Ministry of Higher Education and Scientific Research

UNIVERSITY OF MISAN

College of Medicine

Curriculum

Syllabus of Medical College Curriculum

2025-2024

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First Year

2025-2024

Subject	***Medical biology***
Theory	**60 hrs**
Practical	**60 hrs**
Units	٦
No	Title
١	**Molecular Cell Biology .A**
٢	Introduction
٣	From molecules to cells
٤	Instrumentation with special reference to EM
٥	membrane Molecular organization of plasma
٦	Functional aspects of plasma membrane
٧	Cellular differentiation
٨	Cellular specialization
٩	Cellular activities
١٠	divisioncell &Nucleus
١١	Cell chemistry
١٢	Cell organelles
١٣	Molecular Biology for specialized cells
١٤	aging Cellular
١٥	living inclusions of cells-Non
١٦	Molecular genetics
١٧	Introduction
١٨	linked inheritance-Sex
١٩	**Molecular structure of gene .B**
٢٠	Molecular structure of genetic code
٢١	Molecular basis of crossing over
٢٢	DNA structure
٢٣	Mutations
٢٤	mechanismsGenetic control
٢٥	Genetic engineering
٢٦	Molecular basis of recombination
٢٧	Preparation of recombinant DNA
٢٨	Genetic cloning technique
٢٩	**HistologyPreliminary .C**
٣٠	Connective tissues
٣١	Specialized connective tissues
٣٢	tissue Muscular
٣٣	Nervous tissue

Subject	***Human Anatomy***
Theory	**90 hrs**
Practical	**60 hrs**
Units	٨
No	Title
١	**Limb Upper .A**
٢	Introduction
٣	Surface anatomy of the upper limb
٤	Pectoral region
٥	Brachial plexus &Axilla
٦	Scapular region
٧	The arm
٨	Cubital fossa ،The forearm
٩	jointsindividual ،Classification ،Introduction :Joints
١٠	The hand
١١	Applied anatomy
١٢	**LimbLower .B**
١٣	Bones ،Introduction to the lower limb
١٤	thighFront of the
١٥	Lumbosacral plexus
١٦	Gluteal region
١٧	popliteal fossa &Posterior aspect of the thigh
١٨	Posterior aspect of the leg
١٩	Anterior aspect of the leg
٢٠	Joints of the lower limb
٢١	The foot
٢٢	Applied anatomy
٢٣	**Thorax .C**
٢٤	Thoracic wall as part of the body wall
٢٥	Osteology of the chest wall
٢٦	Intercostal spaces
٢٧	Diaphragm
٢٨	diaphragm during respiration &Chest wall
٢٩	mediastinumDivisions of the
٣٠	The superior mediastinum
٣١	pericardium &Heart
٣٢	heartof the Chambers
٣٣	plexuses of the heart nerves and ،Blood supply
٣٤	lungsPleurae and
٣٥	Posterior mediastinum

Subject	***Medical Chemistry***
Theory	**٩٠ hrs**
Practical	**٩٠ shr**
Units	٩
No	Title
١	**Inorganic .A and Analytical Chemistry** 1. isotopes radioactive of uses medical and Radioactivity 2. importance their and systems living in Ions 3. interests medical of salts and bases ،Acids 4. (SIU) units of system international The 5. balance base-acid ،concept pH The 6. concentrations expressing of methods and Solutions 7. importance physiological of systems buffer and Buffers 8. living and dialysis ،systems biological and chemistry Colloidal systems 9. medicine in applications possible and Chelation
٢	**BIOCHEMISTRY .B** **1. Carbohydrates** a. Introduction b. carbohydrates of nomenclature and Classification c. monosaccharaides of structure dimensional three The d. monosaccharaides of structure cyclic The e. monosaccharaides of reactions chemical and Physical f. Disaccharides g. Polysaccharides h. carbohydrates of importance Biological i. carbohydrates of absorption and Digestion **2. Lipids** a. .Introduction b. .lipids of Importance c. .Classification d. .lipids of roles Biological e. .reactions and classification ،acids Fatty f. .(fats natural) Triglycerides / Triacylglycerol g. .Phospholipids h. .Sphingolipids i. .cholesterol ،Steroids j. .apolipoprotein ،.Lipoproteins k. lipids of absorption and Digestion
٣	**ORGANIC CHEMISTRY** 1-and isomerism optical) chirality ،stereoisomerism ،Isomerism geometrical organic of activity medical to relationship A .(isomerism systems living and compounds

	2. (steroids) system cyclic of Stereochemistry 3. to toxicity and oxidation) thiols and ethers ،phenols ،Alcohols (human 4. (ketons and aldehydes) compounds carbonyl of chemistry The 5. ،amides ،urea) derivatives their of some and acids Carboxylic (etc...esters 6. compounds heterocyclic and Alkaloids 7. the on group functional of effect) antibiotics of chemistry The (activity medical 8. (drugs sulfa) compounds Sulfur
٤	**BIOCHEMISTRY .D** **acids amino Proteins and** a. .Introduction b. .acids amino of structure and Classification c. .acids amino of curye Titration d. acids amino Reaction of e. .peptides of activity Biological f. .of bonds Types g. .bond peptide of properties Important h. and acids amino of determination ،polypeptides of Naming sequence of polypeptides i. types of different of formation and chain polypeptide of folding The protein j. proteins of levels Structural k. proteins fibrous and Globular l. proteins of function Biological m. protein digestion of 4. acids Nucleic a. Introduction b. Nucleotides Nucleosides and c. Classification d. synthesis protein in acid nucleic of Role 5. Enzymes a. enzymes of nomenclature and classification ،Definition b. enzymes properties of c. reactions enzymatic affecting Factors d. specificity Enzymes e. action of mechanism and kinetics Enzymes f. inhibition Enzymes g. actions enzyme Theories of

Subject	***Medical Physics***
Theory	**60 hrs**
Practice	**60 hrs**
Units	٦
No	Title
١	body the in and on Force & Measurement and، Modeling ،Terminology
٢	Heat and Cold in Medicine &Physics of the Skeleton
٣	Pressure &and Power of the Body ،Work، Energy
٤	Pressure
٥	The Physics of the Lungs and Breathing
٦	Physics of the Cardiovascular System
٧	Electricity Within the Body
٨	Cardiovascular Instrumentation
٩	Medicine Application of Electricity and Magnetism in the
١٠	Sound in Medicine
١١	Physics of the Ear and Hearing
١٢	Light in Medicine
١٣	Physics of Eyes and Vision
١٤	Laser in medicine
١٥	ray-Physics of diagnostic X
١٦	Physics of MRI and CT Scan
١٧	Physics of Nuclear Medicine
١٨	radiation therapy Physics of
١٩	Radiation protection in medicine

Subject	***Medical foundations &Terminology***
Theory	٢٧ hrs
Practice	0
Units	٢
No	Title
١	**Foundations hrs ١٥** 1. and Disease ،Health of Concepts the to Course Introductory environment ٢ hours 2. asic terms and conceptB 3. cology of healthE 4. The concept of preventive medicine and revention hours٢ 5. The natural history of disease 6. houres٢ nviroment and healthE 7. agent interaction – ostH 8. Epidemiology 9. hours ٢ infectious agens cquiringA 10. Diseases Infectious Emerging hours ٢
٢	**Medical Terminology hrs ١٢**

subject	.hrs
What is medical terminology	١
Forming medical terms	١
Medical terms rules	٢
body parts terminology	١
T terminology.I.G	١
nervous system terminology	١
hematological terminology	١
Dermatological terminology	١
terminology Cardiovascular	١

اللغة العربية	الموضوع
ثلاثون ساعة	نظري
صفر ساعة	عملي
أثنان	الوحدات

ت	الموضوع	عدد الساعات
١	الكلمة	١
٢	الأسماء	١
٣	علامات الأسماء	١
٤	الأفعال	١
٥	علامات الأفعال	١
٦	الحروف وأنواعها	١
٧	المعارف	١
٨	المعرف بأل.	١
٩	الجموع وأنواعها.	١
١٠	جمع المذكر السالم.	١
١١	جمع المؤنث السالم.	١
١٢	جموع التكسير	١
١٣	جموع القلة.	١
١٤	جموع الكثرة	١
١٥	المثنى وعلامات إعرابه.	١
١٦	أبواب الفعل المضارع.	١
١٧	الفعل الثلاثي والرباعي.	١
١٨	الفعل المزيد بحرف وحرفين.	١
١٩	حروف القلقلة الصغرى والكبرى.	١
٢٠	الأسم المقصور والمنقوص والممدود.	١
٢١	حروف الغُنة.	١
٢٢	همزتي الوصل والقطع.	١
٢٣	حرفي الضاد والضاء.	١
٢٤	رسم الهمزة.	١
٢٥	رسم الألف.	١
٢٦	القصص القرآني.	١
٢٧	قصة يوسف النبي عليه السلام	١
٢٨	-قصة أصحاب الكهف	١
٢٩	قصة اصحاب الاخدود	١

Subject	English Language
Theory	30 hrs
Practice	0
Units	2

ENGLISH IN MEDICINE (CURRECULUM)

١.hrs ٣ **Taking a history**

1- Asking basic questions
2- Taking notes
3- Reading skills: Scanning a case history
4- William Hudson :Case history

٢. hrs٣ **Taking a history**

1- Asking about systems
2- Asking about symptoms
3- Reading skills: Using a pharmacology reference
4- William Hudson :Case history

٣. hrs **٣patient** **Examining a**

1- Giving instructions
2- Understanding forms
3- ١ Reading articles :Reading skills
4- William Hudson :Case history

٤.hrs ٤ **Special examinations**

1- explaining and reassuring ،Instructing
2- and prompting encouraging ،Rephrasing
3- ١Reading articles :Reading skills
4- William Hudson :Case history

٥.Investigations. hrs٣

1- discussing investigations Explaining and
2- Using medical documents
3- ٢Reading articles :Reading skills
4- William Hudson :Case history

٦.hrs ٣ **Making a diagnosis**

1- Discussing a diagnosis
2- Explaining a diagnosis
3- ٣Reading articles :Reading skills
4- illiam HudsonW :Case history

٧ Treatment. hrs٤

1- Medical treatment
2- Physiotherapy
3- Surgical treatment.
4- Reading skills: Using an online database

Human Rights

اسم المادة		عدد الساعات الاسبوعية			
باللغة العربية	باللغة الانكليزية	ن	ع	م	عدد الوحدات
حقوق الانسان	Human Rights	٢	-	١	٢

الاسبوع	المادة النظرية	عدد الساعات
١	مفهوم حقوق الاسان .التعريف الفقهي والقانوني لحقوق الانسان خصائص حقوق الانسان	2
٢	حقوق الانسان في الشرائع السماوية. الشريعة اليهودية والمسيحية. حقوق الانسان في الشريعة الاسلامية	٢
٣	حقوق الانسان في الحضارات القديمة . حقوق الانسان في الحضارة اليونانية و الرومانية حقوق الانسان في حضارة وادي النيل و وادي الرافدين	٢
٤	أنواع حقوق الانسان حقوق الانسان الاساسية وغير الاساسية . حقوق الانسان الفردية والحقوق الجماعية	٢
٥	الإعلان العالمي لحقوق الانسان تعريف الاعلان العالمي لحقوق الإنسان. مضمون الاعلان العالمي لحقوق الانسان. القيمة القانونية للإعلان العالمي لحقوق الانسان. أهداف الاعلان العالمي لحقوق الانسان أهمية الاعلان العالمي لحقوق الانسان	٢
٦	ضمانات التشريعية لحقوق الانسان. ضمانات حقوق الانسان في التشريعات العراقية تقسيم الحقوق و الحريات	٢
٧	الضمانات الدستورية لحقوق الانسان أولاً: الضمانات الدستورية. ١- الدستور. ٢- مبدأ سيادة القانون. ٣- مبدأ الفصل بين السلطات. ثانياً: الضمانات القضائية. ١- حق التقاضي . ٢- الرقابة القضائية على دستورية القوانين. ٣- الرقابة على أعمال السلطة التنفيذية.	٢
٨	مفهوم الديمقراطية تعريف الديمقراطية الديمقراطية القديمة (أثينا). الديمقراطية الحديثة.	٢
٩	اركان الديمقراطية وصورها. اولا : اركان الديمقراطية ثانياً: صور الديمقراطية ١ – الديمقراطية المباشرة . ٢ – الديمقراطية شبه المباشرة ٣ – الديمقراطية النيابية.	٢
١٠	خصائص الديمقراطية. وأهدافها. خصائص الديمقراطية. أهداف الديمقراطية.	٢
١١	طرق نشوء الديمقراطية. اولا: الطريق السرية ثانياً : طريقة الفرض ثالثا : طريقة الثورة.	٢

١٢	خصائص النظام الديمقراطي. اولا : وجود دستور. ثانيا : سيادة القانون. ثالثاً : حرية التعبير وابداء الراي. رابعاً: حرية تكوين الاحزاب السياسية. خامساً : استقلال السلطة القضائية.	٢
١٣	آليات إسناد السلطة في النظم الديمقراطية. اولا: مفهوم الانتخاب. ثانياً : أساليب الانتخاب. ١ – الانتخاب المباشر والانتخاب غير المباشر. ٢ – الانتخاب الفردي والانتخاب بقائمة. ثالثاً : الضمانات الكفيلة بحماية الانتخاب. ١ – أن يكون الانتخاب سري . ٢ – المساواة في إبداء الرأي . عدم استعمال وسائل القسر والإكراه.	٢
١٤	محاسن الديمقراطية وأهدافها. أولا: محاسن الديمقراطية . ثانياً : أهداف الديمقراطية.	٢
١٥	مساوئ الديمقراطية. إعادة سريعة لما تناولناه في موضوع حقوق الإنسان .	٢

Computer Sciences
hrs ٣٠ : Theory
hrs ٦٠ :Practice
٤ :Units

COURSE SYLLABUS	
Lecture No	**Title of the Subject**
Lec 01 - 02	**Welcome and Introduction to course material**
Lec 03-04	**Chapter One: Computer Fundamentals** • What is Computer • Generations Computer • Data and Information • Features of Computer • Computer Components • Types of Computers
Lec 05-07	**Chapter Two: Computer Components** • Computer Parts • Hardware • Computer Ports • points-Key • Number Systems • Software • Programming languages • Personal Computer PC • Features of Personal Computer

