chest diseases and to basically interpret chest x-ray
- 12. Provide the students with the essential knowledge of Clinical pathology related to Medical practice.
- 13. Attitude of team relationship and personal development including a lifelong continued medical education.

### 2 – Intended Learning Outcomes of Course (ILOs)

#### a- Knowledge and Understanding

- A 1. Identify altered structure and function of the body and its major systems that are seen in various diseases and integrate it in clinical conditions including endocrinal, gastrointestinal, renal, rheumatological, immunological, hematological, oncological diseases.
- A 2. Discuss etiology, pathogenesis, clinical features, diagnoses and complications of common and life threatening illnesses affecting the body and each of its major organ systems, presenting throughout the age spectrum from adolescents to elderly, including gastrointestinal and hepatic ,endocrinal , diabetes, renal ,hematological and rheumatological disorders.
- A 3. Identify common medical illnesses with multi-system reflections and their differential diagnosis.
- A 4. Describe the principles of evidence based medicine (EBM) including its steps to practice EBM.
- A 5. Identify causes of different cardiovascular diseases.
- A 6. Describe Pathogenesis of different cardiovascular diseases.

- A 7. Explain symptoms of different cardiovascular diseases.
- A 8. Discuss clinical presentation of different cardiovascular diseases.
- A 9. List investigations for diagnosis of cardiovascular diseases (Non-Invasive and Invasive)
- A 10. Summarize Diagnostic Approach of different cardiovascular diseases.
- A 11. List therapeutic approach of different cardiovascular diseases.
- A 12. Enumerate preventive Approach of different cardiovascular diseases.
- A 13. Describe the normal structure and function of the gastrointestinal and hepatobiliary system.
- A 14. Discuss etiology and pathogenesis, clinical features and various diagnostic modalities of common tropical and endemic disorders.
- A 15. List different principles of management of various Tropical and infectious disorders.
- A 16. Describe etiology, pathogenesis, clinical features, diagnoses and complications of common psychiatric disorders, presenting throughout the age spectrum.
- A 17. Describe the steps of proper management of different psychiatric disorders.
- A 18. Describe etiology, pathogenesis and clinical features and identify various diagnostic methods of common and major rheumatic diseases
- A 19. Discuss different principles of management of various rheumatic diseases and back pain
- A 20. Discuss the differential diagnosis of rheumatological diseases.
- A 21. Define different physical modalities and antirheumatic drugs, uses &contraindications.
- A 22. Recognize etiology, pathogenesis, clinical features, diagnoses and complications of common dermatology, STDs and Andrology cases
- A 23. Discuss principles of management of common dermatology, STDs and Andrology cases
- A 24. Describe principles of disease surveillance and screening.
- A 25. Identify the basic technical principles of the main radiologic equipments; x-ray, Barium study, CT and MRI.
- A 26. Describe normal radiologic anatomy of different systems: CNS, CVS, GIT and GUS.
- A 27. Discuss the radiologic appearance of different diseases: congenital, inflammatory and neoplastic.
- A 28. List the main radiologic tools used in emergencies.
- A 29. Discuss the common neurological problems presenting to doctors in primary health care setting, hospital and community their diagnosis, prevention and treatment.
- A 30. Identify disease in terms of mental, functional and physical processes.
- A 31. State the clinical manifestations and differential diagnosis of common neurological disorders with an emphasis on the incidence of the different manifestations and their relative importance in establishing diagnosis, and the early manifestations of serious diseases.
- A 32. Identify risk factors for disease processes and injury, and institute the appropriate diagnostic, preventive, and therapeutic interventions.
- A 33. Identify the indications and logistics of referring patients to higher levels of experience or specialization with regard to neurological cases.
- A 34. List the aetiology, basics of pathogenesis and treatment of pulmonary embolism and pulmonary hypertension and diseases of mediastinum
- A 35. Recognize the aetiology, pathogenesis and treatment of bronchial asthma, COPD, TB, suppurative lung diseases, pleural diseases and lung cancer.
- A 36. Explain different types of pulmonary fibrosis , respiratory failure and pulmonary interventional techniques
- A 37. Recognize pneumonia diagnosis and treatment options
- A 38. Describe the causes, pathophysiology and laboratory diagnosis of various types of anemias.
- A 39. List different types of benign and malignant leucocyte disorders.
- A 40. Recognize appropriate laboratory tests needed for evaluation of organ functions.
- A 41. Identify the basic principles of diagnostic microbiology.
- A 42. Recognize the preanalytical variables that confound test results.

