



Curriculum for the Bachelor Degree in Medicine and Surgery

Fourth Year Syllabus



INTRODUCTION TO CLINICAL SCIENCES

Course title: Introduction to Clinical Sciences

Course code: 1500412

Credit hours: 9 hours

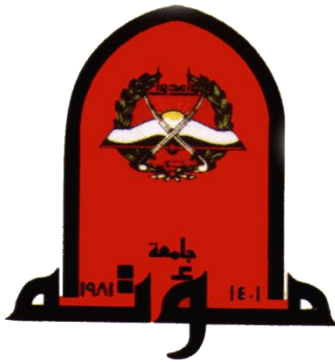
Course designation: Fourth year / summer semester

Department: Integrated module

Course syllabus:

Distribution of Sessions:

Discipline	Lectures	Practical sessions
Communication skills	4	8
History taking	30	24
Clinical examination	0	36

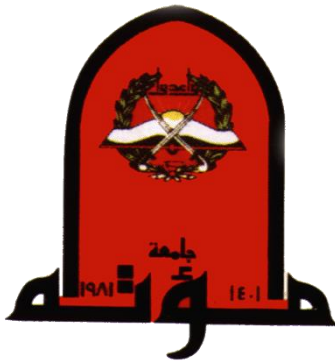


Course Schedule

Week 1	Meeting with the Dean, communication skills lectures, use of library and internet, computer are, visits to teaching hospitals. Quiz
Week 2	General review of history taking, including chief complaint, present illness, past history, drug and social history. Quiz
Week 3	History and clinical examination of respiratory system. Quiz
Week 4	History and clinical examination of cardiovascular system. Quiz
Week 5	History and clinical examination of gastrointestinal system, genitor-urinary system and breast. Quiz
Week 6	History and clinical examination of loco-motor system, thyroid gland. Quiz
Week 7	History and clinical examination of nervous system, including cranial nerves, motor and sensory systems, level of consciousness, and mental status. Quiz
Week 8	Final written and final practical examinations

Lectures:

1. Overview: Dean, faculty of medicine
2. Communication skills.
3. History taking for various systems:
 - Respiratory system
 - Cardiovascular system.
 - Gastrointestinal system.
 - Genito-urinary system.
 - Breast.
 - VI.Locomotor system.
 - Thyroid gland
 - Nervous system



Practical sessions (Clinical examination of the following systems and organs):

- Respiratory system
- Cardiovascular system.
- Gastrointestinal system and the abdomen.
- Genito-urinary system.
- Breast.
- VI.Locomotor system.
- Thyroid gland
- Nervous system
- IX library, internet and computer.

INTERNAL MEDICINE (1)

Course title: Internal Medicine (1)

Course code: 1507402

Credit hours: 13.5 hours

Course designation: Fourth year / all year

Department: Medicine

Course syllabus:

Lectures:

- 1- Overview of the Anatomy and Physiology of CVS
- 2- Rheumatic fever (RF) and infective endocarditis (IE)
- 3- Valvular heart disease (VHD)
- 4- Myocarditis and Cardiomyopathy
- 5- Chronic ischemic heart disease (IHD)
- 6- Acute coronary syndrome (ACS) and MI



- 7- Hearts failure
- 8- Essential Hypertension
- 9- Secondary hypertension
- 10- Arrhythmias
- 11- Management of arrhythmias
- 12- Electrocardiogram (ECG) I
- 13- ECG II
- 14- Overview of the Anatomy and Physiology of the respiratory system
- 15- Pneumonias
- 16- Bronchial asthma
- 17- Chronic obstructive pulmonary diseases (COPD)
- 18- Interstitial lung disease (ILD)
- 19- Bronchogenic carcinoma
- 20- ARDS
- 21- Respiratory failure
- 22- Obstructive sleep apnea (OSA)
- 23- Diseases of the esophagus
- 24- Peptic ulcer diseases (PUD)
- 25- Liver cirrhosis and portal hypertension
- 26- Inflammatory bowel diseases (IBD)
- 27- Malabsorption syndrome & Celiac disease
- 28- GI Bleeding
- 29- Chronic diarrhea
- 30- Viral hepatitis
- 31- Acute Gastrointestinal Infections
- 32- Brucellosis
- 33- Parasitic infestations
- 34- Hematopoiesis and classification of anemias
- 35- Nutritional anemias
- 36- Hemoglobinopathies
- 37- Chronic leukemias & Acute leukemias
- 38- Myeloproliferative disorders
- 39- Lymphomas



- 40- Blood transfusion
- 41- Bone marrow failure syndromes
- 42- Disseminated intravascular coagulation (DIC) and thrombotic thrombocytopenic purpura (TTP)
- 43- Chronic renal failure (CRF)
- 44- Acid base disorders (ABD) 1
- 45- Acid base disorders (ABD) 11
- 46- Acute renal failure (ARF)
- 47- Disorders of the pituitary gland
- 48- Disorders of the thyroid gland
- 49- Calcium metabolism
- 50- Diabetes mellitus (DM) 1
- 51- Diabetes mellitus (DM) 11
- 52- Complications of DM
- 53- Diabetes Mellitus (DM) and the Kidney
- 54- Disorder of adrenal glands
- 55- Disorders of the gonads and puberty
- 56- Endocrine emergency (EE)
- 57- Hypersensitivity reactions (HSR)
- 58- Rheumatoid arthritis (RA)
- 59- Systemic lupus erythematosus (SLE)
- 60- Scleroderma, poly/ dermatomyositis
- 61- Seronegative spondyloarthritis
- 62- Gout and Pseudogout
- 63- Vasculitis
- 64- Osteoarthritis
- 65- Immune deficiency syndromes (IDS)
- 66- AIDS 1
- 67- AIDS 11
- 68- Staphylococcal Diseases
- 69- Antibiotic Resistance
- 70- Fever of unknown origin (FUO)
- 71- Parasitic infestations



- 72- Neuropathic disorders
- 73- Muscle and neuromuscular diseases
- 74- Extrapyrarnidal diseases
- 75- Demyelination
- 76- CNS degenerative diseases
- 77- Meningitis and brain abscess

Seminars:

- 1- Hemoptysis
- 2- Pulmonary function tests (PFT)
- 3- Tests for ventilatory functions
- 4- Smoking and lung diseases
- 5- Monoarthritis
- 6- Secondary hypertension
- 7- Pericardial diseases
- 8- Management of arrhythmias
- 9- Chest pain
- 10- Lymphadenopathy
- 11- Hyperlipidemias
- 12- Investigations of the endocrine system
- 13- Investigations in gastrointestinal tract diseases
- 14- Investigation in liver disease
- 15- Diarrhea
- 16- Jaundice
- 17- Acute upper gastrointestinal (GI) bleeding
- 18- Allergic reactions
- 19- Venous thromboembolism (VTE)
- 20- Headache
- 21- Stroke
- 22- Hematuria and proteinurea
- 23- Water and sodium disturbances



24- Renal replacement therapy

Bedside Teaching:

This is a daily sessions for a small group of students (about 12 students), supervised by a staff member, where the students acquire the skill of taking appropriate history and conducting proper physical examination for patients with various common medical problems. The students expected to generate a problem list or differential diagnosis for common medical problems and know how to reach a diagnosis by rationale utilization of laboratory and imaging facilities.



FORENSIC MEDICINE AND TOXICOLOGY

Course title: Forensic Medicine and Toxicology

Course code: 1504404

Credit hours: 2.25 hours

Course designation: Fourth year / all year

Department: Pathology and Microbiology

Course syllabus:

Lectures:

- 1- Aims or laws. Medico-legal cases, Physician duties regarding them
- 2- Medical laws (MOH, Medical councils)
- 3- Types of wound
- 4- Domestic violence
- 5- Death and postmortem changes
- 6- Burns
- 7- Physician duties, patient's rights, Abortions
- 8- Sudden death
- 9- Mental health, Organ transplant
- 10- Identification
- 11- Introduction to toxicology
- 12- Management approach of acute poisoning patients
- 13- Toxic gases (CO, CN) and volatiles



RADIOLOGY AND NUCLEAR MEDICINE

Course title: Radiology and Nuclear Medicine

Course code: 1507403

Credit hours: 2.25 hours

Course designation: Fourth year / all year

Department: Medicine

Course syllabus:

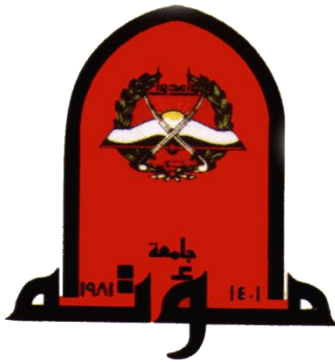
I. Radiology (X-ray, CT, MRI & U/S):

The primary goal of radiology undergraduate program is the educational instruction of student in the basic diagnostic imaging. Lectures should provide students with basic knowledge regarding the appropriateness and limitations of diagnostic imaging tests and basic instructions in image interpretation. Discussed issues include all the following items:

- 1) Principles of musculo-skeletal imaging
- 2) Principles of gastrointestinal imaging
- 3) Principles of neuroradiology
- 4) Principles of genitourinary imaging
- 5) Principles of head and neck imaging
- 6) Principles of respiratory imaging
- 7) Principles of cardiovascular imaging
- 8) Principles of pediatric imaging

11. Nuclear medicine:

1. Principles of nuclear medicine: introduction on physics, tracers, gamma camera and PET scan.
2. Bone scintigraphy: introduction, indication & normal variants.
3. Renal scintigraphy: introduction, indication & kinetics of different tracers.
4. Thyroid scintigraphy: introduction, tracers, imaging and treatment.
5. DXA scan: introduction and diagnosis of osteoporosis.