Lec08-13 Chapter Three: Introduction to Operating System

- OS Definition
- Functions of the Operating System
- Goals of OS
- Classification of Operating Systems
- Types of Operating Systems
- Microsoft Widows
- .get started
- Control Panel
- Folders and Files Managements

Lec 14 Chapter Four: Microsoft Word

- Get started and window elements
- Basic Operations
- Formatting
- Editing and layout
- Insert tables and images

Term Exam-Mid

Microsoft PowerPoint :Chapter Five ١٥-٢٠Lec

- Get started and window elements
- Basic Operations
- and charts ،Graphics ،Formatting
- How to prepare scientific presentations

Lec 21-25 Chapter Six: Microsoft Excel

- Get started and window elements
- Basic Operations
- Functions

- Formatting
- charts and ،Graphics

Lec 26 Chapter Seven: Computer Safety and software licenses

Lec 27-29 The Internet and Communication

Review ٣٠Lec

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SECOND YEAR

2025-2024

Subject	Biochemistry
Theory	hrs ٩٠
Practice	60 hrs
Units	8
No	Title
١	Vitamins
٢	Diagnostic Enzymology
٣	Introduction to intermediary metabolism
٤	Carbohydrate Metabolism -carbohydrates b ofCatabolism -a cycle Acid Citric c- shuntmonophoshate Hexose d- -e Metabolism Fructose and Galactose Metabolism Diasaccharides -Glycogen Metabolism g-f Gluconeogensis Control mechanism-h
٥	Biological Oxidation
٦	Cell Membrane -a Definition
٧	ObesityNutrition and nutritionDefinition of-a
٨	Haemoglobin Definition -a
٩	Free radicals
١٠	Nucleotide metabolism
١١	Acid base disturbance
١٢	Immuno globulin
١٣	Acid Metabolism Amino
١٤	Protein metabolism
١٥	System Renal
١٦	Mineral Metabolism
١٧	Antioxidants
١٨	Hormones
١٩	Chemistry of Cancer
٢٠	Xenobiotics
٢١	Lipid Metabolism
٢٢	The Muscle
٢٣	Integration of Metabolism &Regulation -
٢٤	TestsLiver Functions

Subject	Human Anatomy
Theory	120 hrs
Practice	120 hrs
Units	12
No	Title
١	:Neuroanatomy introduction ANS ،PNS ،CNS ، tissue Nervous related terms - cells Neuroglioal
٢	osteology ،skull - views of the skull
٣	Meninges dural folds - sinuses cranial venous
٤	brain divisions of
٥	cerebral hemispheres -external and internal structures
٦	basal ganglia
٧	ventricles of the brain
٨	Brainstem Midbrain
٩	Diencephalons
١٠	Pons
١١	Cerebellum
١٢	blood supply of the brain
١٣	cerebrospinal fluid
١٤	spinal cord external and internal features
١٥	Tractology Of the spinal cord
١٦	pyramidal and extrapyramidal system
١٧	cranial nerves.
١٨	.associated structures nerves and ،vessels ،muscles - ، scalp
١٩	Neck &Head fossa temporal fossa infratemporal
٢٠	Nec k - anatomy surface - fascia superfacial
٢١	neck of the triangles posterior triangle vessels nerves and associated structures ،muscles -
٢٢	triangle anterior associated and nerves vesses ،muscles - . structures Thyroid gland

٢٣	arteries and nerves of the neck،main veins . cervical plexuses
٢٤	Face structures muscles associated and vessels، nerves ، muscles - smastication of
٢٥	parotid gland
٢٦	submandibular region
٢٧	oral cavity
٢٨	nasal cavity paranasal sinuses
٢٩	.associated structures ،muscles -Larynx
٣٠	and related structures ،Ear
٣١	Abdomen wall abdominal anterior structures and associated muscles wall abdominal posterior and associated structures muscles
٣٢	inguinal canal inguinal hernia spermatic cord
٣٣	Peritoneum arrangement of abdominal viscera
٣٤	gastrointestinal tract esophagus
٣٥	Stomach
٣٦	intestine small intestine large associated structures lymphatics and ،nerves ،blood vessels
٣٧	liver and biliary system
٣٨	Spleen
٣٩	Pancreas
٤٠	retroperitoneal structures kidney suprarenal gland
٤١	lumbar plexuses
٤٢	:Pelvis Pelvic skeleton and bony pelvis
٤٣	contents of pelvic diaphragm fascia visceral pelvic
٤٤	pelvic viscera in male
٤٥	pelvic viscera in female
٤٦	Perineum Urogenital diaphragm Contents of male genital triangle Contents of urogenital diaphragm in male and female

٤٧	contents of anal triangle anal canal
٤٨	Ischiorectal fossa
٤٩	Clinical notes
Subject	**Embryology**
Theory	**٣٠ hrs**
Practice	**0**
Units	٢
No	Title
١	Gametogenesis–Introduction .
٢	meiosis&Chromosomes during mitosis .
٣	Morphological changes during gamete maturation .
٤	–Abnormal gamete – Spermiognesis-Spermatogenesis . Ovulation
٥	Fertilization . week st١
٦	nd week development٢
٧	rd week development٣ .
٨	ectoderm،Differentiation of germ layers .
٩	paraxial mesoderm and their،Differentiation of mesoderm . derivatives & intermediate mesoderm،derivatives
١٠	Endoderm .
١١	development of &fetal membrane ،Formation of deciduas placenta
١٢	Congenital malformation.
١٣	Skeletal system .
١٤	Muscular system
١٥	serous membranes &Body cavities
١٦	Cardiovascular system
١٧	Respiratory system
١٨	digestive System
١٩	Urogenital system.
٢٠	Genital system.
٢١	neck &Head . .hrs٢ Feras .Dr
٢٢	ear &Eye .

Subject	Histology
Theory	60 hrs
Practice	60 hrs
Units	٦

No	Title
١	Vascular system
٢	Introduction
٣	systemBlood vascular
٤	Capillaries
٥	(continuous and fenestrated)Type of capillaries
٦	Large،arteries medium sized ، arteries small ، Arteriole) . Arteries (elastic arteries
٧	(Atherosclerosis) .Age changes in arteries
٨	(large vein ،vein sized medium ،vein small ،Venule) . Veins –
٩	Vasa vasorum
١٠	The skin and its appendages
١١	Lymphatic system
١٢	Heamopoiesis
١٣	Digestive system
١٤	Respiratory system
١٥	Respiratory membrane
١٦	The endocrine system
١٧	Theurinary system
١٨	(nephron The) . passages of the kidney excretory The
١٩	Female reproductive system
٢٠	Mammary glands
٢١	systemMale Reproductive
٢٢	Special sense organs

Subject	Physiology
Theory	150 hrs
Practice	60 hrs
Units	١٢
No	Title
١	general physiology Subject and &physiology Introduction to significance Methods of physiological research
٢	Physiology and other sciences
٣	(Cellular organization)function &Cell structure
٤	Homeostasis ،body water functions،Body fluids
٥	Body water &Edema & ،dynamics ، composition ،Body fluids .Body fluid dynamics ،functions
٦	،Introduction type of the muscle:Physiology of the muscles motor unit ،structure ،Skeletal muscles
٧	،contraction muscle ، muscle of response Mechanical، Excitability
٨	Summation of muscle ،muscle fatigue ،contraction Type of contraction
٩	Effect of ،Effect of two muscle stimuli ،Simple muscle twitch repeated stimulation
٠	Muscle tone ،All or none Law ،Tetanus &Clonus
١٠	CNS Physiology of
١١	، limbic system &hypothalamus Physiology of the
١٢	The brain stem and reticular formation
١٣	loss of consciousness &sleep ،Wakefulness
١٤	sensory functions &motor .Cerebral control function
١٥	memory ،speech ،Conditioned reflexes
١٦	EEG ،Corticospinal tracts
١٧	،adequate stimulus &the stimulus ،definition & ،Introduction :Sensation Classification of sensory receptors electrical and ionic .sensory receptors events in receptors
١٨	representation cortical and ، field receptive the ، unit sensory The
١٩	of role،the sensory pathways ،of sensory information Coding ،contractions muscular proprioceptors in reflex and voluntary
٢٠	inverse & ، organs tendon Golgi The، reflex (tendon) stretch The muscles tone effect &Gama efferent activity ،stretch
٢١	،Superficial .deep & visceral sensation ، touch pressure، pain sensations ،warmth،cold ،vibration &sensation
٢٢	point-set &temperature Normal ،Body temperature regulation
٢٣	shivering thermo genesis -non & ،shivering ،Heat production
٢٤	hypothalamic regulations of body temperature ، Heat loss Hypothermia &Fever Functional anatomy of ،Equilibrium &Hearing :Special Senses

	properties of hearing system،the ear
٢٥	Theories of hearing
٢٦	Vestibular function
٢٧	pathways &smell receptors –test &Smell
٢٨	Physiology of olfaction
٢٩ ٣٠	pathways &test receptor organs ،Physiology of the test
٣١	Functional anatomy of the eye :Vision
٣٢	functions &Blood composition
٣٣	hemoglobin variants &hemoglobin ،RBCs
٣٤	anemia &metabolisms Iron
٣٥	hemolytic anemia &RBC destruction
٣٦	classifications &WBC morphology
٣٧	Specific functions of different WBC
٣٨	typing –HLA &allergy &The immune system
٣٩	blood coagulations &Homeostasis ،The platelets
٤٠	blood transfusions & Blood group
٤١	the fibrinolytic activity of ،functions &The plasma compositions plasma
٤٢	Functional anatomy of the kidney
٤٣	regulation of renal blood flow-Auto
٤٤	GFR &Mechanisms of glomerular filtration
٤٥	tubule secretion in the &absorption -Re
٤٦	Effect of water loss ،Effect of excess intake
٤٧	+Regulation of K ، +absorption of N-Regulation of tubular re balance
٤٨	Diuretics
٤٩	Urea clearance ،Creatinine clearance balance base -acid of regulation Renal & PH & Ion Hydrogen The
٥٠	Renal function test
٥١	+H ،+H & ،PH of concept. base & acid of chemistry Fundamental Hasselbach equation -s'Henderson &ion of body fluids
٥٢	Carbonic acids Body buffer ، +elimination of H &Generations distribution of body buffer system ،system
٥٣	abnormal sounds\ ،Mechanisms of heart sounds
٥٤	anatomical review &Introduction to CV physiology
٥٥	conducting system Specialized &The heart coronary circulation tissue
٥٦	Cardiac cycle
٥٧	Ultra action potential،contraction ،structure ،myocardium The of role and bases Ionic .muscle to skeletal comparison structure with coupling contraction and ،excitation ،contraction muscle
٦٠	The mechanical properties of the cardiac muscle)law -Sterling

٦١	types of muscle ،relationship (tension -length) Starling low of the heart Action .The electrical activity of the heart .(contraction The refractory .first response and slow response،potential
٦٢	.Pacemaker cells and pacemaker action potential .periods wave and T &،QRS ،P ، axis electrical ،ground -General back–ECG significance their clinical
٦٣	(syndrome Adam -Stock ،blocks)Cardiac arrhythmias -ECG
٦٤	conduction system Cellular & ،myocardium ،Action potential bases of cardiac arrhythmias
٦٥	cardiac function curve methods of measuring ،put-Cardiac out
٦٦	put Factors regulating cardiac output-Cardiac out
٦٧	Hypotension & shock Transient ،hypotension prolonged .physiological changes-hypotension and its patho
٦٨	Hypertension Volume loading ، mechanism Vasoconstrictor mechanism Secondary ،hypertension primaryhypertension (essential)
٦٩	Heart Failure
٧٠	Cardiomyopathy
٧١	Ischemic heart disease
٧٢	Exercise physiology
٧٣	،s'Ohm ،s 'Poiseulle ،hematocrit & ،blood volume ،Circulation capacitance ،conductance ،laplace Laws Peripheral resistance
٧٤	.Reynolds numbers ،laminar and turbulent flow ،Compliance intrinsic)auto regulation control ،Local regulation of blood pressure Regulation of BP (extrinsic)neural control & (control long term control & short،
٧٥	Systolic BP ، Diastolic ،BP pulse pressure ، Mean ، Bp s sounds'Koratkov &measurement of BP
٧٦	there functions General venous pressure and its &The veins the filling pressure ،reference point ،Venous pump .regulation
٧٧	Respiratory physiology functional anatomy
٧٨	Pulmonary function test &capacities &Lung volume
٧٩	Mechanics of breathing muscles of respiration ، pressure changes during respiration
٨٠	Airways resistance ،compliance ،Expansion of the lung
٨١	resistance of pulmonary &pressure ،Pulmonary circulations blood vessels
٨٢	perfusions &distribution of ventilation ،Alveolar ventilation
٨٣	diffusion capacity &Exchanges of gases
٨٤	by blood $_2$CO &، $_2$Transport of O
٨٥	Control of ventilation
٨٦	& nervous control، motility ، FunctionsGeneral principles of GI blood circulation
٨٧	GI hormones ،Introduction to the gastrointestinal tract

٨٨	gas،salivary ،Secretory functions of the elementary tract .secretions pancreatic ،tric
٨٩	، intestine small، bile ،Secretory function of the alimentary tract large intestine secretions
٩٠	absorption &digestion ،Ingestion ،Basic principles of GI
٩١	intestinelarge ،intestine small ، stomach ، in GI tract Absorption
٩٢	liver functions &Bile salt synthesis
٩٣	liver function test ،Jaundice
٩٤	Physiology of ، DU ،swallowing disorders ،GI disorders ،malabsorption
٩٥	paralysis of defecation in spinal cord ،Diarrhea ،Constipation injuries
٩٦	gastrointestinal obstruction ،vomiting ،Nausea
٩٦	thermal and chemical changes ،The sliding filament theory during muscle contraction
٩٧	،pituitary The ،Introduction ،Physiology reproductive &Endocrine clinical ،neurohypophesis ،adenohypophesis ،hypothalamic hormones correlate
٩٨	clinical ، metabolism iodine، rate metabolic the ، thyroid The correlate
٩٩	، bone physiology & ،metabolism calcium ،parathyroid The clinical correlate
١٠٠	and the medulla،the cortex ،The adrenal glands
١٠١	ovary the ،the testes ،The gonads
١٠٢	The pancreas .The organs with endocrine functions
١٠٣	the ovary ،the testes ،The gonads
١٠٤	lactations &،pregnancy ،Reproduction
١٠٥	regulations Renal ، balance base – acid ofregulation Respiratory base balance –of acid
١٠٦	abnormalities base -Acid
١٠٧	of low Effect ، Physiology diving sea Deep ، Physiology altitude High .body the Effect of accelerated force on ،pressure on body ^{٢}O
١٠٨	space physiology &Problems of temperature in aviation
١٠٩	space weightlessness Radiation at the high altitude and
١١٠	Echocardiography
	منهاج مادة جرائم البعث الفصل الاول :- جرائم نظام جرائم البعث وفق قانون المحكمة الجنائية العراقية ٢٠٠٥ م :- ١-١. مفهوم الجرائم واقسامها . ١-١-١. تعريف الجريمة لغة واصطلاحاً .