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#### **b- Intellectual Skills**

- B 1. Integrate basic biomedical & biopsychosocial science with clinical care.
- B 2. Reason deductively in solving clinical problems:
  - B .2.1. Prioritize clinical problems.
  - B .2.2. Evaluate information objectively, recognizing its limitations
- B 3. Use personal judgment for analytical and critical problem solving.
- B 4. Integrate the results of history, physical and laboratory test findings into a meaningful diagnostic formulation of various medical conditions.
- B 5. Construct appropriate management strategies for patients with common medical diseases, both acute and chronic status.
- B 6. Design an initial course of management for stabilization of patients with serious illnesses.
- B 7. Classify factors that place individuals at risk for disease, to determine strategies for appropriate response.
- B 8. Evaluate relevant and current data from literature, using information technologies and library resources, in order to help solve a clinical problem based on evidence (EBM).
- B 9. Recognize and cope with uncertainty that is unavoidable in the practice of medicine by accepting and reacting to uncertain situation through proper counseling, consultation and referral.
- B 10. Choose the suitable diagnostic techniques as regard cost effectiveness
- B 11. Interpret the clinical and report of diagnostic procedures to reach the proper diagnosis of specific cardiovascular disease
- B 12. Choose the suitable therapeutic modalities for a specific cardiovascular disease
- B 13. Analyze symptoms and signs and construct a differential diagnosis for common presenting complains pf tropical diseases
- B 14. Recognize and prioritize the complains of the patient relevant to the musculoskeletal system and analyze them
- B 15. Design appropriate management strategies for patients with common rheumatologic and musculoskeletal disorders.
- B 16. Classify different radiological examination used in different diseases.
- B 17. Analyze the radiological films and differentiate between normal and abnormal films.
- B 18. Choose between different oxygen delivery devices.
- B 19. Design an appropriate diagnostic plan for evaluation of common presenting complaints
- B 20. Differentiate between different types of leukemias by laboratory tests and clinical assessment.
- B 21. Use the blood bank appropriately in patient management.
- B 22. Apply laboratory data for evaluation of hemostasis and immune system
- B 23. Evaluate endocrine function by laboratory tests and correlate with clinical findings.
- B 24. Use the appropriate laboratory assays of carbohydrates plasma proteins, lipids and minerals for screening, diagnosis and monitoring.

#### c-Professional and Practical Skills

- C1. Take and record a structured, patient centered history of appropriate depth and details, relevant to the clinical context.
- C2. Perform full physical examination of patients in complete and/or problem-focused manner.with acute and chronic clinical conditions appropriate to the age, gender, acute and

- chronic clinical conditions while being culturally sensitive.
- C3. Record patients 'data appropriately.

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- C4. Formulate management plans for common diseases and acute emergencies.
- C5. Write safe prescriptions of different types of drugs based on patient's weight, age and health condition.
- C6. Provide first aid measures for critically ill patients in skill lab.
- C7. Demonstrate competency in cardiopulmonary resuscitation and basic life-support.
- C8. Perform and interpret basic bedside laboratory tests.
- C9. Perform some therapeutic interventions e.g. insert a nasogastric tube and a Sungstaken tube in skill lab.
- C10. Apply safety and infection control measures during practice.
- C11. Perform general cardiac examination (pulse, Blood Pressure, Neck veins, hand, Lower Limb)
- C12. Perform Local cardiac examination
- C13. Perform cardiac auscultation
- C14. Interpret simple cardiac investigations
- C15. Conduct a psychiatric interview and record a structured, patient centered history.
- C16. Perform mental state examination for patients appropriate to the age,gender, acute, chronic psychiatric conditions while being culturally sensitive.
- C17. Recognize different findings the radiological film.
- C18. Analyze and interpret the radiological appearance of the common diseases on the film.
- C19. Recognize life-threatening conditions and appropriate initial management.
- C20. Perform full chest examination of patients with chest diseases
- C21. Interpret the finding in chest x ray
- C22. Basic interpretation of pulmonary function and ABG

#### d-General and Transferable Skills

- D1. Adopt principles of the lifelong learning needs of the medical profession.
- D2. Use information and communication technology effectively in the field of medical practice.
- D3. Retrieve, manage, and manipulate information by all means, including electronic means.
- D4. Present information clearly in written, electronic and oral forms.
- D5. Communicate ideas and arguments effectively.
- D6. Use Evidence Based Medicine in management decisions.
- D7. Effectively manage time and resources and set priorities.
- D8. Work efficiently within the health care team and as an effective team leader.
- D9. Solve problems related to patients, work management, and among colleagues.
- D10. Discuss freely about learned medical problems.
- D11. Establish effective communication with the patient and the tutor and practice how to break bad news.
- D12. Explain to the patients and the nature of the illness, the diagnostic and therapeutic options and recommended lifestyle modification.
- D13. Honor and respect patients, seniors and other colleagues involved in his teaching and subsequently in his future practice.
- D14. Respect patients' right and treat all patients equally regardless of believes, culture and behaviors
- D15. Recognize one's own limitations of knowledge and skills and refer patients to appropriate specialized health facility at the appropriate stage.
- D16. Present information to the patients and ethical way.

