

Template of course specifications

University: Beni suef

Faculty: Faculty of Medicine

Department: Internal Medicine

A- Basic Information:

Title:	Internal Medicine course specifications	Course Code		Academic year / level:	5 th & 6 th years (M.B.B.CH.)				
Credit Hours:		Lecture:	361h	Practical:	384h	Other		Total:	745h

B- Professional Information:

1- Aims of course:	<p>1.a To support acquisition of knowledge and understanding of health and its promotion , and of disease , its prevention and management, in the context of the whole individual and his or her place in the family and in society</p> <p>1.b To enable the student to acquire and become proficient in basic clinical skills such as obtaining patient's history ,undertaking a comprehensive physical and mental state examination ,interpreting the finding and constructing diagnostic mid treatment plans .</p> <p>1.c The student should be competent in the predominance in limited number of basic technical procedures and become proficient in listening and responding to patient concerns</p>
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	<p>1.d To enable the students to acquire and demonstrate attitudes necessary for the achievement of high standards of medical practice, both in relation to the provision of care of individuals and populations and to his or her personal development including a life long commitment to continuing medical education .</p>
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2- Intended Learning Outcomes of the Course (ILOs):

<p>a- Knowledge and understanding :</p>	<p>a.1 <u>describe</u> the common medical problem present to doctors - in primary health care setting , hospital and community - their diagnosis, prevention und treatment.</p>
	<p>a.2 Identify disease in terms of mental, function and physical processes .</p>
	<p>a.3 state the clinical manifestations and differential diagnosis of common medical disorders with an emphasis on the incidence of the different manifestations and their relative importance in establishing diagnosis, and early manifestations of serious diseases(e.g. malignancy, emergencies...etc)</p>
	<p>a.4 Recognize the normal aging process in terms of physiologic and clinical manifestations and identify age related diseases and variable causes of disability in old age .</p>
	<p>a.5 Name the role, prevalence and limitations of alternative and complementary medicine.</p>

b- Intellectual Skills (Higher Cognitive Skills) :	<p>b.1 Analyze symptoms & signs and contractual differential diagnosis for common presenting complaints.</p> <p>b.2 Design an appropriate diagnostic plan for evaluation of common presenting complaints which is appropriate in terms of the (inferential severity of the clinical situation and the risks, benefits diagnosis, the and costs to the patient.</p>
	<p>b.3 Accurately interpret the results of commonly used diagnostic procedures .</p>
	<p>b.4 <u>Demonstrate</u> risk factors for disease processes and injury ,and <u>arrange</u> the appropriate diagnostic, preventive, and therapeutic interventions.</p>
c- Professional Skills (Psychomotor or Practical Skills):	<p>c.1 Take a thorough history of appropriate depth and detail, relative to the clinical context.</p>
	<p>c.2 Demonstrate complete and \or problem-focused physical examination .</p>
	<p>c.3 <u>Illustrate</u> urgent life-threatening conditions, and <u>apply</u> appropriate initial management.</p>
	<p>c.4 Safely <u>employ</u> routine diagnostic and therapeutic procedures , including life support.</p> <p>c.5 Use appropriate sterile technique, comply with and use universal precautions .</p>

d- General and Transferable Skills:

d.1 Estimate support and trust with patient.

d.2 Explain to the patient and their relatives the nature of illness, the diagnostic and therapeutic options and Recommend life style modification in compassionate and ethical way .

d.3 Support patient's emotional and psyhosocial concerns.

d.4 Relate effectively with other health care professionals

d.5 Summarize the patient history and examination findings, list the clinical problems and present relevant material clearly, concisely ,coherently, and legibly so that information about patients may be communicated effectively

3.a .Course content

Topic	No. of hrs		TOTAL
	Lectures	Practical Rounds/tutorial/seminars	
Chest	15+25 (40)	24+24(48)	88
Cardiovascular	15+32 (47)	24+24(48)	95
Neurology	15+34(49)	24+26(50)	99
GIT & hepatology & infections	15+40(55)	24+28(52)	107
Endocrinology	15+20(35)	24+18(42)	75
Rheumatology & Immunology	20	20	40
Physical medicine & Rehabilitation	6	24	30
Hematology	20	15	35
Nephrology	20	15	35
Geriatric topics	2	-	2
Genetic topics	3	-	3
Ethics & law topics	2	-	2
EBM Topics	2	-	2
Psychiatry	15	24	39
Clinical Pathology	15	24	39
Dermatology & venereal diseases	30	24	54
Total	141+220	216+168	745
	361	384	

3. b. Course Content:

Topic

5th year lectures

- * General symptoms
- * Cardiac symptoms
- * Chest symptoms
- * Gastrointestinal symptoms
- * Hepatobiliary symptoms
- * Urinary symptoms