٢-١-١. اقسام الجرائم .
٢-١. جرائم نظام البعث وفق توثيق قانون المحكمة الجنائية العراقية العليا عام ٢٠٠٥ م .
١-٢-١. انواع الجرائم الدولية .
٢-٢-١. القرارات الصادرة من المحكمة الجنائية العراقية .

الفصل الثاني :-

الجرائم النفسية والاجتماعية واثارها ، وابرز انتهاكات النظام البعثي في العراق :-

١-٢. الجرائم النفسية .
١-١-٢. اليات الجرائم النفسية .
٢-١-٢. اثار الجرائم النفسية .
٢-٢. الجرائم الاجتماعية .
١-٢-٢. عسكرة المجتمع .
٢-٢-٢. موقف النظام البعثي من الدين .
٣-٢. انتهاكات القوانين العراقية .
١-٣-٢. صور انتهاكات حقوق الانسان وجرائم السلطة .
٢-٣-٢. بعض قرارات الانتهاكات السياسية والعسكرية لنظام البعث .
٣-٣-٢. اماكن السجون والاحتجاز لنظام البعث .

الفصل الثالث :-

الجرائم البيئية لنظام البعث في العراق :-

١-٣. التلوث الحربي والاشعاعي وانفجار الالغام .
٢-٣. تدمير المدن والقرى (سياسة الارض المحروقة)
٤-٣. تجريف بساتين النخيل والاشجار والمزروعات .

الفصل الرابع :-

جرائم المقابر الجماعية :-

١-٤. احداث مقابر الابادة الجماعية المرتكبة من النظام البعثي في العراق .
٢-٤. التنصيف الزمني لمقابر الابادة الجامعية في العراق للمدة ١٩٦٣ - ٢٠٠٣ .

Ministry of Higher Education and Scientific Research

UNIVERSITY OF MISAN

College Of Medicine

Syllabus of Medical College Curriculum

THIRD YEAR

2025-2024

Subject	Microbiology
Theory	90 hrs
Practice	60 hrs
Units	٨
No	Title
١	**General Microbiology .Part I**
٢	Introduction to the medical microbiology
٣	Classification& Bacterial cell
٤	media culture &bacterial growth ،Growth requirements
٥	Antimicrobial agents &Disinfections ،Sterilization
٦	Microbial Genetics
٧	Pathogenesis of microbial infection
٨	Normal flora
٩	Review
٠	**Systemic Bacteriology :Part II**
١٠	**bacteriaGram positive**
١١	(cocci shape bacteria)Staphylococcus
١٢	Pneumococci & .Streptococcus spp
١٣	Listeria spp &Corynebacterium
١٤	(Spore forming)bacteria .Bacillus spp & .Clostridium spp
١٥	Propiobacterium spp
١٦	Mycobacterium
١٧	**Gram negative bacteria –B**
١٨	Neisseria spp
١٩	Pasteurella &Hemophilus
٢٠	Brucella& Bordetella
٢١	Francisella &Legionella pneumophila
٢٢	، Salmonella ،Klebsiella ،coli .E)Enterobacteriacae family other associated bacteria & ،Acinetobacter ،Shigella ،Proteus
٢٣	Pseudomonas spp
٢٤	Yersinia spp
٢٥	Helicobacter pylori
٢٦	Campylobacter &Vibrio

٢٧	(Treponema & ،Spirullum ،Borelli)Spirochete bacteria
٢٨	**Intracellular parasitic bacteria .Part III**
٢٩ ٣٠	Chlamydia spp
٣١	Mycoplasma spp
٣٢	Rickettsia spp
٣٣	Body fluids &stool samples ،Urine
٣٤	**Clinical immunology &Basic .Part IV**
٣٥	.Introduction to immune system
٣٦	Cellular basic of immune system ،antibody &Antigen
٣٧	regulation of B cell ،generation of B cells ،B cell development . negative selection of B cells &positive ،development
٣٨	positive selection of T ،generation of T cells ،T cell development .cells and negative selection of T cells
٣٩	Acquired immunity &Innate
٤٠	cascades and regulation of ،The Complement system complement function
٤١	. inflammation Immune system cells migration and
٤٢	Hypersensitivity reactions
٤٣	Immunological tolerance
٤٤	Transplantation
٤٥	Autoimmunity diseases
٤٦	Tumor immunity
٤٧	Vaccination
٤٨	Immunotherapy
٤٩	Infection and immunity
٥٠	**Medical Virology .Part V**
٥١	**VirologyGeneral –A**
٥٢	Classification of virus &General properties
٥٣	Replication of virus and genetics
٥٤	effect of virus on host cells ،Cultivation of viruses
٥٥	(infection viral slow and ،latent ،chronic ،acute) Pathogenesis Viral
٥٦	antiviral ،interferon :infections Prevention and treatment of viral chemotherapy and viral vaccines
٥٧	**Systemic virology –B**
٦٠	Parvo virus
٦١	Pox virus &Adeno

٦٢	familyHerpes virus
٦٣	Orthomyxo virus family
٦٤	Paromyxovirus family
٦٥	Picorna virus
٦٦	hepatitis Viral
٦٧	Viral gastroenteritis
٦٨	Arbovirus
٦٩	Oncogenic virus
٧٠	infection (HIV)Retro virus
٧١	SARS ،corona virus ،Reo
٧٢	**Medical Mycology : .Part VI**
٧٣	general properties of fungi &Introduction
٧٤	Classification of fungi &Structures
٧٥	Superficial mycosis
٧٦	Subcutaneous mycosis &Cutaneous
٧٧	fungiOpportunistic & Systemic

Subject	Parasitology
Theory	60 hrs.
Practice	60 hrs.
Units	6
No	Title
١	**١- of Entamoeba man** histolytica .E -a coli .E -b gingivalis .E -c hartmanni .E -d e- nana Endolimax f- butschlii Iodamoeba
٢	**protozoa Flagellates - ٢** **urogenital flagellates &oral ،Intestinal –A** ،Trichomonas tenax ،Dientamoeba fragilis ، lamblia Giardia other and mesnili Chilomastix ، vaginalis .T ، hominis Blastocysitis flagellates intestinal complex Leishmania tropica **tissues flagellated &Blood –B** trypanosome ، Mexicana .L ، braziliensis . L ، donovani .L cruzi .T ، gambiense .T ، rhodesiense
٣	**Ciliate - ٣** Balantidium coli
٤	**Sporozoa - ٤** a- .P ، malariae .P ، vivax Plasmodium : parasite Malaria . ovale .P ، falciparum b- and ، Sarcocystis ، Emeria ، Pneumocystis ، Toxoplasma . Cryptosporidium
٥	**Medical helminthology :Part II**
٦	**1-Cestodes** General consideration
٧	solium .T ،saginata Taenia
٨	hydatid diseases &Echinococcus
٩	sparganosis &Diphylobothrium
١٠	Dipylidium caninum
١١	diminuta .H ،Hymenolepis nana

١٢	Multiceps multiceps
١٣	**(flukes) Trematodes-٢**
١٤	gigantic .F &Fasciola hepatica
١٥	Opisthorchis felineus &Clonorchis sinensis
١٦	flukes Intestinal and lung
١٧	Schistosoma haematobium mansoni .S japonicum .S
١٨	Part III
١٩	**3-: Nematodes** General consideration a- lumbrcoides Ascaris b- -c vermicularis Enterobius trichiuria Trichuris d- Trichostrongylus e- -Strongloides stercoralis f -g duodenale Ancylostoma americanus Necator -i migrant larva visceral and Cutaneous -h spiralis Trichinella : The filariae -j 1 bancrofti Wuchereria – 2 malayia Brugia – 3 perstans Mansonella – 4 ozzardi .M – 5 volvulus Onchocerca - 6 loa loa – 7 medinensis Drancuncolus –
٢٠	**ogy Medical Entomol : Part IV**

Subject	General surgery
Theory	٣٠ hrs
Practice	٠
Units	٢

No	Title
١	Wound healing and repair .a
٢	Metabolic response to trauma .b
٣	(specific-non&specific)Surgical infections .c
٤	hospital infection&disinfection ،Sterilization .d
٥	electrolytes and acid base balance ،Fluids
٦	Shock .a
٧	Accidents and life support .b
٨	Hemorrhage
٩	Blood transfusion and complications
٠	Nutrition Surgical
١٠	sinuses and ulcer ،Fistula
١١	Burn
١٢	Parasites of surgical importance
١٣	Principles of skin Repair
١٤	Ischemia
١٥	Gangrene
١٦	Foot unilateral limb edema&Ulcers of the Leg
١٧	Venous disorders of the limbs
١٨	. Lymphatic disorders
١٩	

Subject	edicineM yFamil
Theory	٣٠ hrs
Practice	٣٠ hrs
Units	٣

No	Title
١	Introduction to medical statistics
٢	Summarization and presentation of data
٣	Measurement of central location
٤	variabilityMeasurement of
٥	Introduction to sampling
٦	The normal distribution and its characteristics
٧	The confidence interval and limit
٨	:significanceof Tests ▶ testthe Z ▶ t thetest ▶ χ^2 the test
٩	statistics of application an as diagnosis community of concept The measuring population health in
٠	Definition of relevant terms
١٠	and metabolism Nutrient requirements
١١	infectionNutrition and
١٢	Nutrition of specific groups of population
١٣	Nutritional surveys and assessment of nutritional status of population
١٤	Selected Nutritional diseases
١٥	Diet therapy and nutritional rehabilitation

Subject	Pathology
Theory	١٢٠ hrs
Practice	١٢٠ hrs
Units	١٢
No	Title
١	**Introduction** pathology of branches & Definition De diseases Causes and etiology of diseases of nature and Pathogenesis disease of changes Morphological complications Prognosis and
٢	**Adaptations and death cell ،injury Cell** & stress to response cellular of Overview stimuli noxious .Cellular adaptations to stress Hypertrophy- Hyperplasia- Atrophy- Metaplasia Causes of - injurycell The morphology of cell and tissue injury Reversible injury- Necrosis- Patterns of tissue necrosis- injury to responses Subcellular- injuryMechanisms of cell injury and necrosis Examples of irreversible cell Coagulative necrosis- Caseous necrosis- Liquefactive necrosis- Fatty necrosis- Fibrinoid necrosis- Gangrenous necrosis - Apoptosis Intracellular accumulations Fatty change- and Exogenous) Pigmentation- (endogenous calcification Pathological-
٣	**Acute And Chronic Inflammation** InflammationOverview of

	- Definition - Causes :Types Acute Inflammation- Vascular changes- & flow blood vascular in Change- caliber Increased vascular permeability- events Leukocytes cellular- Leukocyte recruitment- Margination and rolling- Adhesion and transmigrations- Chemotaxis- Leukocytes activation- Phagocytosis- Killing and degradation of microbes- Outcomes of Acute Inflammation- acute of patterns Morphological- Inflammation Inflammation Serous- Fibrinous Inflammation- Inflammation (purulent)Suppurative - Catarrhal inflammation- Ulceration- Gangrenous Inflammation- Pseudomembranous Inflammation- Chemical Mediators- mediators Cell derived- Plasma protein derived mediators- flammationChronic In- and cells inflammatory Chronic- mediators Granulomatous inflammation- chronic of pattern Morphological- inflammation Systemic effects of Inflammation
٤	**Healing and Fibrosis ،Regeneration :Tissue Repair** .Overview of tissue repair Regeneration- The control of cell proliferation- cyclecell The- Proliferative capacities of tissues- Growth factors- and cellmatrix interactions (ECM)Extracellular matrix - .Roles of extracellular matrix- Components of extracellular Matrix-

	Repair by connective tissue- Angiogenesis- ECM and fibroblasts of Migration- deposition (Scar formation) Remodeling Tissue ECM and- Cutaneous wound healing Healing by first intention- Healing by second intention- Wound strength- of Repair Factors Aspects Pathologic Healing Wound Affecting Local Factors- Systemic Factors-
٥	**Microbial Infections** infections microbial to Introduction mechanisms defense specific-Non Categories of infectious agents Routes infections of Viral .disease can cause microorganism How infections Introduction- cellular at injury viral of Mechanisms- .level Transient viral infection- infection Latent viral- Slow viral infection- infection viral ١N١H- Bacterial infections infections Pathogenesis of bacterial- Acute bacterial infections- Acute bacterial infections general types- Common pyogenic bacteria- Gangrene Definition - typesand Chronic bacterial infections- tuberculosis Mycobacterium - Leprosy- Syphilis- Fungal infections-
٦	**Immunopathology** :Introduction &Cell immunity adaptive & Innate system immune tissue of responses immune normal of Over review :Hypersensitivity diseases

	Types of Hypersensitivity diseases- HSR I Type- Type II HSR- HSR III Type- HSR IV Type- transplants of Rejection- immune disease-Auto- Immunodeficiency diseases- Primary Immunodeficiency- Secondary immunodeficiency- Amyloidosis-
٧	**Disturbances of blood flow and body fluid Introduction** and types Hyperemia Edema Hemorrhage congestion and Shock Cardiogenic shock- Hypovolemic shock- Septic shock- Stages of shock - Hypoxia Ischemia- Infarction- homeostasis normal Review of Thrombosis Causes- Fate of thrombi - Embolism Pulmonary thromboembolism- Systemic thromboembolism- emboli Types of-
٨	**٥ Medical Genetics** Mutations (Diseases caused by single gene defects) Mendelian disorders gene disorders-Transmission patterns of single- disorders dominant Autosomal- disorders recessive Autosomal- linked disorders-X- inheritance multifactorial wit Disorders disorders Cytogenetic Cytogenetic disorders involving autosomes- (Down syndrome) ٢١ Trisomy - sex involving disorders Cytogenetic- chromosomes Klinefelter syndrome- Turner syndrome-

	of patterns atypical with disorders gene Single inheritance syndrome -Fragile X :Triplet repeat mutation- mitochondrial genes of mutation by caused Diseases- and Willi-Prader :imprinting Genomic- syndromes Angelman Diagnosis anomalies Congenital diseases genetic of Florescence in situ hybridization- Molecular detection of genetic diseases- Indications for genetic analysis-
٩	**Neoplasia** Definition Nomenclature Hamartoma Teratoma .Characteristics of benign and malignant neoplasms dysplasia &Atypia - Tumor grade and stage- metastasis &Invasion - metastasis &Mechanism of invasion - .Tumor angiogenesis- Kinetic of tumor cell growth- tumor -anti antigens Tumor immunity Tumor .mechanisms effecter -.Carcinogenesis .immunosurveilance & Tumor- of basis Molecular viral and radiation ،Chemical .cancer .clinical effect of neoplasia The
١٠	**Cardiovascular systemThe Blood Vessels** - injury to response their and cells wall Vascular - dysfunction and Function :cells Endothelial - cells muscle smooth Vascular - vascular to response A thickening Intimal injury intimal - Atherosclerosis - disease vascular Hypertensive - hypertension of Pathogenesis - hypertension essential of Mechanisms - hypertension in pathology Vascular - Aneurysms - aneurysm aortic Abdominal - dissection Aortic - Vasculitis - .arteritis (Temporal)cell Giant

	- Buerger)obliteranceThromboangiitis (Disease Tumors- - tumors Benign Hemangioma- Lymphangioma- - tumors (Borderline) Intermediate Kaposi sarcoma- - tumors Malignant Angiosarcoma- The Heart - failure heart Congestive - diseases heart Ischemic - pectoris Angina - infarction Myocardial - heart disease ischemicChronic - death cardiac Sudden diseases heart Valvular- - disease heart and fever Rheumatic - Endocarditis Infective - diseases myocardial Primary - Myocarditis - disease heart Congenital - shunts right-to-Left Atrial septal defects- defects Ventricular septal- arteriosus Patent ductus- - shunts left-to-Right Tetralogy of Fallot- Transposition of great arteries- - diseases Pericardial - Pericarditis - effusions Pericardial - tumors Cardiac
١١	**Respiratory system** Upper respiratory tract Nose- & conditions inflammatory- sinuses Nasal- .tumors conditions inflammatoryNasopharynx- .Tumors- Angiofibroma- Nasopharyngeal carcinoma- .Larynx- ،Benign tumors-

	s nodule'Singer- Polyp- Squamous papilloma- Malignant tumors- Lower carcinomacell Squamous- tractrespiratory - (collapse) Atelectasis - injury Lung Acute - Disease PulmonaryObstructive .Bronchial asthma- .Chronic bronchitis- Bronchiectasis- Emphysema- Centrilobular emphysema- Panacinar emphysema- Pathogenesis- Restrictive defect- disordersChest wall- Interstitial lung diseases- Acute respiratory distress syndrome- Chronic restrictive lung diseases- Pneumoconiosis- Interstitial fibrosis of unknown etiology- infiltrative lesions- Pneumonia- pneumoniaBroncho- Lobar pneumonia- .Pulmonary hypertension- Causes- Pathological changes- .Pneumoconiosis- Classification- Pathological changes- Complications- Tumors- .Bronchial carcinoid- Typical- Atypical- .carcinomacell neuroendocrine Small- - carcinoma neuroendocrine cell large .Bronchial carcinoma- Squamous cell carcinoma- Adenocarcinoma- carcinomacell Small- cell carcinomaLarge- .Pleura-

	Tumors- Mesothelioma- Benign- Malignant- .Secondary tumor-
١٢	**system The Hematopoietic** Red cell Disorders - Hemorrhage: of blood loss Anemia - Anemia Hemolytic Hereditary spherocytosis- anemia Sickle cell- - Thalassemia PD deficiency٦G- Paroxysmal nocturnal hemoglobinuria- Immunohemolytic anemia- .Hemolytic anemia from mechanical trauma- Anemia of diminished erythopoiesis- Polycythemia White - Disorders cell - cells white of disorders neoplastic-Non - cells white of proliferation Neoplastic - Leukaemias disorders Myeloproliferative- cell disorders Plasma Multiple myeloma - Bleeding disorders Ideopathic thrombocytopenic purpura- Hemophilia- Willbrand disease-Von-
١٣	**Lymphoreticular system** Reactive lymphadenopathy - lymphadenitis specific-non Acute - lymphadenitis specific-non Chronic - lymphadenitis Granulomatous - diseases neoplastic-non Miscellaneous lymphadenopathy Neoplastic s lymphoma'Hodgkin- - lymphoma s'Hodgkin-Non cell lymphoma-grade B-Low- cell lymphoma -grade T-Low- cell lymphoma -grade B -High- lymphoma cell -T grade High- lymphadenopathy Metastatic spleen Disorders of Hypersplenism- Splenomegaly-

	Disorders of the Thymus - Hyperplasia Thymic - Thymoma
١٤	**Oral cavity and the Gastrointestinal Tract** Oral cavity Ulcerative and inflammatory lesions- Aphthous ulcer- infection Herpes virus- Oral candidiasis- sarcoma and Kaposi Aids- Esophagus - disorders motor and Anatomic Achalasia- - hernia Hiatal - Varices - (types and causes) Esophagitis - esophagus s'Barrett - .carcinoma Esophageal Stomach Gastritis- Acute gastritis- Chronic gastritis- Gastric ulceration- gastric ulceration Acute- - ulcers peptic Gastric tumors- - polyps Gastric - Carcinoma Gastric - pathogenesis and Etiology intestine and large Small - disease bowel Inflammatory diseases'Crohn- colitis Ulcerative- - intestines large and small of Tumors polyps neoplastic -Non- Adenomas- syndromes Familial polyposis- Colorectal carcinoma- intestine small Neoplasms of- ، intestinal tract-Other tumors of gastro- intestinal lymphoma -Gastro and Carcinoid Appendix Appendicitis- Appendicular tumors-
١٥	**pancreas Gall bladder and ،Liver**

	Liver Micro architecture of liver- Liver cell reaction to injury- Hepatitis- Viral- Alcoholic- Liver cirrhosis- Tumors Gall - bladder Cholelithiasis- stones Pure- stone Mixed- Acute cholecystitis- Chronic cholecystitis- Pancreas Tumors- Acute pancreatitis- Chronic pancreatitis- Tumors- Tumors of exocrine pancreas- Tumors of endocrine pancreas-
١٦	**Kidney and Urinary Tract System Clinical manifestations of renal diseases** Glomerular diseases diseases Pathogenesis of glomerular- - complexes Immune Circulating - complexes situ-In - glomerulonephritis immune mediated-Cell - injury immune Mediators of - injury glomerular of mechanisms Other The nephrotic syndrome- - (nephrosis lipoid) disease change Minimal - glomerulosclerosis segmental and Focal - Membranous) nephropathy Membranous (glomerulonephritis - glomerulonephritis Membranoproliferative The nephritic syndrome- (post streptococcal) Acute post infections - Glomerulonephritis- (Berger disease) lgA nephropathy - - nephritis Hereditary -) Rapidly progressive glomerulonephritis(Crescentic Chronic glomerulonephritis- Diseases affecting tubules and interstitium Tubulointerstitial nephritis-

	Acute pyelonephritis- Chronic pyelonephritis and reflux nephropathy- Drug induced interstitial nephritis- tubular necrosis Diseases Acute- vessels blood involving Benign nephrosclerosis- malignant and hypertension Malignant- nephrosclerosis microangiopathies Thrombotic- Cystic diseases of the kidney Simple cysts- kidney polycystic (adult) dominant Autosomal- diseases polycystic (childhood) recessive Autosomal- diseases kidney Medullary cystic diseases Urinary - obstruction outflow Renal stones- Hydronephrosis Tumors- Renal cell carcinoma- s tumor'Wilm- pelvis and calyces Tumors of the renal- Diseases of urinary tract Ureter- Obstruction- Tumors - Urinary bladder- Acute cystitis- Chronic cystitis- Special forms of cystitis- Tumors- Urethra- Inflammation- Tumors-
١٧	**The female genital system** Vulva Vulvitis - dermatitis Contact- .neoplastic epithelial disorders-Non- Lichen sclerosus- Lichen simplex- Tumors- Vulvar grade low and Condylomas- .Neoplasia Intraepithelial

	Neoplasia and Intraepithelial Vulvar grade High- carcinoma .of vulva Vagina Vaginitis- and neoplasia Epithelial -Intra Vaginal- cell squamous carcinoma Sarcoma Botryoides - Cervix Cervicitis - cervix Tumors of the- and Neoplasia Intraepithelial Cervical- cell squamous .carcinoma .Endocervical polyp- Body of uterus - Endometritis - Adenomyosis - Endometriosis - hyperplasia Endometrial - myometrium and Endometrium of Tumors - polyp Endometrial - Leiomyoma carcinoma Endometrial- Ovaries - cysts neoplastic -Non cyst luteal and Follicular- Polycystic ovaries- .Chocolate cyst- - ovary Tumor of the - tumors stromal epithelial Surface Serous tumors- Mucinous tumors- Endometrioid tumors- Brenner tumors- Germ cell tumors- Teratomas- teratoma cystic (mature)Benign- Immature malignant teratoma- Specialized teratoma- Dysgerminoma- Choriocarcinoma- tumor Yolk sac- tumors stromal Sex cord- tumor Granulosa cell-

	fibroma -Thecoma- Leydig cell tumors -Sertoli- - Metastatic .s tumor'Krukenberg- (pregnancy)Diseases of placenta - pregnancy Ectopic - disease trophoblastic Gestational complete and partial ،mole Hydatidiform- Invasive Mole- Choriocarcinoma-
١٨	**Breast** Normal breast :lesions Benign breast Infections Acute pyogenic infections- Tuberculosis- lesions inflammatory Non infective - ductectasia Mammary - mastitis Granulomatous - necrosis Traumatic fat - body foreign to Reaction - Galactocele breast the of disease Fibrocystic :breast the of tumors Benign Fibroadenoma- Adenoma- Papilloma Breast- carcinoma Risk factors- Classification- lobular ،ductal :In situ carcinoma - carcinoma Invasive- (subtypes &classical)Ductal carcinoma- Tubular carcinoma- Prognosis of breast carcinoma- Phyllodes : breast the of tumors Miscellaneous lymphoma ،tumor breast male Tumors of
١٩	**System Male genital** Testicular neoplasms Germ cell tumor- - Variants - Seminoma - seminomatous Non Teratomas- Embryonal carcinoma- Yolk sac tumor-

	Choriocarcinoma- - tumorgerm cell Mixed - tumorstromal Sex cord - tumor cell Leydig-Sertoli Mixed testicular tumor- - lymphoma Testicular Prostate Hyperplasia Prostatic- Prostatic carcinoma-
٢٠	**and skeletal muscles ،Joints ،Bones** boneDiseases of Infections of bone- Pyogenic osteomyelitis- Tuberculous osteomyelitis- - osteomalacia and rickets deficiency D Vitamin - bone of disease s'Paget - tumors Bone osteoid ،osteoma :forming tumors Bone- ،osteoma osteogenicsarcom - :tumorsforming Cartilage Osteochondroma- Chondroblastoma- Miscellaneous tumors- Ewing sarcoma- Giant cell tumor- Metastatic tumors of bone-
٢١	**The Endocrine System** Pituitary Hyperpitutarism and Pituitary Adenomas- Prolactinomas- Growth Hormone producing Adenomas- Corticotroph Cell Adenomas- NeoplasmsPituitary Anterior Other- Hypopituitarism- Syndromes Posterior Pituitary- Thyroid Hyperthyroidism- Hypothyroidism- Thyroiditis- thyroiditis (Hashimoto)Chronic lymphocytic - (de Quervain)Sub acute granulomatous - Sub acute lymphocytic thyroiditis- Other forms of thyroiditis- Graves diseases- Diffuse and multinodular goiter-

	Thyroid Neoplasms of the- Adenomas- Carcinomas- Papillary Carcinoma- Follicular Carcinoma- Medullary Carcinoma- Carcinoma Anaplastic- Parathyroid Glands Hyperparathyroidism- Primary Hyperparathyroidism- Secondary Hyperparathyroidism- Hyperparathyroidism- Adrenal Cortex Adrenocortical hyperfunction- (hyperaderenalism) (Cushing syndrome)Hypercortisolism - Hyperaldosteronism- Adernogenital syndromes- Adrenal insufficiency- Acute adrenocortical insufficiency- Addison) insufficiency adrenocortical Chronic- (disease neoplasms Adrenocortical- Medulla Adrenal Pheochomocytoma- neoplasm neuronal other and Neuroblastoma- Syndromes Neoplasia Endocrine Multiple ١ type Neoplasia Endocrine Multiple- ٢ type Neoplasia Endocrine Multiple-
٢٢	**nervous system Cells of the The central and peripheral nervous system** Neurons- Astrocytes- Oligodendrocytes- Ependymal cells- Microglia- Edema and hydrocephalus Cerebral edema- Hydrocephalus - Vascular diseases encephalopathy ischemic-hypoxic Global- Infarcts- hemorrhage Intracranial- Primary brain parenchymal hemorrhage- subarachnoidal and Saccular aneurysm- hemorrhage

	Central nervous system trauma Epidural hematoma- Subdural hematoma- Infections of the nervous system Leptomeningitis- leptomeningitis Acute purulent- meningitis(viral)Acute lymphocytic - Chronic meningitis- (encephalitis)Parenchymal infections - Brain abscess- Viral encephalitis- Neoplasms of the central nervous system (Gliomas)Primary neuroglial tumors- Astrocytomas- Oligodendrogliomas- Ependymomas- neoplasmsPrimitive neuroepithelial- Meningiomas- Metastatic neoplasms-

Subject	Internal Medicine
Theory	٤٥ hrs
Practice	٦٠ hrs
Units	٥
No	Title
١	Introduction
٢	Basic nutrition
٣	Malnutrition
٤	support Nutritional
٥	vitaminssoluble Water
٦	Fat soluble vitamins
٧	Obesity
٨	Metabolic diseases
٩	Hyperuricaemia
٠	haemochromatosis ،s disease'sonlWil
١٠	Amyloidosis
١١	galactosaemia ،Porphyrias
١٢	acid base balance &Introduction to electrolytes
١٣	water disturbance & Sodium
١٤	hyperkalemia &Hypokalemia
١٥	Acid base balance
١٦	alkalosis ،Metabolic acidosis
١٧	alkalosis ،acidosisRespiration
١٨	Mixed acid base disturbance
١٩	Syndrome of inappropriate ADH secretion
٢٠	Immune system
٢١	deficiency Immune
٢٢	immune diseases-auto &Inflammatory response
٢٣	Allergy
٢٤	rejection &Transplantation
٢٥	Introduction to infectious diseases
٢٦	Leishmaniasis
٢٧	Parasitic infections
٢٨	Cholera
٢٩	Giardiasis
٣٠	Malaria
٣١	Toxoplasmosis
٣٢	Amebiasis
٣٣	Tetanus
٣٤	Leprosy
٣٥	Plague
٣٦	Viral hemorrhagic fever
٣٧	Pandemic influenza

٣٨	١٩-COVID
٣٩	Schistosomiasis
٤٠	Hydatid disease
٤١	Intestinal tapeworm
٤٢	Nematodes or roundworms
٤٣	Kala azar
٤٤	Enteric fever
٤٥	Brucellosis
٤٦	HIV
٤٧	sepsis
٤٨	PUO
٤٩	Dysphagia and dyspepsia
٥٠	Diarrhea and constipation
٥١	Weight loss

Subject	Pharmacology
Theory	٩٠ hrs
Practice	٦٠ hrs
Units	٨

No	Title
١	Pharmacokinetics ،General Pharmacology
٢	Pharmacokinetics
٣	Cholinergic system
٤	system Adrenergic
٥	Histamine and antihistamines
٦	Kinins and Prostaglandins ،Serotonin
٧	system Central nervous Pharmacology Systemic
٨	Anxiolytics and hypnotics
٩	Antipsychotics Antidepressants
١٠	Antiepileptic Drugs Antiparkinsonian drugs
١١	narcotic and NSAID-Non
١٢	Narcotic analgesic
١٣	Drugs for gout Antirheumatic drug Drug treatment for headache
١٤	General anaesthesia
١٥	Local anaesthesia Neuromuscular blocking drugs
١٦	GIT Drugs acting on
١٧	Drugs acting on respiratory tract
١٨	Diuretics Drugs acting on the heart Antihypertensive
١٩	drugsAntiarrhythmic
٢٠	Hypolipidemic drugs Digitalis in heart failure
٢١	Blood coagulants-Anti
٢٢	anemic drugs and vitamins-Anti
٢٣	Antimicrobials (Part one)Antibiotics
٢٤	(Part two)Antibiotics
٢٥	Antifungal Antiviral Antiprotozoal and anthelmintic
٢٦	Antituberculosis drugs Antimalarial drugs

	Antiseptics
٢٧	Hormones Corticosteroids Thyroids hormones and antithyroid
٢٨	contraceptive drug ،hormones Sex Antidiabetics
٢٩	Cytotoxic drugs Immunopharmacology
٣٠	Drugs interaction Drug poisoning

Ministry of Higher Education and Scientific Research

UNIVERSITY OF MISAN

College Of Medicine

Syllabus of Medical College Curriculum

FOURTH YEAR

2025-2024

Subject	Family Medicine
Theory	90 hrs
Practice	60 hrs
Units	8

No	Title
١	definition of ،concept of health and disease :Introduction epidemiological uses and approaches ،epidemiology
٢	sources and limitations ،types :Epidemiological data
٣	proportions and ratios ،rates :Epidemiological measurements
٤	place and time ،person :Descriptive epidemiology
٥	،Longitudinal،sectional-Cross:studiesepidemiologicalDescriptive Interventional ،Cohort ،Case control
٦	risk ،causation ،The concept of association
٧	studiesAnalytical epidemiological
٨	-screening and quality control of screening and diagnostic tests clinical epidemiology
٩	epidemiological studies Designing
١٠	The concept and investigation of epidemic
١١	DEFINITION OF TERMS-
١٢	THE THROUGH ACQUIRED INFECTIONS- `:GASTROINTESTINAL TRACT
١٣	risk factors ،causes ،extent of the problem :Diarrhoeal diseases and control
١٤	cholera and ،salmonella ،epidemiology of rotavirus Comparative shigellosis
١٥	Amoebiasis and shigellosis
١٦	poisoningBacterial food
١٧	Poliomyelitis
١٨	AInfections hepatitis
١٩	Typhoid and paratyphoid fever
٢٠	RESPIRATORY THETHROUGH ACQUIRED INFECTIONS - :(INFECTIONSBORNE AIR) SYSTEM
٢١	risk factors and ،causes ،extent :(ARI)Acute respiratory infection strategies of control of ARI
٢٢	chicken ،german measles ،Measles :Exanthematous infection pox…etc
٢٣	tonsillitis and ،mumps ،Diphtheria :Mouth and throat infection
٢٤	Whooping cough
٢٥	Tuberculosis
٢٦	Leprosy
٢٧	Acute bacterial meningitis
٢٨	ACQUIRED INFECTIONS :INFECTIONPERCUTANEOUS - SKIN TETHROUGH
٢٩	rickettsiasid ،leishmaniasis ،malaria :insect bites

٣٠	anthrax :abraisions
٣١	rabies ،animal bites
٣٢	tetanus :wounds
٣٣	AIDS ،hepatitis B :injections
٣٤	hookworm ،Schistosomiasis :Pentration
٣٥	sEXUALLY TRANSMITTED DISEASE-
٣٦	zOoNOTIC INFECTIONS -
٣٧	traVELLER HEALTH Nosocomial infections and -
٣٨	epidemiology of ischaemic heart diseases
٣٩	epidemiology of diabetes mellitus
٤٠	cancerepidemiology of
٤١	accidentsepidemiology of
٤٢	epidemiology of mental health and geriatrics
٤٣	Introduction to MCH care
٤٤	careof MCH Components
٤٥	pregnancyNutrition during
٤٦	Infection during pregnancy
٤٧	Low birth weight and prematurity
٤٨	Evaluation of MCH care
٤٩	under five clinics
٥٠	growth monitoring
٥١	Immunization
٥٢	Development clinics
٥٣	care for handicapped children
٥٤	concept and plans :School health services
٥٥	Vital statistics in MCH care
٥٦	،environment of context the within disease and health ofDefinition healthand environmental
٥٧	Basic activities of environmental health
٥٨	related diseases quality and ،sources :Water
٥٩	pollution air of control and effects health ،pollution ofsources : Air
٦٠	Common environmental problems :Toxicology
٦١	Definition of occupational health
٦٢	Objectives of occupational health services
٦٣	with work Health hazards associated
٦٤	Health hazards to the environment and community which result activitiesfrom industrial
٦٥	Safety measures in occupation
٦٦	Selected occupational diseases
٦٧	for PHCJustifications/Limitation of the hospital model
٦٨	Supportive /and difficulties of PHC contents ،Definition The five star doctor /prohrammes
٦٩	CDD ،EPI :programmesNational PHC
٧٠	Breast feeding ،MCH ،ARI :National PHC programmes
٧١	Brief historical view of Iraq health system

٧٢	administrationConcept of
٧٣	Planning of health care services
٧٤	Evaluation of health care services

Subject	**Medical Ethics**
Theory	**٣٠ hrs**
Practice	**٠ hrs**
Units	**٢**
No	Title
١	Ethics in general and medical ethics as a subset
٢	background with Theoretical :Principles of medical ethics teaching ethics drawing on justification of extensive
٣	Ethics in International documents
٤	Ethical consideration of Doctors and the community relationship
٥	Ethical consideration in preventive medicine
٦	perspectives Medical ethics in historical
٧	Ethics and research
٨	patientsDoctors and
٩	colleaguesDoctors and
١٠	Ethics in surgical practice
١١	Ethics in Gynaecology and obstetrics
١٢	Ethics in Paediatrics
١٣	Ethics in Psychiatric practice
١٤	reproduction Ethical consideration in human
١٥	Accountability in practicing medicine
١٦	،surgical separation of twins ،Dying patients :Special problems Refusal of necessary treatment ،Abortion
١٧	Optional topics

Subject	Obstetrics
Theory	٦٠ .hr
Practice	٦٠ .hr
Units	٦

No	Title
١	examination &Obstetric history taking
٢	fetal development ،implantation ،Fertilization
٣	Fetal development and growth
٤	function &Placenta development
٥	Physiological changes in pregnancy
٦	Antenatal care
٧	assessment of fetal wellbeing & Antenatal imaging
٨	Assessment of fetal wellbeing
٩	Prenatal diagnosis
١٠	Minor complications of pregnancy
١١	infectionUrinary tract
١٢	Fetal and maternal anatomy relevant to labor
١٣	(stages ،onset ،physiology)The process of labour
١٤	labourMechanism of
١٥	labournormal Management of
١٦	labourPain relief in
١٧	.(poor progress in labour)Abnormal labour
١٨	.(brow ،face)Malpresentation
١٩	.(occipitoposterior position)Malposition
٢٠	.(oblique ،transverse)Abnormal lie
٢١	.prolapse & ،presentation Cord
٢٢	.Breech presentation
٢٣	Induction of labour
٢٤	hemorrhagepostpartum
٢٥	rd stage of labour٣Abnormalities of
٢٦	Operative intervention in obstetrics
٢٧	miscarriageof Types
٢٨	The puerperium
٢٩	The puerperium
٣٠	term pregnancy-Post
٣١	Antepartum hemorrhage
٣٢	immunization-Rhesus iso
٣٣	higher multiples gestations &Twins
٣٤	restrictionfetal growth
٣٥	Intrauterine fetal death
٣٦	Hypertensive disorders of pregnancy
٣٧	Hypertensive disorders of pregnancy
٣٨	preterm labour &Late miscarriage
٣٩	Prelabour rupture of the membranes

٤٠	its abnormalities &Amniotic fluid
٤١	Respiratory diseases during pregnancy
٤٢	Heart diseases during pregnancy
٤٣	pregnancyDiabetes in
٤٤	pregnancyDiabetes in
٤٥	Anemia in pregnancy
٤٦	Renal disease in pregnancy
٤٧	Thyroid disease in pregnancy
٤٨	Liver disease in pregnancy
٤٩	Coagulation disorders in pregnancy
٥٠	Connective tissue disease in pregnancy
٥١	Perinatal infection
٥٢	infection Perinatal
٥٣	Venous thromboembolism
٥٤	Abdominal pain in pregnancy
٥٥	Obstetric emergency
٥٦	Obstetric emergencies
٥٧	the puerperium &Psychiatric disorders
٥٨	Drugs in pregnancy
٥٩	perinatal mortality &Maternal
٦٠	Neonatology

Subject	General surgery
Theory	90 hrs.
Practice	90 hrs
Units	9
No	Title
١	of aspect Surgical ،Tumors ،.B.F ،anomaly Congenital .Esophagus Hiatus Hernia ،Reflux ،Achalasia
٢	،GERD ،Reflux ،Achalasia ،Dysphagia ،Esophagitis .Esophagus Hiatus hernia
٣	Surgical treatment of ،Acute dilatation :Stomach and Duodenum peptic ulcer
٤	،Endoscopy Radiology ،Secretary tests :Duodenum and Stomach Peptic ulcers ،Gastritis
٥	post gastric surgery complications ،Tumors of stomach
٦	its treatment intestinal bleeding and-Gastro
٧	:Liver ،Investigations ،Jaundice ،Hepatitis ،Cirrhosis Portal hypertension
٨	:Spleen Indications for .surgery Surgical aspect of portal hypertension
٩	Tumors ،Cysts including Hydatid cyst ،Abscess ،Injury :Liver
١٠	،Investigations Congenital anomaly :Biliary tree Gall bladder and .Tumors &Obstructive jaundice ،Cholecystitis ،stones ،Injuries
١١	.Laparoscopy
١٢	Mesentery and :peritoneum ،Peritonitis ،Cysts Subphrenic .abscess
١٣	.Tumors ،Mass ،Appendicitis :Appendix
١٤	Exocrine Tumors ،cysts ،chronic and acute Pancreatitis :Pancreas .Endocrine&
١٥	Small and Large bowel diseases
١٦	Surgical anatomy and physiology
١٧	Constipation
١٨	Diverticular disease and blind loop syndrome
١٩	Inflammatory bowel diseases
٢٠	fistula Enterocutaneous
٢١	Mesenteric vascular ischaemia
٢٢	Intestinal obstruction
٢٣	.Benign and Malignant tumors of intestine
٢٤	Anorectal diseases
٢٥	Surgical anatomy and physiology
٢٦	Clinical assessement
٢٧	ulcer rectal Injuries and solitary rectal ،Rectal prolapse
٢٨	Rectal tumours
٢٩	.Pilonidal sinus
٣٠	.perianal abscess and perianal fistula ،strictures ،Anal fissure

٣١	.Hemorrhoids
٣٢	Anal canal tumours
٣٣	Anal incontinence
٣٤	Lower GIT bleeding
٣٥	Diabetic foot and gangrene
٣٦	Hernias
٣٧	Abdominal wall
٣٨	Urinary tract lectures
٣٩	Urinary tract imaging
٤٠	Congenital anomalies of kidney and ureter
٤١	Congenital anomalies of urinary bladder and urethra
٤٢	Urinary tract infections
٤٣	(VUR)ureteral reflux -Vesico
٤٤	Genitourinary tuberculosis and bilharziasis
٤٥	and ،Laparoscopy ،Endourology ؛Minimal invasive Urology
٤٦	Robotic surgery
٤٧	Urinary lithiasis
٤٨	Obstructive uropathy
٤٩	Tumors of the urinary bladder
٥٠	Tumors of the kidney and ureter
٥١	of prostate Carcinoma
٥٢	Benign prostatic hyperplasia
٥٣	Benign disorders of the testicle
٥٤	Tumors of the testis
٥٥	Male infertility and sexual dysfunction
٥٦	Renal transplantation
٥٧	anatomy and physiology of the kidney ؛Introduction
٥٨	Acute renal failure
٥٩	Chronic renal failure
٦٠	Nephritic and nephrotic syndromes
٦١	Glomerulonephritis
٦٢	Glomerulopathies associated with systemic diseases
٦٣	Diabetic nephropathy and hypertensive nephropathy
٦٤	Drugs and the kidney

Subject	Pediatrics
Theory	٣٠ hrs
Practice	0
Units	2

No	Title
١	**Infant feeding** ،Constipation ،Feeding problems ،Formula feeding ،Breast feeding) (Vomiting and Abdominal pain
٢	**Nutritional disorders** th Failure to ،Kwashiorkor-Marasmus ،Marasmus ،Kwashiorkor) : (.Calcium metabolism and rickets
٣	**Immunization** includi vaccines Other ،program vaccine polio expanded and vaccine) : ،Measles vaccine ،Tetra vaccine ،vaccine Penta ،hepatitisB vaccination of contraindications and Complications (MMR .schedule in IRAQ Immunization
٤	**development and Growth** ph ،development and growth affecting factors ،definition) : methods of ،development of growth and circumferential ،growth linear measurement developmenta ،fold skin& (milestones from birth until puberty
٥	**Infectious diseases:** cou whooping ،rubella mumps measles ،encephalitis ،meningitis) : (azar-kala ،poliomyelitis

Subject	Internal Medicine
Theory	135 hrs.
Practice	90 hrs
Units	١2

No	Title
١	**Infectious diseases .A**
٢	(enteric fevers)Salmonellosis
٣	Bacillary dysentry
٤	Brucellosis
٥	Tetanus -Anthrax
٦	syndromeSeptic shock
٧	Food poisoning
٨	(HIV) virusimmunodeficiency Human
٩	Cytomegalovirus infections
١٠	haemorrhagic fevers ،Infectious mononucelosis
١١	Pyrexia of unknown origin
١٢	Fungal infections ،Relapsing fever ،Leptospirosis
١٣	**Cardiovascular diseases .B**
١٤	Introduction and physiological aspects
١٥	Non invasive cardiovascular investigations
١٦	.Presenting Problems In Cardiovascular Disease
١٧	Rhythm And Conduction ،Disorders Of Heart Rate
١٨	.Atherosclerosis
١٩	Coronary Heart Disease
٢٠	Diseases Of The Heart Valves
٢١	Congenital Heart Disease
٢٢	Rheumatic fever
٢٣	Infective endocarditis
٢٤	myocardiumDiseases of
٢٥	Pericardium Diseases Of The
٢٦	Hypertension
٢٧	Pregnancy and heart disease
٢٨	Heart failure
٢٩	Peripheral circulatory failure
٣٠	Peripheral vascular diseases
٣١	**diseasesRespiratory .C**
٣٢	Anatomical and physiological consideration
٣٣	of respiratory diseases Common clinical manifestations
٣٤	and diagnostic procedures in respiratory ،Investigations
٣٥	Acute upper respiratory tract infection
٣٦	The pneumonias
٣٧	bronchiectasis ،Suppurative lung disease
٣٨	Obstructive airway diseases
٣٩	Pneumothorax

٤٠	Pleural effusion
٤١	Interstitial lung diseases
٤٢	Respiratory failure
٤٣	Adult respiratory distress syndrome
٤٤	Cor pulmonele
٤٥	Bronchogenic carcinoma
٤٦	B.Pulmonary T
٤٧	Pulmonary embolism
٤٨	**disorders Endocrine and Metabolic.D**
٤٩	neuroendocrine relationship-Introduction
٥٠	diseasesPituitary gland
٥١	diseasesThyroid gland
٥٢	Diabetes mellitus
٥٣	Adrenal gland diseases
٥٤	Parathyroid gland diseases
٥٥	Gonadal diseases
٥٦	Dyslipidemia
٥٧	Porphyria
٥٨	**Gastroenterology and liver diseases.E**
٥٩	Functional anatomy of gasterointestinal systeme
٦٠	Common clinical manifestations of GIT
٦١	diseases .I.GInvestigations of the
٦٢	hiatus ،esophagitis ،dysphagia :Diseases of the esophagus tumours ،achalasia ،hernia
٦٣	Ulcer Diseases of stomach
٦٤	Tumours stomachof the
٦٥	Bleeding.I.G
٦٦	Malabsorption syndrome
٦٧	Ischaemia and tumours of small bowel
٦٨	bowel diseases inflammatoryChronic
٦٩	Tumours of large bowel
٧٠	،acute viral hepatitis -disease Acute paranchymal liver :The liver Portal ، disease liverChronic، failure hepatic fulminant Acute hypertension
٧١	Drug induced liver disease
٧٢	biliary system :Tumours of the liver
٧٣	acute pancreatitis :Pancreatic diseases
٧٤	system biliary
٧٥	**.F Poisoning Drug**
٧٦	Drug poisoning
٧٧	Chemical poisoning

المادة	الطب العدلي
النظري	٦٠ ساعة
العملي	٦٠ ساعة
الوحدات	٦

ت	العنـــــــــــــــــــــوان
١	المقدمة تعريف الطب العدلي- العلاقة بين الطب والقانون وأهمية الطب العدلي- الغاية من تدريس الطب العدلي لطلبة كلية الطب في مرحلة دراستهم- الجامعيه الاوليه- العلاقة بين الطبيب العدلي والسلطات القضائية- اوجه الاختلاف بين طبيعة عمل الطبيب العدلي والطبيب المعالج من حيث- : أ تعدد الاطراف ذات العلاقة- ج العلنية
٢	الحالات الطبية العدلية أ الحالات الطبية العدلية في الاحياء- : فحص اثار الشدة بانواعها- تحديد الفترة الزمنية المنقضية على الحادث- تحديد ظروف الحادث وكيفية حصوله- الاعتداءات الجنسية المختلفة- فحص العنة والعقم- الحمل غير الشرعي والاجهاض الجنائي- فحص فصيلة الدم والبصمة الوراثية في نزاعات الابوة- انتفاء المسؤولية والمسؤولية الناقصة وتشمل- : *تقدير الاعمار بغض النظر عن المستمسك الرسمي- *الجنون اثناء ارتكاب الجريمة او اثناء المحاكمة- *الوقوع تحت تأثير المسكر والمخدر وقت ارتكاب الجريمة- أ الوفيات القضائية- -: -الاصابات والجروح المفضية للموت -الحروق المختلفة -الاختناق بوسائله المختلفة -الانتحار بوسائله المختلفة -التسمم بأنواعه المختلفة -الموت المفاجئ -الغرق -الوفيات تحت التخدير واثناء الاجراءات التشخيصية والعلاجية -اي وفاة تثير الشبهة والشكوك حولها وتحتاج البينة الطبية فيها

	دور و واجب الاطباء تجاه الحالات الطبية العدلية الاسعاف والعلاج- ضبط الادلة المادية- اخبار الجهات التحقيقية- التقرير الطبي العدلي وكيفية تنظيمه- تقييم شدة الاصابة- تقييم الحالة العامة الصحية للمصاب
٣	الجروح تعريف الجروح الطبي والقضائي استعراض النصوص القانونية المتعلقة بالجروح والمصطلحات القانونية- الاسس المعتمدة في تصنيف الجروح: - 1مدى تأثيرها على صحة وحياة المصاب: *بسيطة- *خطيرة- *قاتلة- 2نوع الاداة المحدثة للجرح: - *السحجات والكدمات- *الجروح الرضية- *الجروح القطعية- *الجروح الطعنية- *الجروح الوخزية- *الجروح النارية- الفحص الطبي القضائي للجروح: - *نوع الجرح- *موقع الجرح- *صفات الجرح- *تقييم شدة الاصابة) بسيطة, -خطيرة , قاتلة(*تقييم الحالة العامة- للمصاب)جيدة, متوسطة, سيئة(*تحديد نوع الاداة المحدثة -للجرح *تحديد كيفية حصول -الاصابة)جنائية, انتحارية,عارضية , مفتعلة(*تحديد حيوية الاصابة في حال -حدوث الوفاة *تحديد الرابطة السببية بين -الاصابة والوفاة وبين الاصابة والحالة المرضية اسباب الموت في الجروح: - *اصابة اعضاء مهمة لديمومة الحياة

	*الصدمة العصبية *الصدمة الدموية *النهي العصبي *النزف الدموي *الخمج *الخثرات والصمات) الدموية,الشحمية, الهوائية(*عجز الكليتين *نزف الغدة الكظرية جروح مناطق الجسم المختلفة: - *جروح فروة الراس *كسور الجمجمة الكسور المباشرة) الخطية, -الانخسافية, التفتتية(الكسور غير المباشرة)الطولي, -المستعرض, الحلقي(*اصابات الدماغ الارتجاج الدماغي- الكدمة الدماغية- تمزق الدماغ- الوذمة الدماغية- النزف الدماغي- *الانزفة السحائية النزف فوق الجافية- النزف تحت الجافية- النزف تحت العنكبوتية- *كسور العمود الفقري واصابات الحبل الشوكي *جروح الرقبة) الانتحارية,الجنائية, العرضية(*اصابات الصدر: كسور الاضلاع- إصابات الرئة- إصابات القلب- إصابات الاوعية الدموية- *إصابات البطن: إصابات الطحال- إصابات الكبد- اصابات المعدة والامعاء- اصابات الكليةوالغده الكظريه -اصابات المثانة البولية-
٤	جروح الاسلحة النارية

	*الغاية من دراسة جروح الاسلحة النارية *انواع الاسلحة النارية *صفات جروح الاسلحة النارية *تحديد مدخل ومخرج الطلق الناري *تحديد مسافة الاطلاق *تحديد اتجاه الاطلاق *تحديد نوع السلاح الناري *تحديد السبب الحقيقي للوفاة *ضبط الادلة المادية والجرمية *تحديد ظروف الحادث وكيفية الاصابة
٥	ظروف الاصابة وكيفية حصول الحادث الكيفية الجنائية الكيفية الانتحارية الكيفية العارضية الكيفية المفتعلة
٦	الموت *تعريف الموت *تشخيص الموت *اهمية تشخيص الموت *انواع الموت
٧	الحروق تعريف الحروق- انواع الحروق- الحرق الكهربائي- الحرق الكيميائي- الحرق الحراري) الحرق الجاف, الحرق الرطب(- الاغراض المتحققة من دراسة الحروق تعيين درجة الحرق- - تعيين المساحة السطحية للحرق- تعيين العامل المسبب للحرق) الحرق الناري, الحرق السلقي(- تعيين حيوية الحرق- تعيين عوامل الخطورة في الحرق- العلامات السريرية والتشريحية للحرق- اسباب الوفاة في الحروق-

	اضرار البرد (عضة الصقيع او الموت بردا -)
٨	الصدمة الكهربائية الصفات الفيزيائية للتيار الكهربائي- العلامات السريرية والتشريحية للحرق الكهربائي- اسباب والية الموت بالصعق الكهربائي- الصاعقة الجوية
٩	الاختناق تعريف الاختناق- اسباب الاختناق- مراحل الاختناق- العلامات العامة للاختناق- انواع الاختناق- كتم النفس- الخنق اليدوي- الخنق الرباطي- الشنق- الاختناق بالضغط على الصدر) الاختناق الاصابي او الرضي(- الاختناق في حيز محكم الغلق- الاختناق باستنشاق جسم غريب) الغصص او الزهق(- الغرق: انواع الغرق) الغرق الجاف , الغرق الرطب(- *علامات انغمار الجثة في الماء *الية الموت في الغرق *المشاهدات التشريحية في الغرق
١٠	اصابات) وسائط النقل (السيارات *الاهداف من دراسة حوادث السيارات *انواع حوادث السيارات) دهس ,تصادم ,انقلاب السيارات(*اصابات مراحل الدهس *اصابات السائق
١١	القضايا الجنسية *الحالات الواردة الى الطبابة العدلية وسبب ورودها *فحص غشاء البكارة *انواع الجرائم الجنسية *الاغتصاب

	*السفاح *هتك العرض *اللواط *الحمل غير الشرعي *الاجهاض الجنائي *جريمة قتل الوليد *العنة والعقم
١٢	الموت المفاجئ *تعريف الموت المفاجىء *اسباب الموت المفاجىء حسب الفئات العمرية المختلفة *احتشاء العضلة القلبية *الامراض النزفية وغير النزفية في الدماغ كالصرع والاورام والصمات *الصمة الدموية الرئوية *الربو *اسباب اخرى متفرقة *موت الرضع المفاجىء) موت المهد(*الموت اثناء العمليات الجراحية) الموت تحت التخدير العام (او اثناء الاجراءات
١٣	السموم *تعريف *العوامل المؤثرة في تاثير السم على الجسم *التسمم بالكحول *الادمان والاعتماد *التسمم بمبيدات الحشرات *التسمم بالكيروسين) النفط الابيض(*التسمم بالسياناید *التسمم بغاز احادي اوكسيد الكاربون
١٤	الاستعراف -التعرف على الاحياء -التعرف على الجثث مجهولة الهوية الحديثة

Syllabus of the MEDICAL ETHICS (Theory 30 hrs)

1- First term Objectives

Topic	Lectures
❖ **Principal Features of Medical Ethics** - ؟What's special about medicine - What's special about medical ethics? - Who decides what is ethical? - ؟Does medical ethics change - Does medical ethics differ from one country to another? - How do individuals decide what is ethical?	hours ٤
❖ **Physicians and Patients** - What's special about the physician-patient relationship? - .Respect and equal treatment - .Communication and consent - Decision-making for incompetent patients.	hours ٤
❖ **Physicians and Society** - What's special about the physician-society relationship? - .Dual loyalty - .Resource allocation - .Public health - .Global health	hours ٤

second term .٢ objectives

Topic	Lectures
❖ **Physicians and Colleagues** - .Challenges to medical authority - Relationships with physician colleagues, teachers and .Students - Reporting unsafe or unethical practices. - Relationships with other health professionals. - .Cooperation - Conflict resolution	hours ٦
❖ **Medical Research** - .Importance of medical research - .Research in medical practice - .Ethical requirements - .Ethics review committee approval - .Risks and benefits - .roles Conflict of - Honest reporting of results	hours ٦

Ministry of Higher Education and Scientific Research

UNIVERSITY OF MISAN

College Of Medicine

Syllabus of Medical College Curriculum

FIFTH YEAR

2025-2024

Subject	sGynecology and Obstetric
Theory	60 hrs
Practice	60 hrs
Units	6

No	Title
١	Menstrual cycle
٢	Amenorrhea
٣	٢Amenorrhea
٤	GT abnormality)Normal and abnormal sexual development
٥	Puberty
٦	Androgen excess
٧	cycle normal menstrualThe
٨	-Disorder of the menstrual cycle
٩	Embryology of the female reproductive system
١٠	Polycycstic ovarian syndrome
١١	bleeding menstrual Heavy
١٢	(BEO)Dysfunctional uterine bleeding
١٣	Dysmenorrhea
١٤	syndrome Premenstrual tension
١٥	Postmenopausal bleeding
١٦	Lower genital tract infection
١٧	Upper genital tract infection
١٨	Sexual transmitted infections
١٩	contraception ،Fertility control
٢٠	sterilization &Contraception
٢١	١Subfertility
٢٢	٢Subfertility
٢٣	Assisted reproductive technology
٢٤	Recurrent miscarriage -Problems in early pregnancy
٢٥	Ectopic pregnancy
٢٦	(GTD)Gestational trophoblastic disorder
٢٧	Persistent GTD
٢٨	adenomyosis& Endometriosis
٢٩	Benign diseases of the uterus and cervix
٣٠	Benign diseases of the ovary
٣١	Benign tumors of the ovary
٣٢	Malignant tumors of the ovary and fallopian tube
٣٣	Malignant tumors of the ovary and fallopian tube
٣٤	pregnancyduring tumor Ovarian
٣٥	Malignant disease of the uterus
٣٦	disease of the cervix Premalignant
٣٧	Premalignant disease of the cervix
٣٨	Malignant disease of the cervix
٣٩	Malignant disease of the cervix

٤٠	Benign disease of the vulva
٤١	Malignant disease of the vulva
٤٢	the vagina malignant disease of &Benign
٤٣	HIV -Infection in gynecology
٤٤	Tuberculosis of the genital tract
٤٥	١Urogynecology
٤٦	٢Urogynecology
٤٧	٣Urogynecology
٤٨	١ (anatomy)Pelvic organ prolapse
٤٩	٢Pelvic organ prolapse
٥٠	١ menopauseThe
٥١	٢ menopauseThe
٥٢	١Endoscopic surgery in gynecology
٥٣	٢Endoscopic surgery in gynecology
٥٤	١Gynecological operations
٥٥	٢Gynecological operations
٥٦	Postoperative complications in gynecology
٥٧	Chronic pelvic pain and back pain
٥٨	gynecologytherapy in Hormone
٥٩	Radiotherapy in gynecology
٦٠	gynecologyChemotherapy in

Subject	General surgery
Theory	١٢٠ hrs
Practice	١٢٠ hrs
Units	12

No	Title
١	**Cardiothoracic surgery lectures .A**
٢	Thoracic،Anatomy):mediastinum and ،lung ،pleura ،Chest wall ،Incisions Thoracic ،Injuries Conditions Requiring Urgent Congenital ،Injurie Dangerous But Less Compelling ،Correction Chest Wall Tumors ،Deformities
٣	،Effusion Pleural : Diseases of the Pleura and Pleural Space Tumors
٤	،Congenital Lung Lesions ،Diagnostic Modalities ،Anatomy :Lung ،Carcinoma Primary)Tumors،Infections Pulmonary Solitary) Other Lung Tumors ،Nodules Pulmonary
٥	Neoplasms ،Trauma ،Congenital Lesions :Trachea
٦	:Mediastinum Vena Superior ،Mediastinitis ،Tumors and Cysts Caval Obstruction
٧	Cardiac :surgery Cardiopulmonary heart Congenital ،bypass and diseases heart valvular) disease heart Acquired ،disease replacement surgery and Cardiac Valves ، (ischaemic heart diseases tumours cardiac and transplantation Cardiac ،pacemaker
٨	:Pericardium anatomy and ،physiology pericardial ،effusion constrictive pericarditis and pericardiocentesis
٩	**Vascular surgery lectures** .B
١٠	Investigations of vascular diseases
١١	diseases Aneurysmal
١٢	Thoracic aortic dissection
١٣	(Atherosclerosis and Vasculitis)Occlusive disease
١٤	Vascular embolism
١٥	Arteriovenous fistulas
١٦	Vascular trauma
١٧	s phenomenon and Vibration'Raynaud)Vasospastic disorders .(white finger
١٨	Cold injury
١٩	**Maxillofacial surgery lectures .C**
٢٠	Maxillofacial injuries
٢١	Developmental and dislocation mandibular ،Orthopantomography abnormalities of the teeth
٢٢	Swellings of the jaw
٢٣	Infections in Maxillofacial surgery
٢٤	cleft and lip cleft) palate and lips ،face the of anomalies Congenital (palate
٢٥	cyst dermoid ،ranula ،congenital anomalies :Oral cavity disorders

	and stomatitis
٢٦	aerodigestive and oral and cavity oral of conditions Premalignant cancers
٢٧	glossitis ،tongue tie ،fissures ،tongue ulcers :Tongue disorders and tongue tumours
٢٨	**Anesthesia .D**
٢٩	and Preparation for anaesthesia،History of anaesthesia
٣٠	Preoperative investigation
٣١	Preoperative evaluation and management
٣٢	Preoperative drugs and treatment
٣٣	General anaesthesia
٣٤	Management of the airway during anaesthesia General
٣٥	Haemostasis and blood pressure control
٣٦	Monitoring during anaesthesia
٣٧	Recovery from general anaesthesia
٣٨	and hypo)Management of blood pressure in the recovery room (hypertension
٣٩	Local anaesthesia
٤٠	acute pain management)Perioperative pain relief
٤١	post operative pain management
٤٢	reliefchronic pain
٤٣	**Orthopedic .E**
٤٤	Fractures and Joint Injuries .١
٤٥	injuries major of managementThe
٤٦	.fracturesof Principle
٤٧	.upper arm and elbow ،Injuries of the shoulder
٤٨	.Injuries of the forearm and wrist
٤٩	.Hand injuries
٥٠	.Injuries of the spine
٥١	.Injuries of the pelvis
٥٢	.Injuries of the hip and femur
٥٣	.Injuries of the knee and leg
٥٤	.Injuries of the ankle and foot
٥٥	General Orthopedics .٢
٥٦	.Orthopedic diagnosis
٥٧	.Infection
٥٨	.Rheumatic disorders
٥٩	.Crystal deposition disorders
٦٠	.Osteoarthritis
٦١	Osteonecrosis and related disorders
٦٢	surgeryOrthopedic .٣
٦٣	Osteomyelitis Acute
٦٤	Genetic disorders
٦٥	Rheumatic disorders
٦٦	Hand congenital and acquired deformities

٦٧	Neuromuscular disorders
٦٨	deformitiesCongenital foot
٦٩	Chronic Osteomyelitis
٧٠	Crystal deposition disorders
٧١	nerve injuries Peripheral
٧٢	Wrist disorders
٧٣	Metabolic and endocrine disorders
٧٤	Elbow disorders
٧٥	Hip disorders
٧٦	Bone Tumors
٧٧	Shoulder and pectoral girdle disorders
٧٨	Bone Tumors
٧٩	Hand disorders
٨٠	Cervical disorders
٨١	kyphosisScoliosis and
٨٢	Knee disorders
٨٣	prolapsedIntervertebral disc
٨٤	Orthopedic operations
٨٥	Knee joint swelling
٨٦	Hand infections
٨٧	Torticolis
٨٨	Deformities of toes
٨٩	Soft tissue tumors
٩٠	Ankylosing spondylitis
٩١	Spondylolysthesis

Subject	tologyDerma
Theory	٣٠ hrs
Practice	30 hrs
Units	3
No	Title
١	.of the skinfunction& Anatomy
٢	skin and morphological of terms general ،Histology of the skin . lesions
٣	infectionBacterial skin
٤	.(Mycoses)Fungal infections
٥	.infections Viral
٦	.Leprosyand TB
٧	.pigmentationDisorders of
٨	Disorders of sebaceous gland
٩	Disorders of sweat gland
١٠	Disorders of blood vessels
١١	.Leishmania
١٢	.Psoriasis
١٣	.pityriasis rosea،Lichen planus
١٤	.rosacea Acne، Acniform rash، Acne
١٥	.erythemas &Urticaria
١٦	.Bullous eruption
١٧	Reaction to physical agent
١٨	.atopic dermatitis ،Eczema
١٩	.its disorders &Nail
٢٠	Skin tumors
٢١	.Contaneus manifestation of internal organs and AIDS
٢٢	.Drugs eruptions
٢٣	.Genodermatoses
٢٤	١.Skin in connective tissue diseases
٢٥	٢.Skin in connective tissue diseases
٢٦	.Syphilis and other treponematosis
٢٧	.Chancoroid and other genital ulcers
٢٨	.non gonococcal urthritis&Gonococcal -Urtheral discharge
٢٩	.physical therapies&topical :Dermatological therapy
٣٠	.Systemic therapies

Subject	T.N.E
Theory	٣٠ hrs
Practice	٣٠ hrs
Units	3

No	Title
١	Surgical anatomy and applied physiology of the nose paranasal sinses.
٢	endoscopy of the nose and paranasal sinuses Radiology and.
٣	Congenital malformation and injuries of the nose and paranasal sinuses.
٤	Infection of the nose and paranasal sinuses and their management
٥	Nasal allergy and vasomotor rhinitis.
٦	Epistaxis.
٧	the nose and paranasal sinuses Tumors of.
٨	Surgical anatomy and applied physiology of pharynx and esophagus.
٩	Inflammation of the mouth and pharynx.
١٠	Ulcers
١١	Adenoid hyper atrophy-Tonsillitis and Adenoid is.
١٢	and complications indications ،Tonsillitis and Adenoidectomy.
١٣	Dyspagia-and hypopharynx Tumors of the nasopharynx.
١٤	Surgical anatomy and applied of the Larynx.
١٥	Congenital malformations and injuries of the Larynx.
١٦	Laryngitis and chronic Acute.
١٧	Hoarseness.
١٨	Stridor.
١٩	Larynx the Tumors of.
٢٠	Lump in the Neck.
٢١	labyrinth–Surgical anatomy of the ear.
٢٢	Physiology of hearing and vestibular system.
٢٣	Hearing impairment and audio logical assessment.
٢٤	Vertigo and neurological assessment
٢٥	and neoplasm of the ear trauma ،Congenital malformation.
٢٦	chronic and secretory ،Otitis media Acute.
٢٧	Complications of the middle ear infections
٢٨	Principles of middle ear surgery.
٢٩	Otosclerosis.
٣٠	s disease'Mienier.
٣١	V.P.P.B
٣٢	Vestibular neuronitis

Subject	Ophthalmology
Theory	٣٠ hrs
Practice	٣٠ hrs
Units	٣

No	Title
١	،myopia ،The optical system of the eye)Refractive errors ،accommodation ،anisometropia ،astigmatism ،hyperopia .(lenses contact ،presbyopia
٢	lid eye ،diseases lid eye allergic ،trichiasis) disorders lid Eye ،and cysts nodules benign ،zoster herpes ،simplex herpes - infection cell basal - tumors malignant ،blepharitis marginal ،stye ،chalazion ،melanoma ،carcinoma cell squamous ،carcinoma (ptosis ،entropion ،ectropion
٣	،blow out fracture ،Trauma orbital hemorrhage)Orbital eye disorders :Tumours ،cellulitis preseptal ،cellulitis orbital :Infection (eye disease thyroid ،hemangioma cavernous ،sarcoma-rhabdomyo
٤	viral ؛conjunctivitis bacterial ؛ anatomy Applied) diseases Conjunctival ؛conjunctivitis allergic ؛conjunctivitis chlamydial ؛conjunctivitis non ؛lesions conjunctival pigmented ؛degenerations conjunctival .(pigmented conjunctival tumours
٥	؛bacterial keratitis ؛anatomy corneal Applied) I diseases sclera and Corneal corneal ؛keratitis zoster herpes ؛keratitis simplex herpes ؛fungal keratitis foreign corneal ؛laceration corneal ؛abrasion .(keratoconus ؛chemical corneal injury ؛body
٦	؛tonometry ؛aqueous pathophysiology ؛Definition) Glaucoma primary ؛assessment field visual ؛assessment nerve optic ؛gonioscopy congenital ؛glaucoma angle narrow primary ؛glaucoma angle open in laser ؛therapy medical glaucoma ؛glaucoma .(glaucoma
٧	rhegmatogenous retinal ،Applied anatomy)Retinal detachment exudative retinal ،tractional retinal detachment ،detachment .(treatment of retinal detachment ،detachment
٨	،Exposure keratopathy)Corneal and sclera diseases II surgical refractive ،keratoplasty ،keratoconjunctivitis sicca .(scleritis ،episcleritis ،procedures
٩	Central retinal ،Diabetic retinopathy)Retinal vascular diseases I ،fugax Amaurosis ،occlusion vein retinal Branch ،occlusion vein .(occlusion artery retinal Central
١٠	causes of ،Pathogenesis of cataract)Crystalline lens disorders .(Ectopia lentis ،cataract congenital ،surgery cataract of types ،cataract
١١	،pigmentosa retinitis ،retinopathy Hypertensive) II diseases Retinal .(myopic maculopathy ،Age related macular degeneration

١٢	etiological ،classification clinical ،classification Anatomical) Uveitis ،diagnosis differential ،features clinical ،classification (Hyphema ،treatment،complications
١٣	anterior ،optic atrophy ،Optic neuritis)I Neuroophthalmology alcohol tobacco ،neuropathy optic compressive ،neuropathy optic ischemic .(papilledema،amblyopia
١٤	duct nasolacrimal congenital ،anatomy Applied) diseases Lacrimal .(canaliculitis ،dacryocystitis ،obstruction
١٥	nerve Abducent ،Oculomotor nerve palsy) IINeuroophthalmology .(drug induced optic neuropathy ،nerve palsy Trochlear ،palsy
١٦	،Choroidal melanoma ،Retinoblastoma)Intraocular tumors .(Metastatic carcinoma
١٧	،treatment general outlines of ،trauma Terminology of eye) trauma Eye posterior ،trauma blunt of complications segment anterior ،trauma Blunt ،trauma blunt of complications segment .(Penetrating trauma
١٨	،esotropia accommodative ،esotropia infantile ،Introduction) Squint .(hypotropia ،hypertropia ،exophoria ،exotropia
١٩	Laser tissue ،light Properties of laser)Laser in ophthalmology .(Choice of laser wavelength ،interaction

Subject	Internal medicine
Theory	9٠ hrs
Practice	٦٠ hrs
Units	٨

No	Title
١	**Nephrology .A**
٢	Functional anatomy and physiology
٣	tract disease Investigation of renal and urinary
٤	،.nephrotic syn،gn:Glomerular diseases
٥	interstitial diseases-Tubulo
٦	Acute renal failure
٧	failureChronic renal
٨	therapyRenal replacement
٩	Diseases of the lower genitourinary tract
١٠	kidneyDrugs and the
١١	involvement in systemic conditions Renal
١٢	Renal tumours
١٣	**diseaseBlood .B**
١٤	Functional anatomy and physiology
١٥	Clinical examination in blood disease
١٦	Investigation of diseases of the blood
١٧	Blood products and transfusion
١٨	antithrombotic therapy Anticoagulant and
١٩	Anaemias
٢٠	Haemoglobinopathies
٢١	Haematological malignancies
٢٢	Myeloproliferative disorders
٢٣	Bleeding disorders
٢٤	Thrombotic disorders
٢٥	**diseaseNeurological .C**
٢٦	and physiology anatomyFunctional
٢٧	of neurological disease Investigation
٢٨	Headache syndromes
٢٩	Epilepsy
٣٠	diseaseCerebrovascular
٣١	Inflammatory diseases
٣٢	Neurodegenerative diseases
٣٣	Infections of the nervous system
٣٤	Intracranial mass and raised intracranial pressure
٣٥	peripheral nerves Diseases of
٣٦	Diseases of the neuromuscular junction
٣٧	muscleDiseases of

Subject	Pediatric
Theory	90 hrs
Practice	٣٠
Units	7

No	Title
١	**Diseases of the newborn:** premature ،weight birth low ،care &the normal newborn)**:** small ،baby hypoxic ،post term baby ،disease membrane hyaline ،gestational age for ،infections neonatal ،neonatal convulsions ،encephalopathy ischemic of diseases and metabolic،(jaundice) hyperbilirubinemia neonatal ،hypocalcemia ،hypoglycemia ،mother diabetic of infant ،newborn of disease hematological hemorrhagic disease of newborn ،newborn
٢	**Genetic disorders:** single ،Chromosomal abnormalities ،inherited disorders ،basic genetics) Unusual genetic ، (Mendelian disorders)gene disorders Interaction of genetic and environmental ،mechanisms or complex ،multifactorial ،polygenic)factors ،Klinefelter syndrome ،١٨ ،١٣ ،٢١trisomy ،(disorders ،and cri du chat ،Turner syndrome (Genetic counseling
٣	**Cardiac diseases**: ، TOF ،PDA ،ASD ،VSD :diseases congenital heart) **:** (endocarditis and rheumatic fever ،failure heart ،TGA)
٤	**Respiratory :** (pneumonia ،bronchiolitis ،epiglottitis ،infectious croup) **diseases**
٥	**Atopic disorders** (atopic conditions and asthma)
٦	**mellitus Diabetes**
٧	**Gastrointestinal disorders:** Electrolytes and fluid therapy ،dehydration ،gastroenteritis) ،GIT of malformation congenital ،ORT pyloric ،fistula esophageal -trachea hirshsprung and ،stenosis (disease
٨	**Renal system disorders** nephrotic ،streptococcal glomerulonephritis acute post ،UTI) (syndrome uremic hemolytic
٩	**disorders system Nervous** t clinical ،classifications ،definition :disorders convulsions**)** seizu mal ptit ،spasm infantile ،convulsion febrile including mental ،palsy Cerebral .myoclonic seizures (retardation
١٠	**oncology and Hematology** hemoglobinop ،anemia deficiency iron including anemia) ،children in leukemia ،defect membrane di hemorrhagic willibrand disease -von ،including hemophilia (and thrombocytopenia
١١	**Poisoning** organophosphorus and iron ،lead ،kerosene ،salicylate ،measures general)

Subject	Radiology
Theory	٣٠ hrs
Practice	٣٠ hrs
Units	٣

No	Title
١	**1- Introduction:**
٢	.objectives of radiology &Aims
٣	.departmentimaging The
٤	& CT ،imaging nuclide-radio ،ultrasound ،ray-X Basic principles of .MRI
٥	،ultrasound ،ray-contraindications of x & ،limitations ،Indications .MRI &CT ،radionuclide imaging
٦	.Contrast medium used in radiology
٧	.protectionradiation & hazards ray-X
٨	**2-III ،II ،Respiratory system I**
٩	.Radiological anatomy of the lungs
١٠	.Investigations in chest diseases
١١	chest normal ofinterpretation ،procedure &technique ray-x Chest .ray-x
١٢	.ray-Diseases of the chest with normal chest x
١٣	،space filling air ،sign Silhouette) disease lung of signs Radiological ،cavitation ،shadows spherical ،collapse pulmonary .(widespread shadows &line ،hilar enlargement ،calcification
١٤	.Diseases of the pleura
١٥	.Diseases of the mediastinum
١٦	،TB Pulmonary ،abscess Lung ،pneumonia) diseases lung specific ،embolism Pulmonary ،airway the of Diseases ،Hydatid Pulmonary ،lymphoma Pulmonary ،metastases Pulmonary ،Bronchogenic carcinoma ،pneumonitis Radiation ،trauma Chest ،ARDS & RDS .(Cystic fibrosis
١٧	.Diseases of the diaphragm
١٨	**3.II ،vascular system I-The cardio**
١٩	.Investigations of the cardiovascular system
٢٠	،shape &Heart size) :Radiological evidence of heart disease .(pulmonary vessels ،evidence of pericardial disease
٢١	،Valvular heart disease ،Heart failure)disease Specific heart .(congenital heart disease ،ischemic heart disease
٢٢	.Diseases of the aorta
٢٣	.Dextrocardia
٢٤	**Plain abdomen.٤**
٢٥	.General considerations
٢٦	.Normal findings in plain abdominal films
٢٧	،Bowel dilatation) :of abnormal plain abdominal film Interpretation .(Abdominal calcifications ،Ascitis ،Gas outside bowel lumen

٢٨	**5. II ،intestinal tract I-Gastro**
٢٩	.Normal radiographic anatomy
٣٠	Types of contrast study of the GIT
٣١	.radiological terms in GIT diseases Specific
٣٢	.Diseases of the esophagus
٣٣	.Diseases of the stomach small bowel
٣٤	.Diseases of the large bowel
٣٥	**pancreas &spleen ،Liver-٦**
٣٦	investigations of hepatobiliary &Normal radiographic anatomy .system
٣٧	.biliary system &Diseases of the liver
٣٨	.Radiological investigations of the spleen
٣٩	.diseases of the pancreas &Radiological investigations
٤٠	**retroperitonium &Peritoneal cavity .٧**
٤١	-intra ،peritoneal tumors ،ascitis)Diseases of the peritoneum (peritoneal abscesses
٤٢	.peritoneum-retroInvestigations of the
٤٣	،peritoneal lymphadenopathy-retro)peritoneum -Diseases of the retro peritoneal-retro ،gland adrenal the of disease -retro ،hematoma peritoneal-retro ،aneurysm aortic ،tumors (abscesses psoas & peritoneal
٤٤	**II ،Urinary tract I.٨**
٤٥	Investigations of the urinary tract
٤٦	.Nephrocalcinosis &Urinary calculi
٤٧	.obstruction Urinary tract
٤٨	،Angiomyolipioma ،renal cyst simple)masses Renal paranchymal .(Renal cell carcinoma
٤٩	.Urothelial tumor
٥٠	& Renal ،Emphysematous pyelonephritis &acute)Infection Chronic ،Renal TB ،Pyonephrosis ،perinephric abscess .(pyelonephritis
٥١	.ureteric reflux-Vesico
٥٢	.Renal trauma
٥٣	.failure Chronic renal
٥٤	.urtinary tract Congenital variation of the
٥٥	diseases of the ،diseases of the prostrate ،Diseases of the UB .Urethra
٥٦	.testes &Diseases of the Sacrotum
٥٧	**Female genital tract.٩**
٥٨	.normal radiographic anatomy &Investigations
٥٩	،masses ovarian) tract genital female the of diseases Specific .(endometriosis ،disease inflammatory pelvic ،masses uterine
٦٠	.Ultrasound appearance of normal uterine pregnancy
٦١	.Ectopic pregnancy
٦٢	**imaging Breast.١٠**

٦٣	.breastInvestigations of
٦٤	.anatomy Normal radiographic
٦٥	breast ،fibroadenoma ،cyst simple) breast the of diseases Specific .(carcinoma
٦٦	**11.III ،II ،Radiology of bone diseases I**
٦٧	Plain radiographic Signs of bone diseases
٦٨	.Classification of bone diseases
٦٩	.solitary bone lesion Radiological assessment of
٧٠	Ewing ،Chondrosarcoma ،Osteosarcoma) :tumors bone Malignant .(Giant cell tumor ،s sarcoma
٧١	.like lesion tumor & tumorsBenign
٧٢	.(TB ،Osteomeylitis)Bone infection
٧٣	.(myeloma multiple & metastases bone) lesions bone focal Multiple
٧٤	.Generalized decrease in bone density
٧٥	.Generalized increase in bone density
٧٦	.Acromegally
٧٧	.Radiology of bone trauma
٧٨	**Radiology of joint diseases.١٢**
٧٩	.of joint diseasestechniques Imaging
٨٠	diseases Plain radiographic Signs of joint
٨١	.(arthritispyogenic ،osteoarthritis ،rheumatoid arthritis)Arthritis
٨٢	.Avascular necrosis
٨٣	**13.II ،Radiology of the spine I**
٨٤	Imaging investigations of the spine
٨٥	.Anatomical review
٨٦	.abnormality Plain radiographic Signs of spinal
٨٧	& lymphoma ،Metastases) :Specific diseases of the spine degenerative disc ،spinal trauma ،spinal infection ،Myeloma Spinal ،spondylitis Ankylosing ،stenosis Spinal ،disease .(compression cord spinal ،dysraphysim
٨٨	**II ،brain I &Skull .١٤**
٨٩	brain &Imaging investigations of the skull
٩٠	.brain &Normal radiographic anatomy of the skull
٩١	multiple ،infection ،stroke ،brain tumors) :Specific brain disorders .(sclerosis
٩٢	.Radiology of head injury
٩٣	**15.II ،neck I &orbit ،Sinuses**
٩٤	.nasal sinuses-diseases of the para &Imaging techniques
٩٥	.diseases of the orbit &Imaging techniques
٩٦	.diseases of the salivary glands &Imaging techniques
٩٩	.gland thyroid-para & thyroid the of diseases & techniques Imaging
١٠٠	**Angiography .١٦**
١٠١	.complications of arteriograpy &principles ،indications ،Definition
١٠٢	.Indications of venography
١٠٣	venous-arterio ،Atheroma ،Aneurysms) disorders vascular Specific

	،hyperplasia Fibromuscular &Stenosis ،malformation &fistula .(vascular Tumors ،Embolism &Thrombosis
١٠٤	Interventional radiology
١٠٥	.Vascular interventional procetures
١٠٦	.biopsyPercutaneous needle
١٠٧	.fluid collections &Percutaneous drainage of abscess
١٠٨	.obstruction Interventions in urinary
١٠٩	.Interventions in biliary obstruction

Subject	**Psychiatry**
Theory	**60 hrs**
Practice	**٣٠ hrs**
Units	**5**
No	Title
١	Classification of Mental &Diagnosis،History of Psychiatry Disorders
٢	Doctor Relationship-The patient
٣	(symptomatology)Psychopathology
٤	Schizophrenia Spectrum and Other Psychotic Disorders
٥	Depressive Disorders
٦	Related Disorders &Bipolar
٧	Anxiety Disorders
٨	Compulsive and Related Disorders-Obsessive
٩	Related Disorders-and Stressor -Trauma
١٠	and Related Disorders Somatic Symptom
١١	Dissociative Disorders
١٢	Eating Disorders &Feeding
١٣	Wake Disorders-Sleep
١٤	Related and Addictive Disorders-Substance
١٥	and Conduct Disorders ،Control-Impulse ،Disruptive
١٦	DisordersNeurodevelopmental
١٧	Dysfunction Sexual
١٨	Paraphilic Disorders
١٩	Gender Dysphoria
٢٠	Personality Disorders
٢١	of Medicine AspectsPsychiatric

Ministry of Higher Education and Scientific Research

UNIVERSITY OF MISAN

College Of Medicine

Syllabus of Medical College Curriculum

SIXTH YEAR

٢٠٢٤_٢٠٢٥

Number of weeks		Subject
Units	**Weeks**	
12	**12**	**Internal Medicine**
12	**12**	**Surgery**
10	**10**	**Gynecology & obestetrics**
10	**10**	**Pediatrics**
44	**44**	**TOTAL WEEKS**