GENERAL SURGERY (1)

Course title: General Surgery (1)

Course code: 1508402

Credit hours: 13.5 hours

Course designation: Fourth year / all year

Department: General & Special Surgery

Course syllabus :

Seminars :

- 1- Cervical lump
- 2- Acute abdomen
- 3- Gastro- intestinal tract bleeding
- 4- Jaundice
- 5- Breast Lumps & nipple discharge
- 6- Thyroid module
- 7- Mass in the abdomen
- 8- Intestinal obstruction
- 9- Hernia complications
- 10- Complication of Peptic ulcer diseases
- 11- Dysphagia
- 12- Inguino-scrotal mass
- 13- Diabetic foot
- 14- Etiology of Gall bladder stones
- 15- Appendicitis & complications
- 16- Painful and lesions
- 17- Hydatid cyst
- 18- Hematuria
- 19- G.I. stomas & fistulae
- 20- Lymph adenopathy



General Surgery lectures:

- 1- Shock
- 2- Fluids & Electrolytes
- 3- Hemorrhage
- 4- Neonate Intestinal obstructions
- 5- Blood & blood component
- 6- Nutritional support
- 7- Abdominal wall hernias
- 8- Ano-rectal malformation
- 9- Trauma & multiple injuries
- 10- Abdominal trauma
- 11- Thyroid diseases
- 12- Oesophageal Atresia
- 13- Wound healing and complication
- 14- Peritonitis & intra-abdominal sepsis
- 15- Parathyroid, adrenals, pituitary glands
- 16- Diaphragmatic hernia
- 17- Head & cranial nerves injury
- 18- Diseases of salivary glands
- 19- Liver
- 20- Head and neck anomalies
- 21- Esophagus
- 22- Breast disorders
- 23- Gall bladder & biliary systems
- 24- Inguino scrotal anomalies
- 25- Small intestines
- 26- Stomach & duodenum
- 27- Obstructive jaundice
- 28- Abdominal emergencies in children
- 29- Large intestines
- 30- Surgical aspects of anorectal diseases
- 31- Surgical disorders of spleen
- 32- Gastro- intestinal bleeding



- 33- Large intestines tumors
- 34- Urinary tract surgical disorders & investigations
- 35- Pancreas
- 36- Abdominal masses

Cardio-thoracic Surgery Lectures:

- 1- Mediastinal masses
- 2- Chest trauma
- 3- Lung cancer
- 4- Surgical lung infection
- 5- Surgical pleural diseases
- 6- Chest wall deformities
- 7- Thoracostomies (chest tube)
- 8- Tracheostomy
- 9- Vascular injuries
- 10- Aorto-occlusive diseases
- 11- Acute limb ischemia
- 12- Thrombo-embolism
- 13- Arterial aneurysms
- 14- I.H.D. valvular & valves complication

Lectures of burns & plastic surgery

- 1- Burns
- 2- Acute management of burn injury
- 3- Soft tissue reconstruction
- 4- Cleft lip & palate
- 5- Ulcer, fistula, cysts & vascular anomalies
- 6- Skin tumors



EMERGENCY MEDICINE, ANESTHESIOLOGY & INTENSIVE CARE

Course title: Emergency Medicine, Anesthesiology & Intensive Care

Course code: 1508403

Credit hours: 4.5 hours

Course designation: Fourth year / all year

Department: General and Special Surgery

Course syllabus:

Lectures:

Anesthesia:

- 1- Design and organization of ICU. Transport of the critically ill.
- 2- Mechanical ventilator support, physiotherapy, sedation and pain relieve in ICU .
- 3- CPR .
- 4- Airway management ,endotracheal intubations and O2 therapy .
- 5- Acute respiratory failure in chronic obstructive airway disease.
- 6- Hypovolaemic shock, fluid, electrolyte management and transfusion .
- 7- Acid base balance and disorders.
- 8- Poisoning and drug intoxication.

Medicine:

- 1- Acute myocardial infarction, cardiogenic shock, anti-failure drugs .
- 2- Cardiac arrhythmias and anti-arrhythmic drugs.
- 3- Acute hypertension and vasodilators .
- 4- Acute cerebro–vascular complications.
- 5- Diabetic emergencies .

Surgery:

- 1- Sever multiple trauma, acute abdomen .
- 2- Head injuries.
- 3- Acute upper GIT bleeding.



Seminars:

- 1- Sever multiple traumas (acute abdomen).
- 2- Acute MI, cardiogenic shock, anti- failure drugs.
- 3- Design and organization of ICU, transport of critically ill patients.
- 4- Airway management and o2 therapy (demonstration on Manikin).
- 5- Cardiac arrhythmias and anti- arrhythmic drugs.
- 6- Head injuries.
- 7- Acute hypertension and vasodilators.
- 8- CPR.
- 9- CPR (demonstration on manikin).
- 10- Acute upper GIT bleeding.
- 11- Diabetic emergencies.
- 12- Physiotherapy, sedation and pain relief in ICU.
- 13- Poisoning and drug intoxication.
- 14- Airway management and o2 therapy (demonstration on manikin).
- 15- Acid-base balance and disorders.
- 16- Cerebro-vascular complications.
- 17- IV fluid, electrolytes, blood transfusion.
- 18- CPR (demonstration on manikin).