6th year lectures

GIT-.Liver and pancreas

- ❖ Diseases of the mouth
- ❖ Diseases of the esophagus
- ❖ Diseases of the stomach & duodenum
- ❖ Peptic ulcer
- ❖ Gastrointestinal malignancy
- ❖ Diseases of the small intestine
- ❖ Malabsorption syndrome
- ❖ Diseases of the large intestine
- ❖ Diseases of the pancreas
- ❖ Diseases of the peritoneum
- ❖ Diarrheas and dysenteries
- ❖ Gall bladder diseases
- ❖ Functional colonic disorders
- ❖ Inflammatory bowel disease
- ❖ Disorders of GI T motility
- ❖ Jaundice
- ❖ Acute hepatitis
- ❖ Chronic hepatitis
- ❖ Liver Cirrhosis
- ❖ Portal hypertension

- ❖ Upper GI bleeding
- ❖ Hepatocellular failure
- ❖ Liver transplantation
- ❖ Helminthes infection

Cardiovascular

- ❖ Heart failure .
- ❖ Infective endocarditis .
- ❖ Hypertension .
- ❖ Shock.
- ❖ Ischemic heart disease
- ❖ Cor pulmonale
- ❖ Arrhythmias
- ❖ Pericarditis
- ❖ Large vessel disease
- ❖ Cardiomyopathy
- ❖ Congenital heart disease
- ❖ Cardiovascular drugs
- ❖ Pulmonary embolism

Nephrology

- ❖ Structure and function
- ❖ Major clinical syndromes in nephrology
- ❖ Acute renal failure
- ❖ Chronic renal failure
- ❖ Nephrotic syndrome
- ❖ Nephritic syndrome
- ❖ Interstitial and tubular disease
- ❖ Diabetic nephropathy
- ❖ Drug nephrotoxicity
- ❖ Water, electrolyte and acid base balance
- ❖ Renal replacement therapy
- ❖ Kidney in systemic diseases
- ❖ Obstructive nephropathy

- ❖ Investigations of renal disease
- ❖ Tumors of the urinary tract

Endocrine & Metabolism

- ❖ Acromegaly and other pituitary tumors
- ❖ Sheehan's and other hypopituitary disorders
- ❖ Stunted growth
- ❖ Diabetes insipidus and SIADH
- ❖ Diseases of thyroid gland.
- ❖ Hyperparathyroidism and metabolic bone disease
- ❖ Tetany and calcium homeostasis
- ❖ Cushing syndrome
- ❖ Addison's
- ❖ Pheochromocytoma
- ❖ Obesity
- ❖ Dyslipidemias
- ❖ Vitamins
- ❖ Nutritional deficiency
- ❖ Gonadal disorders
- ❖ Diabetes Mellitus , types , clinical manifestations and complications.
- ❖ Management of DM.
- ❖ Hypoglycemia

Neurology

- ❖ Introduction
- ❖ The cranial nerves
- ❖ Hemiplegia
- ❖ Vascular occlusive disorders
- ❖ Paraplegia
- ❖ Cauda Equina
- ❖ Neurogenic bladder disorders
- ❖ Peripheral neuritis
- ❖ Myopathies
- ❖ Spondylosis

- ❖ Sciatica
- ❖ Motor neuron disease
- ❖ Subarachnoid hemorrhage
- ❖ Ataxia
- ❖ Extraparamidal syndromes
- ❖ Space-occupying lesions
- ❖ Headache and migraine
- ❖ Epilepsy
- ❖ Coma
- ❖ Speech

Psychiatry

- ❖ Misuse and drug independence
- ❖ Schizophrenia and related disorders
- ❖ Depression and manic disorders
- ❖ Anxiety and phobic disorders
- ❖ Somatoform disorders
- ❖ Disorders of eating, sleeping and
- ❖ psychosexual functions
- ❖ Personality disorders
- ❖ Suicide
- ❖ Violence

Rheumatology and autoimmune disorders

- ❖ Basic immunology.
- ❖ Autoimmune antibodies.
- ❖ Rheumatoid arthritis.
- ❖ Systemic lupus erythematosus.
- ❖ Scleroderma.
- ❖ Sjogran's syndrome.
- ❖ Polymyalgia rheumatic.
- ❖ Behcet's syndrome.
- ❖ Polymyositis and dermatomyositis.
- ❖ Mixed connective tissue disease.

- ❖ Seronegative spondyloarthropathies.
- ❖ Osteoarthritis & Osteoporosis.
- ❖ Infective arthritis & Reactive arthritis.
- ❖ Autoimmune diseases and vasculities.
- ❖ Immunodeficiency and hypersensitivity.
- ❖ Rheumatological emergencies
- ❖ Drugs used in rheumatic diseases.

Hematology & oncology .