D17. Respond effectively to a patient's emotional and psychosocial concerns

#### E- Professional attitude:

- E.1. Adopt an empathic and holistic approach to the patients and their problems.
- E.2. Respect patients' rights and involve them and /or their caretakers in management decisions.
- E.3. Recognize the important role played by other health care professions in patients' management.
- E.4. Apply basics of medical ethics and be aware of the national code of ethics issued by the Egyptian Medical Syndicate.
- E.5. Counsel Patients suffering from different conditions.
- E.6. Ensure confidentiality and privacy of patients' information.

#### **F- Communication skills:**

- F.1. Communicate clearly, sensitively and effectively with patients and , and colleagues from a variety of health and social care professions.
- F.2. Communicate effectively with individuals regardless of their social, cultural, ethnic backgrounds, or their disabilities.
- F.3. Cope with situations where communication is difficult including breaking bad news.
- F.4. Show compassion to the patients and situations of stress and grief.
- F.5. Honor and respect patients, superiors, colleagues and any other member of the health profession.

#### 3 – Contents:

#### **Internal medicine courses:**

Topics	Number of teaching hours	
	Lecture	Tutorial/clinical
GASTROENTEROLOGY & HEPATOLOGY	Total (26)	(20 rounds)
GASTROENTEROLOGY	11	8
1. Approach to a patient with gastrointestinal disease	11	J J
2. Oesophageal Diseases: Dysphagia, GERD		
3. Peptic Ulcer Diseases & related disorders		
4. Malabsorption syndrome		
5. Diarrhea		
6. Constipation		
7. Irritable Bowel Syndrome		
8. Inflammatory Bowel Disease		
9. Upper GIT bleeding		
10. Lower GIT bleeding		
11. GIT malignancies		
<b>HEPATOLOGY</b>		
1. Acute Hepatitis		
2. Chronic Hepatitis I		
3. Chronic Hepatitis II		
4. Acute liver failure	15	12
5. Liver cirrhosis and Chronic liver failure		
6. Ascites		
7. Portal hypertension		
8. Hepatic encephalopathy		

9. Hepatorenal syndrome, HPS		
10. Non viral hepatitis		
Non alcoholic fatty liver disease, Wilson disease,		
hemochromatosis & others.		
11. Liver Tumors & Hepatomegaly (differential		
diagnosis) 12. Jaundice & cholestasis .		
<ul><li>13. Liver transplantation.</li><li>14. Pancreatic Diseases</li></ul>		
15. Gall bladder Diseases		
	Total	22
ENDOCRINOLOGY, DIABETES, METABOLISM & NUTRITION	(24)	22
	(24)	
ENDOCRINOLOGY  1 Approach to a potient with and agricult discussors		
<ol> <li>Approach to a patient with endocrinal disorder</li> <li>Pituitary Disorders – I</li> </ol>		
Hypopituitarism, diabetes insipidus		
Short stature in adults		
3. Pituitary Disorders – II		
Acromegaly, differential diagnosis of tall stature.		
SIADH		
4. Metabolic Bone Disease:		
Osteoporosis and osteomalacia		
5. Disorders of the Parathyroid Glands:		
Hypo- and hypercalcemia		
6. Adrenal Disorders – I		
Cushing syndrome	13	12
Conn's syndrome		
Pheochromocytoma		
7. Adrenal Disorders – II		
Addison disease		
Acute suprarenal failure		
8. Hypothyroidism		
9. Hyperthyroidism		
10. Other thyroid disorders:		
Goiter, thyroiditis, thyroid emergencies.		
11. Gonadal disorders		
12. Common presentations of endocrine disorders		
(including Hirsutism and hyperprolactinemia)		
13. Case scenarios in Endocrinology		

DIABETES & METABOLISM:		
1. Classification, Clinical Aspects & Diagnosis of	9	8
DM.		
2. Acute complications of diabetes I		
3. Acute complications of diabetes II		
4. Chronic complications of diabetes I		
5. Chronic complications of diabetes II		
6. Management of Diabetes I		
7. Management of Diabetes II		
8. Hypoglycemia		
9. Lipid disorders		
NUTRITION		
1. Obesity & Metabolic syndrome		
2. Assessment of nutrition & Nutritional deficiencies	2	2
GERIATRICS		
Introduction to geriatric medicine I	2	2
2. Introduction to geriatric medicine II		4
HAEMATOLOGY & ONCOLOGY :		
1. Anemia – I		
Iron deficiency anemia		
Megaloblastic anemia		
2. Anemia – II		
Aplastic anemia		
Hemolytic anemia		
3. Blood transfusion (clinical aspects)		8
4. Acute Leukemia	9	U
5. Chronic Leukemia		
6. Myeloproliferative Disorders		
Polycythemia		
Multiple myloma		
7. Lymphoma		
8. Haemorrhagic disorders I		
9. Haemorrhagic disorders II		
RHEUMATOLOGY and CLINICAL		
IMMUNOLOGY:		
1. SLE & Lupus related syndromes I		
2. SLE & Lupus related syndromes II		
3. Rheumatoid arthritis (systemic manifestations and	7	8
treatment)	'	U
4. Seronegative arthropathies.		
5. Progressive Systemic Sclerosis & Myositis.		
6. Vasculitis		
7. Differential diagnosis of arthritis		

NEPHROLOGY		
1. Common symptomatology of a renal patient I		
2. Common symptomatology of a renal patient II		
3. Evaluation of patient with kidney disease		
4. Acute kidney injury I	10	
5. Acute kidney injury II	10	8
6. Chronic Kidney disease I		
7. Chronic Kidney disease II		
8. Fluid and Electrolyte disturbance.		
9. Acid Base Balance		
10. Drugs and Kidney		
GENERAL INTERNAL MEDICINE		
CRITICAL CARE MEDICINE		
DIFFERENTIAL DIAGNOSIS		
1. Evidence based medicine (EBM) principles		
2. Iatrogenic disorders:		
3. Nanotechnology in medicine		
4. Principles of Regenerative medicine		
5. Medical ethics		
6. Patterns of fevers, Hyperpyrexia,		
hypothermia, Bacteremia and Septicemia.		
7. Sudden death & resuscitation & Care of critically		
ill patient.		
8. Common differential diagnosis in medicine I		
Pyrexia of unknown origin = PUO (infectious and	14	12
non infectious causes).		
9. Common differential diagnosis in medicine II		
=		
a. Fatigue and chronic fatigue syndrome		
b. Dyspnea		
10. Common differential diagnosis in medicine III		
a. Polyuria b-Oedema		
11. Common differential diagnosis in medicine		
Non surgical causes of abdominal pain		
12. Common differential diagnosis in medicine IV		
Lymphadenopathy		
13. Case scenarios in internal medicine I		
<b>14.</b> Case scenarios in internal medicine II		
General approach to history taking and clinical (general		
and local) examination.		6
PROCEDURAL SKILLS :		
At the end of the course the student will be able to:		
for liver biopsy, nasogastric and Sungstaken		4 alimi1 1
tube.		4 clinical rounds
• Predict and describe the indications,		1 skill lab
contraindications, precautions and possible		
complications of such procedures.		
Demonstrate competency on cardiopulmonary		
resuscitation and basic life support.		

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Total	92 hours	270 hours (15 weeks, 6 rounds /week, each round 3 hours)
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**Cardiology topics:** 

Topic	Lecture	Tutorial/Practical
Introduction to cardiovascular diseases (CVD)		1
Symptoms of CVD		2
General Examinations (General & other Systemic Items		1
related to CVD)		
Local Cardiac Examination.		2
Cardiac Auscultations an Heart Sounds		1
Cardiac Murmurs (Genesis and Clinical Approach )		3
Investigation for Cardiovascular Diagnosis		2
Congenital Heart Diseases in Adults	1	3
Rheumatic Fever	1	3
Valvular Heart Diseases (Stenotic and Regurgitate	2	9
Lesions of all Cardiac Valves)		
(MV,TV,AV,PV)		
Infective Endocarditis	1	3
Pericardial Diseases	1	3
Ischemic Heart Diseases	2	3
Systemic Hypertension.	2	3
Pulmonary Hypertension (Cor -pulmonal ,Pulmonary	1	3
Embolism )		
Myocarditis, Cardiomyopathy & specific heart muscle	1	3
Diseases		
Cardiac Arrhythmias & Conduction Defects	2	3
Congestive Heart Failure	1	3
Acute Circulatory Failure (Shock, Syncope and	2	1
Hypertensive States)		
Diseases of Aorta & Great Vessels	1	1
Peripheral Vascular Diseases		1
Total	18 hours	54 hours (3 weeks)

**Chest topics:** 

Topic	Lecture	Tutorial/Practical
Anatomy	1	3
Pulmonary function test	1	3
Pneumonia	1	3
Pulmonary tuberculosis and Extra pulmonary TB	1	3
Suppurative lung syndrome	1	3
Pleural diseases	1	3
Bronchial asthma	1	3
Hypersenstivity pneumonitis	1	3
Smoking	1	3
Chronic obstructive pulmonary disease	1	3
Lung cancer	1	3

Topic	Lecture	Tutorial/Practical
Diseases of the mediastinum	1	3
Respiratory failure and ARDS	1	3
Oxygen therapy	1	3
Pulmonary thromboembolic disease and Pulmonary	1	3
hypertension		
Pulmonary fibrosis and Lung collapse	1	3
Chest wall diseases and Diaphragm	1	3
Chest radiology and Investigations in chest medicine	1	3
Total	18 hours	54 hours (3 weeks)

## **Neurology topics**:

2,002,010	gy topics.  Topic	Lecture	Tutorial/practical
	Neurological lectures	(18 hours)	54 hours (3 weeks)
Introduction.		1	
Cerebrovascu	lar disorders.	2	
Hemiplegia.		1	
	e extrapyramidal system.	2	
Diseases of th	e Cerebellum.	1	
Diseases of th	e spinal cord.	1	
Diseases of th	e peripheral nerves.	1	
Diseases of th	e muscles.	1	
Epilepsy.		2	
Infections of t	he nervous system.	1	
Demyelinating	g diseases.	1	
Headache.		1	
Brain Tumors		1	
Dementia.		1	
Coma.		1	
Neurological	sheet		
History			4
	lopment and general appearance nctions - Speech & articulation		4
Interrectuur ru	Olfactory -Optic		3
	Oculomotor -Trochlear -Abducent		3
Cranial	Trigeminal - Facial +clinical case		3
nerves	Vestibulo-Cochlear -Glossopharyngeal Vagus -Accessory - Hypoglossal		3
Motor	Muscle status, Muscle tonus, Muscle strength		3
System	Reflexes -Involuntary movements		3
Sensory System	Superficial -Deep - Cortical		3
endocrine disc	Trophic & vasomotor changes, Vegetative & orders, Spine, Cranium, Station and Gait of other systems  *Neurological cases**		3

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Paraplegia		3
Cauda equina syndrome		3
Extrapyramidal syndromes		3
Cerebellum disorders		3
Muscle diseases & neuromuscular disorders		3
Polyneuropathy		3
Hemiplegia		3
Total	18 hours	54 hours (3 weeks)

**Tropical medicine topics:** 

Topic	Lecture	Practical/tutorial
Fevers	1	3
Traveler's diarrhea	1	1
Emerging and re-emerging infections	1	2
Viral haemorrhagic fevers	1	3
Prion disease	1	3
Malaria	1	2
Parasitic liver disease	1	3
Tropical liver disease	1	3
Schistosomiasis	1	3
Common parasitic diseases and atlas of infectious diseases	1	2
Ameobiasis	1	2
Lieshmaniasis	1	
Tropical sheet		3
General examination		3
Local examination		3
Total	12 hours	2 weeks (36 hours)

**Psychiatry topics:** 

Topic	Lecture	Tutorial/practical
Mental state examination& Symptomatology	1	3
Aetiology of psychiatric disorders& Organic mental	1	3
disorders		
Anxiety disorders	1	2
Somatoform disorders		2
Dissociative disorders		1
Mood disorders	1	3
Schizophrenia	1	3
Substance abuse &dependence	1	1
Total	6 hours	18 hours (1 week)

Physiotherapy, rehabilitation & rheumatology topics:

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Topic	Lecture	Tutorial/Practical
Osteoarthritis & gout	1	
Articular manifestations of Rheumatoid arthritis	1	3
Low back pain	1	3
Rehabilitation	1	3
Physiotherapy	1	3
Anti-rheumatic drugs	1	

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Osteoarthritis		3
Gout		3
Total	6 hours	18 hours (1 week)

**Diagnostic radiology topics:** 

Topic	Lecture	<b>Tutorial/Practical</b>
Basic radiology of the central nervous system	1	3
Basic radiology of the cardiovascular system	1	3
Basic radiology of the chest	1	3
Basic radiology of the upper gastrointestinal tract	1	3
Basic radiology of the lower gastrointestinal tract and the	1	3
liver		
Basic radiology of the the emergency ultrasound and CT	1	3
Total	6 hours	18 hours (1week)

**Dermatology topics:** 

Topic	Lecture	Practical/Tutorial
Structure & function of skin, pathological terms, principles	1	4
of diagnosis, topical therapy		
Viral infection	2	4
Fungus infection	2	8
T.B, Leprosy	1	2
Eczema	1	2
Bacterial infection	1	4
Parasitic diseases, urticaria, papular urticaria	1	4
Erythema multiforme, drug eruption	1	2
Psoriasis, Lichen planus, PRP	1	4
Diseases of sebaceous & sweat glands	1	4
Diseases of hair, melanin disorder	2	2
Collagen diseases, pemphigus	1	4
Anatomy of genitals, male infertility & Sexual medicine	2	4
Gonorrhea, NGU, Syphilis, Chancroid, granuloma	7	6
inguinale, Viral STD, LGV, Candidiasis, trichomonias		
Total	24	54 (3 weeks)

**Clinical pathology topics:** 

Topic	Lecture
Laboratory approach for diagnosis of anaemia	1
Haemolytic disorders	1
Haemostasis	1
Transfusion medicine	1
Leucocyte disorders	1
Liver and kidney function tests	1
Diabetes and dyslipidemia	1
Cardiac functions, Acute phase reactants	1
Tumor markers	1
Sampling procedures in microbiology lab.	1
Laboratory diagnosis of viral and fungal infections	1
Laboratory diagnosis of bacterial infections	1
Hypersensitivity	1



Immune deficiency syndrome	1
Polycythemia	1
Lymphoma	1
Total	16 hours

## **Course ILOs matrix:**

																			ILO	S													
Courses	1		-	4	-		-	0	Ι.	10	11	1	12	1	1	1.0	1	1	A 10	20	21	22	22	24	25	26	27	20	20	20		2	22
	1	2	3	4	5	6	7	8	9	10	11	1 2	13	1 4	1 5	16	1 7	1 8	19	20	21	22	23	24	25	26	27	28	29	30	3 1	3 2	33
Internal	X	X	X	X									X							X	X			X									
Medicine																																	
Cardiovascular					X	X	X	X	X	X	X	X																					
Medicine																																	
Neurology																													X	X	X	X	X
Chest Medicine																																	
Tropical														X	X																		
Medicine																																	
Psychiatry																X	X																
Medicine																																	
Rheumatology &																		X	X		X												
Rehabilitation																																	
Dermatology,																						X	X										
Andrology &																																	
STDs.																															$ldsymbol{f eta}$		
Diagnostic																									X	X	X	X					
Radiology																																	
Clinical																																	
Pathology																																	

																	II	O	S															
Courses					A																	В												
	34	35	36	37	38	39	40	4 1	4 2		2		4	5	6	7	8	9	10	11	12	13	14	15	1 6	1 7		18	19	20	21	22	3	2 4
Internal Medicine					X	X				X	X	X	X	X	X	X	X	X	X										X				X	
Cardiovascular Medicine																			X	X	X													
Neurology																			X	X		X							X					
Chest Medicine	X	X	X	X									X						X									X						
Tropical Medicine														X					X			X												
Psychiatry Medicine										X			X	X																				
Rheumatology & Rehabilitation													X	X									X	X										
Dermatology, Andrology & STDs.										X		X																						
Diagnostic Radiology																			X						X	X	X							
Clinical Pathology					X	X	X	X	X																					X	X	X	X	X

												]	LO	S								
Courses													С									
	1	2		4			7			10	11	12	13	14	15	16	17	18	19	20	21	22
Internal Medicine	X	X	X	X	X	X	X	X	X	X												
Cardiovascular Medicine	X										X	X	X	X								
Neurology	X	X		X															X			
Chest Medicine	X			X																X	X	X
Tropical Medicine	X	X		X																		
Psychiatry Medicine															X	X						
Rheumatology & Rehabilitation	X	X	X																			
Dermatology, Andrology & STDs.	X	X																				
Diagnostic Radiology																	X	X				
Clinical Pathology																						

															ILO	S												
Courses										D											E					F		
	1	2	3	4	5	6	7	8	9	1 0	11	1 2	13	14	15	16	17	1	2	3	4	5	6	1	2	3	4	5
Internal Medicine	X	X	X	X	X	X	X	X	X									X	X	X	X	 X	X	X	X	X	X	X
Cardiovascular	X			X	X			X			X																	
Medicine																												
Neurology								X				X	X				X											
Chest Medicine	X				X			X																				
Tropical Medicine												X	X	X														
Psychiatry Medicine	X		X		X																							
Rheumatology & Rehabilitation															X	X												
Dermatology,				X	X			X																				
Andrology &																												
STDs.																												
Diagnostic																												
Radiology																												
Clinical																												
Pathology																												

### **Courses of General Medicine ILOs matrix:**

Course	A	В	С	D	Е	F
Gastroenterology and hepatology	A 1-3,13	B 1-5, 9	C1,2,5,6,10	D 1,2, 4,11	E 2-4, 5	F1-5
Endocrine/diabetes/ Metabolism/nutrition	A 1-3,	B 1- 6,9,23	C 1,2,4-6	D 1-6 7-10	E 1-3, 6	F1-5
Hematology/oncology	A 1-3	В 1-6	C 1,2,4,5	D 1-4,6 7-10	E 1-3	F1,3,5
Nephrology	A 1-3	В 1-6	C 1,2,4-6	D1-3, 11 7-10	E 1,4-6	F3-5
Rheumatology /Immunology	A 1-3,20	B 1-5, 9,15	C 1,2,4,6	D1,3,5	E 1,2,5, 6	F1,4
General internal medicine (including fevers)/ Critical care medicine	A 1-4	B 1-6, 8,19	C 1,2, 4-6, 7,9,10	D 1-6, 7-10	E 1-6	F1,3,5
Procedural skills	A 3	В 5,7	C 7-11	D3-4,7,15	E 2-3, 6	F1-5
Geriatrics	A 2	В 3-5,7	C 1,2,6	D10,11,17	E 1.2,4-6	F1-5

## UNIVERSITY DEVELOPMENT CENTER

### 4 - Teaching and Learning Methods

- 4.1- Lectures: Illustrated \ Interactive lectures with power point presentations in lecture halls which can accommodate moderate number of students.
- 4.2-Clinical bedside teaching and interactive tutorial: Clinical skills including history taking and clinical examination are taught for small groups (40 students each), and subgroups (around 10 students each) six days /week for 15weeks of rotation during the academic year.
- 4.3-Case studies (problem solving learning) and presentation of clinical cases by students supervised by clinical tutors.
- 4.4- Self learning: Solving case scenario and student presentation supervised by clinical tutors.
- 4.5- Skill Lab
- 4.6- Clinical Bed side.
- 4.7- Field visits to special medical units

#### 5 – Student Assessment Methods

5.1 -	5.1-Multistation clinical examination:	to assess	Knowledge (A1- 37), clinical examination skills C1-22 Intellectual skills (B1-24)
5.2 -	5.2-Case scenario on clinical topics	to assess	Intellectual skills (B1-24) Practical clinical skills (C1-22) knowledge and understanding (A1-37).
5.3 -	5.3-Short essay questions case scenario, and MCQ	to assess	Knowledge (A1- 42), Intellectual skills (B1-24) Clinical skills (C3-5).
5.4 -	5.3-Clinical/ oral final exam ( a multi station clinical case discussion)	to assess	Intellectual (B1-24), clinical skills (C1-22) & attitude (D1- 17, E1-6, F1-5) Knowledge (A1- 37)
5.5 -	5.4-Skills and interpretation of laboratory data \ OSPE.	to assess	Practical (C8-11), knowledge (A1-3) intellectual skills (B1-24)

Assessment Schedule & Weighting of Assessments:

	Midterm exam (End of clinical round exam)		
	General Medicine:		
	Multi-station clinical exam	40 marks	
	Clinical based case scenario exam	25marks	
	Continuous assessment & logbook	10 marks	
	Special Medicine:		
	Cardiology: OSCE(5 cases +short essay questions)	15 marks	
Assessment 1			
	Chest: OSCE and logbook	17 marks	
	Neurology OSCE	17 marks	20.0/
	Psychiatry MCQs exam	9 marks	20 % (180 marks)
	Radiology MCQs exam	9 marks	(160 marks)
	Physiotherapy, rheumatology & rehabilitation:		
	MCQs exam	9 marks	
	Dermatology OSCE	20 marks	
	Tropical Med. OSCE	9 marks	

Assessment 2	<u>Final written Exam :</u>		
	General & Special medicine:		
	Short essay questions & case scenario (paper 1)	130 marks	
	Short essay questions (paper 2)	130 marks	50 %
	MCQs (paper 3)	130 marks	
	Dermatology: MCQs	30 marks	(450 marks)
	Clinical pathology: MCQs	30 marks	
	Final clinical and oral exam:		
	General & Special medicine:		
Assessment 3	Clinical final exam multi-station case discussion	200 marks	
	Procedural skills	20 marks	
	X ray interpretation	20 marks	30%
	Dermatology (oral/clinical)	20 marks	(270 marks)
	Clinical pathology (oral)	10 marks	
Total marks			900 marks

### 6 – List of References:

6.1- Course Notes	Handouts of lectures given by the staff of internal medicine department
6.2-Department website	Lectures in power point presentations are also available for the students on department website.: <a href="http://mansvu.mans.edu.eg/imd/">http://mansvu.mans.edu.eg/imd/</a>
6.3- Essential Books	Kumar & Clark, Clinical Medicine (latest edition)
6.4- Recommended Books	Harrison principles of medicine (latest edition) Cecil Textbook of medicine Davidson's Principles and Practice of Medicine. Macleod's Clinical Examination by John Munro and C. Edwards A guide to physical examination, Barbara Bates
6.5- Periodicals, Web Sites,	MD consult, medicine, BMJ, NEJM

Cardio-Vascular Diseases	
6.1- Course Notes	
6.2- Essential Books	Chapter of Cardio-Vascular Diseases In Davidson's Text Book Medicine
6.3- Recommended Books	Harrison's Manual
6.4- Periodicals, Web Sites,	- Cardio Source - Med escape
Tropical Medicine	
6.1- Course Notes	
6.3- Recommended Books	Oxford Handbook of Tropical Medicine Handbook of Liver Diseases
6.4- Periodicals, Web Sites,	
Psychiatry	
6.1- Course Notes	Lectures in psychiatry, bystaff of the department
6.2- Essential Books:	Synopsis of psychiatry, Kaplan & Sadock's (text book)

6.3- Recommended Books	Current psychiatry(text book)
6.4- Periodicals, Web Sites,	American J & British J & J of psychosomatic medicine.
Rheumatology & Rehabilitation:	
6.1- Course Notes	Basics of Clinical Rheumatology and Rehahabilitation
6.2- Essential Books (Text	- Kelly's Textbook of Rheumatology
Books) 6.3- Recommended Books	- Primer on The Rheumatic Diseases by Klipple
	ABC Rheumatology
6.4- Periodicals, Web Sites,	
Dermatology & Andorology	
6.1- Course Notes	Dermatology, Andrololgy & STDs: a book authorized by the department' staff members
6.2- Essential Books	Rook text book of dermatology, 2010. Blackwell company, USA-
6.3- Recommended Books	Andrology for the clinical skill, F comhair & T. Hargreve editor. Springer-Verlag Berlin Heidelberg 2006
6.4- Periodicals, Web Sites,	www.dermis.com
Radiology	
6.1- Course Notes	Radiology, student notes.
6.2- Essential Books	Text book of radiology and imaging
6.3- Recommended Books	
6.4- Periodicals, Web Sites,	Learning radiology.com, radiopedia, radiolopolis, pedrad.com
Neurology	
6.1- Course Notes	Handout of lectures.
6.2- Essential Books	Neurology in clinical practice.
6.3- Recommended Books	Department Book.
6.4- Periodicals, Web Sites,	http://emedicine.medscape.com/neurology.
Clinical Pathology	
6.1- Course Notes	Staff member lecture notes
6.2- Essential Books	Guide to clinical Patholoy
6.3- Recommended Books	Henry's clinical diagnosis and management by laboratory methods
Chest	
6.1- Course Notes	Handouts of lectures
6.2- Essential Books	Lectures in power point presentations  Basics of Respiratory Medicine (Book of Chest Department)
6.3- Recommended Books	Fishman
6.4- Periodicals, Web Sites,	Emedicine, BMJ, ATS

## UNIVERSITY DEVELOPMENT CENTER

### 7 – Facilities Required for Teaching and Learning

- 7.1. Lecture *halls* with data show availability:
- At the Mansoura faculty of Medicine, Mansoura university hospital, and Specialized Medical Hospital.
- 7.2. Seminar rooms with couch for bed side teaching and interactive tutorials of small group teaching and instruments for procedural skills at Mansoura university hospital and Specialized Medical Hospital
- 7.3. Skill lab for training of students about procedural skills
- 7.4. <u>A student's log book</u> to follow the attendance of students and show their activities during the clinical training including self-learning and any formative assessment.

Course Coordinator :	Prof Salah Elgamal
Head of Department :	Prof Salah Elgamal