- ❖ Hematopoiesis
- ❖ Iron deficiency anemia
- ❖ Sideroblastic anemia
- ❖ Megaloblastic anemia
- ❖ Hemolytic anemia
- ❖ Polycythemia
- ❖ Multiple myeloma
- ❖ Leukemias
- ❖ Lymphoma
- ❖ Myeloproliferative disorders
- ❖ Bleeding and clotting disorders
- ❖ Spleen
- ❖ Blood transfusion
- ❖ BM transplantation
- ❖ Thrombophilias
- ❖ Lymphadenopathy

Chest

- ❖ Diseases of the pleura.
- ❖ Chronic bronchitis and bronchial asthma
- ❖ Emphysema
- ❖ Pneumonias
- ❖ Bronchiectasis
- ❖ Lung abscess
- ❖ Pulmonary TB

- ❖ Drug induced pulmonary disease
- ❖ Mediastinal syndrome
- ❖ Adult respiratory distress syndrome
- ❖ Respiratory failure
- ❖ Bronchial carcinoma
- ❖ Occupational lung disease

Infections

- ❖ Enteric fevers
- ❖ Brucellosis
- ❖ Meningitis
- ❖ Schistosomiasis
- ❖ Amebiasis
- ❖ Malaria
- ❖ Infectious mononucleosis
- ❖ Cytomegalovirus
- ❖ HIV
- ❖ Cholera
- ❖ Plague
- ❖ Toxoplasmosis
- ❖ PUO
- ❖ Rabies
- ❖ Diagnosis of parasitic diseases
- ❖ Filariasis
- ❖ Fascioliasis
- ❖ Measles, mumps, Influenza

Ethics and Law

- ❖ Informed consent
- ❖ Life, Death, Dying and Killing
- ❖ Organ transplantation
- ❖ Refusal of treatment
- ❖ Autonomy
- ❖ Confidentiality and good clinical
- ❖ practice

Geriatric medicine

- ❖ Effect of aging on body systems
- ❖ CVS disorders in the elderly
- ❖ Diabetes in the elderly
- ❖ Hypertension in the elderly
- ❖ Falls
- ❖ Cognitive disorders in the elderly
- ❖ Delirium in the elderly
- ❖ Senile osteoporosis
- ❖ Urinary incontinence
- ❖ Prescribing for the elderly
- ❖ Genetics
- ❖ Nucleic acids
- ❖ Recombinant DNA technology
- ❖ Chromosomal abnormalities
- ❖ Regulation of gene expression
- ❖ Immunogenetics

Others

- ❖ Evidence based medicine
- ❖ ECG .
- ❖ Imaging .

B) Clinical cases :-

CARDIOVASCULAR

1. Dysrhythmias
2. IHD
3. Congestive heart failure
4. Hypertension - evaluation
5. Valvular heart disease-clinical features, diagnostic methods, interpretation of data

6. Evaluation of chest pain

7. Cardiomyopathy

8. Large vessel disease

RESPIRATORY

1. Asthma

2. Obstructive lung disease-chronic bronchitis. Emphysema

3. pleural effusion

4. Suppurative syndrome

5. Respiratory failure / acute and chronic

6. Carcinoma of the lung

7. T.B

8. Mediastinal syndrome

9. Interstitial lung disease

GASTROINTESTINAL

1. Cirrhosis

2. Ascites

3. G.LT bleeding

4. Jaundice-differential diagnosis

5. Malabsorption

6. Nausea and vomiting

7. Peptic ulcer disease

8. Inflammatory bowel disease.

NEUROLOGY

1. Cerebrovascular disease-stroke syndromes

2. Headache

3. Paraparesis

4. Seizures

5. Peripheral neuropathy

6. Myopathy

7-Ataxias

8. Extraparamidal syndromes

RHEUMATOLOGY

1. Degenerative joint disease
2. Gout
3. Low back pain
4. Systemic lupus erythematosus
5. Rheumatoid arthritis
6. Vasculitis
7. Systemic sclerosis.
8. Mixed connective tissue disease.

ENDOCRINOLOGY

1. Adrenal insufficiency and Addison's disease
2. Acromegaly and Sheehan's syndrome
3. Diabetes
4. Stunted growth
5. Hyper /hypothyroidism
6. Parathyroid and calcium metabolism / osteoporosis
7. Obesity

HEMATOLOGY/ONCOLOGY

1. Anemia
2. Clinical evaluation of bleeding-clotting disorders
3. Hodgkin's disease, lymphoma-stages, principles of treatment
4. Leukemia
 - a. acute lymphocytic, myeloid
 - b. chronic lymphocytic, myeloid
5. Multiple myeloma
6. Thrombocytopenia
7. Lymphoproliferative disorder

INFECTIOUS DISEASE

1. Endocarditis
2. FUO
3. Pneumonia

4. Tuberculosis

5. Hepatitis

NEPHROLOGY

1. Evaluation of hematuria

2. Kidney in systemic disease •

3. Glomerulonephritis

4. Nephrotic syndrome

5. Obstructive uropathy

6. Principles of diagnosis and management of acute and chronic renal failure

Clinical chemistry

Clinical pathology

Psychiatry

Dermatology & venereal diseases

C) Medical skills

A:

1 Aseptic technique

2- Procedures involving veins

" venepuncture for blood sampling (including safe use of blood containers)

''' insert and remove cannula into peripheral vein

* set up intravenous fluid infusion

* Give intravenous injections

* MIX and inject drugs into intravenous tag

* Use an infusion pump to give drug treatment

3- Give intramuscular and subcutaneous injections

4- Blood transfusion- takes blood for cross match and monitor a blood transfusion

5- Arterial blood sampling

6- insert nasogastric tube/ principles of nasogastric feeding

7- Bladder catheterization.

8- Measure blood glucose using finger prick sample and strip

9- Urine (dipstick and analysis).

10 - Administer oxygen therapy safely .

11 - perform an ECG .

12- Perform basic respiratory function tests (measurement of peak expiratory flow rate and interpretation of peak flow charts).

13- Cardiopulmonary resuscitation .

For each of these skills . the student should be able to :-

- * competently perform the procedure
- * Identify the indications, contraindications, and potential complication of the procedure .
- * Recognize the relevant points of anatomy and technical features of the equipment.

Clinical Diagnostics Studies :

The course content includes an introduction to, indications for, and interpretation of clinical laboratory tests, plain X ray and electrocardiography. the emphasis of this course is on diagnostic studies necessary for the proper evaluation of common disease entities seen in a primary care setting . Specific methodologies will not be covered , rather, the definition of tests , their indications and proper interpretation are taught.

The following Topics will be covered :

- 1- introduction to laboratory medicine, interpretation of tests
- 2-Diagnosis of infectious diseases by laboratory methods .
- 3- Hematology: introduction & anemia .
- 4- Hematology : white blood cell disorders .
- 5- Hematology coagulation.
- 6- Urinalysis & renal function evaluation .
- 7 - Blood chemistry panels & cholesterol.
- 8- Glucose .
- 9 - Thyroid function tests .
- 10 - Miscellaneous laboratory tests .
- 11 - Electrocardiography : ECG interpretation I .
- 12 - Electrocardiography; ECG interpretation II.

- 13 - Electrocardiography : ECG interpretation III.
- 14 - Radiology : introduction and basic concepts .
- 15 - Radiology : the chest.
- 16 - Radiology : the abdomen .
- 17- Radiology ; the musculoskeletal system .
- 18 - Radiology ; unclear medicine. Ultrasound, and CT

4- Teaching and Learning Methods:	4.a Illustrated Lectures : Large group plenary sessions 6 hours weekly.
	4.b Seminars : Students arc expected to search and prepare certain topic in a teamwork manner. This work will be orally presented using information technology ,role play and group discussion
	4.c Clinical Rounds ; Tutors demonstrate the core practical clinical examination for 3 hours daily , 5 days weekly .
	4.d Tutorials: For giving introduction, indications, and interpretation of clinical laboratory tests, radiography, and electrocardiography . Students small groups then work on ECG Lab report, and x-rays to identify abnormalities, interpret findings , and put diagnosis.
	4.e Practical clinical techniques:- focus on the development of practical skills appropriate to

	the clinical situation .Students have to demonstrate sufficient knowledge and skill before undertaking invasive clinical procedures on patients .
5- Teaching and learning methods for disables:	5.a No special arrangements are available
	5.b
	5.c
	5.d
6- Student Assessment: a) tools:	1. Written examination.
	2. Clinical Examination.
	3. Oral Examination .
	4 Attendance criteria.
b) time schedule:	Week
	Week
	Week
	Week
	Week
c) Weighting of Assessments :	Mid-Term Examination: 20 %
	Final-term Examination : 50 %
	Oral Examination: 4.44 %
	Practical Examination: 16.6%
	Semester Work: %
	Others: Data interpretation 4.44 % Skin & venereal 2.22 % Clinical pathology 2.22 %
7- List of References:	
- Course Notes:	Handout of lectures.
- Essential Books (Text Books):	* Davidson's Principles and Practice of Medicine .* Clinical Medicine KUMMAR and CLARK . * 1000 MCQs for Davidson's principles and practice of Medicine .

	<p>* MCQs for Clinical Methods KUMMAR and CLARK .</p> <p>*Hutchison's Clinical Methods .</p> <p>* Clinical Examination , MACLEOD, MLJNRO.</p> <p>* A Guide to physical Examination . Barbara Bates .</p>
- Recommended Books:	National books approved by the Internal Medicine council.
- Periodicals, Web Sites, etc:	CDs and Floppy disks in the electronic library .

Course Coordinator:

Head of Department: