Ministry of Higher Education
And Scientific Research
University of Basra

College of Pharmacy
Department of clinical
Laboratory Science
Stage: ١st **year**

Course Syllabus

Name of the First Teacher of the Course: Kassim Fawzi Abdulkareem

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Name of the Second Teacher of the Course:

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Degree:

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Name of the Third Teacher of the Course:

Academic Rank:

Degree:

Email:

Course Title	Human Anatomy				
Academic System	Semester 2nd		Academic		
Course Objective	To study the position of different organs in the thoracic and abdominal cavity including: digestive system, circulatory system, lymphatic system, respiratory system, urinary system, reproductive system, endocrine system ,nervous system and skin.				
Textbooks	Clinical Anatomy by Regions, by(Richard S. Snell 8th ed. 2010).				
Reference Books	❖ ❖				
Course Assessment for Semester System (100%)	Theoretical Content Exam	Laboratory Work	Quizzes	Project	End Semester Examination
	%20	25%	5%	---	%50
Course Assessment for Annual System (100%)	First Term	Midterm Exam	Second Term	Lab Work	Final Examination
Additional Information					

Weekly Schedule

Week	Theoretical Content	Laboratory Work	Notes
1	Circulatory system location of vascular system.	Circulatory system location of vascular system	
2	Circulatory system location of lymphatic system	Circulatory system location of lymphatic system	
3	Lymphoid tissue (thymus, spleen & lymph nodes)	Lymphoid Tissue	
4	Lymphoid nodule (MALT & tonsil)	Lymphoid nodule (MALT & tonsil)	
5	Nervous System	Nervous System	
6	Urinary system	Urinary system	
7	Digestive System	Digestive System	
8	Glands associated with digestive system	Glands associated with digestive system	
9	Endocrine system	Endocrine system	
10	Male reproductive system	Male reproductive system	
11	Female reproductive system	Female reproductive system	

Ministry of Higher Education
And Scientific Research
University of Basra

College of Pharmacy
Department: Clinical
Laboratories sciences
Stage: ٣rd

Course Syllabus

Name of the First Teacher of the Course: Bassim Jasim Hamid

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Name of the Second Teacher of the Course: Usama Hamid Ramadhan

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Name of the Third Teacher of the Course:

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Degree:

Email:

Course Title	Biochemistry 1				
Academic System	Semester		Academic		
Course Objective	To integrate key concepts describing the traditional core topics of Biochemistry: structure and metabolism. At the end of the semester the students should be able to understand the chemical structure, and function of all biomolecules present in the living organisms.				
Textbooks	❖ Harper's Illustrated Biochemistry, Twenty-Sixth Edition ❖ Lab manual practical biochemistry				
Reference Books	❖ ❖ ❖ ❖ ❖				
Course Assessment for Semester System (100%)	Theoretical Content Exam	Laboratory Work	Quizzes	Project	End Semester Examination
	٢٥	١٠	١٠	٥	٥٠
Course Assessment for Annual System (100%)	First Term	Midterm Exam	Second Term	Lab Work	Final Examination

Additional Information	

Weekly Schedule

Week	Theoretical Content	Laboratory Work	Notes
1	Introduction to the macromolecules biochemistry: Definitions and terms; proteins, enzymes, DNA.	Effect of acids on carbohydrates	
١	Amino acids: Structures of A.A (table of standard A.A abbreviation and side chain); Classification, properties, isomerism.	Molish test, bials test seliwanoff test.	
٢	Amino acids: Chemical reactions, Zwitter ions, titration curve calculating isoelectric point values. Examples and questions. Non standards A.A: Structures, existence and clinical value.	Reducing properties, Benedicts test, Fehling test, Barfoed test.	
٣	Peptides: Peptide bond, resonance forms, isomers, physical properties and chemical reactions. Essential poly peptides in human body, structures, roles and clinical values.	Iodine test, Ozasone test.	
٤	Proteins: Structure and conformations of proteins, Primary structure, Secondary structure (α helix, β sheet), tertiary structure, quaternary structure. Classification, synthesis, cellular functions (Enzymes, cell signaling, and ligand transport, structural proteins), protein in nutrition.	Unknown carbohydrates sample.	
5	Denaturation of proteins and protein sequencing: Determining A.A composition,	Color reaction of proteins, Biuret test,	

	N- terminal A.A analysis, C-terminal A.A analysis, Edman degradation, prediction protein sequence from DNA/ RNA sequences. Methods of protein study: Protein purification, cellular localization, proteomics and bioinformatics, structure predication and simulation.	ninhydrin test.	
6	Carbohydrates: Chemistry and classification, biomedical importance, classification of CHO, Stereochemistry of monosaccharides, metabolism of CHO; Physiologically important monosaccharides, glycosides, disaccharides, polysaccharides.	Millons test unoxidized sulfur test.	
٧	Lipids: Introduction, classification of lipids, fatty acids (F.A), nomenclature of F.A, saturated F.A, unsaturated F.A, physical and physiological properties of F.A, metabolism of lipids. Phospholipids, lipid peroxidation and antioxidants, separation and identification of lipids, amphipathic lipids.	Solubility of proteins	
٨	Enzymes: Structures and mechanism, nomenclature, classification, mechanisms of catalysis, thermodynamics, specificity, lock and key model, induced fit model, transition state stabilization, dynamics and function, allosteric modulation. Biological function, cofactors, coenzymes, involvement in disease.	Unknown sample of proteins.	
٩	Kinetics: General principles, factors effecting enzyme rates (substrate conc., pH, temperature, etc), single-substrate reaction (Michaelis-Menten kinetics), kinetic constants. Examples of kinetic questions and solutions.	Solubility of lipids	
١٠	Enzyme inhibition: Reversible inhibitors, competitive and non competitive inhibition, mixed-type inhibition, Irreversible inhibition.	Acrolin test, Soap,	

	Inhibition kinetics and binding affinities (*ki*), questions and solutions.		
١٠	Control of activity and uses of inactivators; multi-substrate reactions, ternary-complex mechanisms, ping-pong mechanisms, non-Michaelis-Menten kinetics, pre-steady-state kinetics, chemical mechanisms.	Saponification number	
١١	Nucleic Acid: Chemical structure, nucleic acid components, nucleic acid bases, nucleotides and deoxynucleotides (Properties, base pairing, sense and antisense, super-coiling, alternative structures, quadruple structures.	Iodine test for lipids	
١٢	Biological functions of DNA: Genes and genomes, transcription and translation, replication.	enzymes	
١٣	Biochemistry of extracellular and intracellular communication: Plasma membrane structure and function; Biomedical importance, membrane proteins associated with lipid bilayer, membranes protein composition, dynamic structures of membranes, a symmetric structures of membranes.	amylase	
١٣	Artificial membranes model, the fluid mosaic model, membrane selectivity, physiological functions of plasma membranes.	Effects of pH on enzyme	
١٤	Biochemistry of the endocrine system: Classification of hormones, biomedical importance, the target cell concept and hormone receptors, biochemistry of hormone signal transduction.	Effects of pH on enzyme	
١٥	Special topics: Nutrition, digestion, and absorption. Biomedical importance, digestion and absorption of carbohydrates, lipids, proteins, vitamins and minerals; energy	Effects of heat on enzyme	

	balance. Biochemistry of hemostasis and clot formation.		

Ministry of Higher Education
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University of Basra

College of Pharmacy
Department: Clinical Laboratories sciences
Stage: ٣rd

Course Syllabus

Name of the First Teacher of the Course: Bassim Jasim Hamid

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Degree: Ph. D

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Name of the Second Teacher of the Course: Usama Hamid Ramadhan

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Degree: Ph. D

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Name of the Third Teacher of the Course:

Academic Rank:

Degree:

Email:

Course Title	Biochemistry 2				
Academic System	Semester √	Academic			
Course Objective	To provide a condensed curriculum of strong basic biochemistry and molecular biology. At the end of the semester the students should be able to understand all metabolic processes occurring in the living cell.				
Textbooks	❖ Harper's Illustrated Biochemistry, Twenty-Sixth Edition ❖ Lab manual practical biochemistry				
Reference Books	❖ ❖ ❖ ❖ ❖				
Course Assessment for Semester System	Theoretical Content Exam	Laboratory Work	Quizzes	Project	End Semester Examination

(100%)	٢٥	١٠	١٠	٥	٥٠
Course Assessment for Annual System (100%)	First Term	Midterm Exam	Second Term	Lab Work	Final Examination
Additional Information					

Weekly Schedule

Week	Theoretical Content	Laboratory Work	Notes
1	Bioenergetics.	Urine examination	
١	Biologic oxidation.	Protein in urine	
٢	The respiratory chain and oxidative phosphorylation.	Sugar in urine	
٢	Over view of metabolism.	Ketone bodies	
٣	Citric acid Cycle.	Bile salts in urine	
4	Glycolysis.	Bilirubin in urine	
5	Metabolism of glycogen.	Evaluation of unknown urine sample	
٦	Gluconeogenesis.	Measurement of glucose in CSF	
٧	Pentose phosphate pathway and other pathways of hexose metabolism.	Measurement of protein in CSF	
٨	Biosynthesis of fatty acids.	Serum calcium	
٨	Oxidation of fatty acids.	Blood phosphorus	
٩	Metabolism of acylglycerol and sphingolipids.	Serum total protein	
١٠	Lipid transport and storage.	Blood urea	

١٠	Cholesterol synthesis, transport, and excretion.	Serum uric acid	
١١	Biosynthesis of the Nutritionally Nonessential Amino Acids.	Serum ascorbic acid	
١٢	Catabolism of Proteins & of Amino Acid Nitrogen	Gastric juice analysis, HCl concentration	
١٣	Catabolism of the Carbon Skeletons of Amino Acids.	Gastric juice analysis, Free acid, totat acid content	
١٤	Conversion of Amino Acids to Specialized Products.	Blood Glucose	
١٥	Porphyrins & Bile Pigments	Unknown sample	

Ministry of Higher Education
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University of Basra

College of Pharmacy
Department :Clinical laboratory sciences
Stage: Fifth

Course Syllabus

Name of the First Teacher of the Course **:Falah Hassan Shari**

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ɔnd Teacher of the Course: **Qutaiba Abdul kareem Qasim**

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Name of the Third Teacher of the Course:

Academic Rank:

Degree:

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Course Title		
Academic System	Semester	Academic
Course Objective	**Lecture title** **Objectives**: To exhibit knowledge of human body chemistry levels under healthy and abnormal conditions. At the end of the semester the students should be familiar with the basic and advanced information in clinical laboratory chemistry and how it relates to patient health and care Disorders of Carbohydrates metabolism, Hyperglycemia & Diabetes mellitus, Hypoglycemia., Disorders of lipid metabolism, Liver Function Tests, Kidney Function Tests, Diagnostic enzymology., Hypothalamus & pituitary endocrinology, disorders of anterior pituitary hormones, disorders of adrenal gland, hypopituitarism, Reproductive system, disorders of gonadal function in males & females, biochemical assessment during pregnancy. Tumor markers, Drug interaction with laboratory Tests, Disorders of calcium metabolism and Acid-Base Disorders	
Textbooks	Clinical biochemistry and metabolic medicin(martin Acrook 8th ed) Clinical chemistry theory,analysis and correlation(Lawrence A KAPLAN ,PhD,DABCC,FACB)	
Reference Books	Tietz text book of clinical chemistry and molecular diagnosis ❖ Biochemistry (4th ed) by lippincotts illustrated reviews ❖ Clinical chemistry(4th ed) principle, procedure,correlation by ❖ Michael L. bISHOP ❖ ❖	

Course Assessment for Semester System (100%)	Theoretical Content Exam	Laboratory Work	Quizzez	Project	End Semester Examination
	20%	25%	3%	2%	50%
Course Assessment for Annual System (100%)	First Term	Midterm Exam	Second Term	Lab Work	Final Examination
Additional Information					

Weekly Schedule

Week	Theoretical Content	Laboratory Work	Notes
1	**Lecture title** Disorders of Carbohydrates metabolism, Hyperglycemia & Diabetes mellitus, Hypoglycemia.		3h
2	Disorders of lipid metabolism.		2h
3	Liver Function Tests.		4h
4	Kidney Function Tests.		4h
5	Diagnostic enzymology.		4h
6	Hypothalamus & pituitary endocrinology, disorders of anterior pituitary hormones, disorders of adrenal gland, hypopituitrism.		8h
7	Reproductive system, disorders of gonadal function in males & females, biochemical assessment during pregnancy.		5h
8	Tumor markers.		4h
9	Drug interaction with laboratory Tests.		2h

10	Disorders of calcium metabolism		3h
11	Acid- Base Disorders.		4h

Ministry of Higher Education
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University of Basra

College of Pharmacy
Department:Clinica labrotory sciences
Stage: ١st stage

Course Syllabus

Name of the First Teacher of the Course: Kawther Tuma Khalaf

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Name of the Third Teacher of the Course: Rana Dawood Selman

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Course Title	Human biology				
Academic System	Semester		Academic		
Course Objective	Study histological structure of the human body.It is meant primarily to give the student a foundation for advanced study in health care, physiology, pathology and other fields related to health and fitness. At the end of the course the student should be familiar with the histological description of the human body.				
Textbooks	**Basic Histology by Luiz Carlos 11th ed. 2005**				
Reference Books					
Course Assessment for Semester System	Theoretical Content Exam	Laboratory Work	Quizzes	Project	End Semester Examination

(100%)	20%	25%	5%	---	50%
Course Assessment for Annual System (100%)	First Term	Midterm Exam	Second Term	Lab Work	Final Examination
Additional Information					

Weekly Schedule

Week	Theoretical Content	Laboratory Work	Hours
1	Circulatory system: structure of the vascular system(heart wall,arteries, veins& capillaries)	Circulatory system (artery, vein)	2,2
2	Circulatory system: structure of the lymphatic system (lamphatic capillary)	Lymphatic system(thymus gland & spleen)	1,2
3	Lymphoid tissue	Lymphatic system (lymph node & islet of langerhans)	1,2
4	Lymphoid nodes	Nervous system(cerebral & cerebrum cortex)	1,2
5	Nervous system	Nervous system(spinal cord)	3,2
6	Respiratory system	Respiratory system(tracea, lung)	3,2
7	Digestive system: digestive steps	Digestive system(tongue,esophagus & stomach)	3,2
8	Digestive system: glands	Digestive system(small& large intestine)	1,2

9	Endocrine system: general structure of pituitary gland	Digestive system(liver& panctreas)	2,2
10	Endocrine system: general structure of adenral, thyroid, parathyroid, islets of langerhans & pineal gland)	Endocrine system (pituitary & thyroid)	2,2
11	Male reproductive systm	Endocrine system(adrenal & thyroid)	2,2
12	Male reproductive system	Male reproductive system	1,2
13	Female reproductive system	Female reproductive system	3,2
14	Urinary system	Kidney & bladder	3,2
15	Skin	Thick & thin skin	2,2

Ministry of Higher Education
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University of Basra

College of Pharmacy
Department:Clinica labrotory sciences
Stage: ١st stage

Course Syllabus

Name of the First Teacher of the Course: Kawther Tuma Khalaf

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Course Title	Human biology				
Academic System	Semester		Academic		
Course Objective	Study of the human body composition, tube of cells structure, tubes of tissues, Also explain details the different body systems and human genetics.				
Textbooks	**-Human Biology, Johnks and Lnglis; latest edition.**				
Reference Books	-Human Biology, Daniel D. Chiras; 6th edition. -Human Biology, Daniel D. Chiras; 7th edition. -Human Biology, Sylvia S. Mader; 10 th edition.				
Course Assessment for Semester System (100%)	Theoretical Content Exam	Laboratory Work	Quizzes	Project	End Semester Examination
	20%	25%	5%	---	50%
Course Assessment for Annual System (100%)	First Term	Midterm Exam	Second Term	Lab Work	Final Examination

Additional Information	

Weekly Schedule

Week	Theoretical Content	Laboratory Work	Notes
1	Introduction of biology	Biology	5 hr
2	Cell tissue	Cell	5 hr
3	Types of tissues	Tissues, bone and cartilages	5 hr
4	Nervous system(centeral and peripheral)	Nervous system	8 hr
5	Digestive system (general structure)	Nutrition	6 hr
6	Digestive system(Glands associated with DS (salivary gland, pancreas, liver and gall bladder)	Digestive system (mout,esophagus, stomach and intestine)	4 hrs
7	Respiratory system	Excretory system and respiration	4 hr
8	Urinary system	Human genetics (chromosomes and semi-lethal genes)	4 hr
9	Human genetic (chromosomes)	Skin	3 hrs
١١	Circulatory system(structure of vascular system, lymphatic system)	Circulatory system	5 hr
١٢	Reproductive system	Immunity (inflammation, immunity and the blood	5 hr

		disease)	
١٣	skin		2 hrs
14	Immunity		2 hrs

Ministry of Higher Education
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University of Basra

College of Pharmacy
Department: :Clinical laboratory sciences
Stage: fifth

Course Syllabus

Name of the First Teacher of the Course: **Falah Hassan Shari**

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Course Title		
Academic System	Semester	Academic
Course Objective	Objectives: It provides general information about the biochemical basis of disease and about the principles of laboratory diagnosis; it supplies specific guidance on the **clinical value of chemical investigations, indicating their range of application and** **limitations as well as relating results of laboratory tests to the process of clinical** **diagnosis and management as these might applied to individual patients.**	
Textbooks	Clinical biochemistry by Alllan gaw ❖ Clinicak chemistry willim J Marshall ❖ ❖ ❖ ❖	
Reference Books	❖ ❖ ❖ ❖ ❖	

Course Assessment for Semester System (100%)	Theoretical Content Exam	Laboratory Work	Quizzez	Project	End Semester Examination
	20%	15%	10%	5%	50%
Course Assessment for Annual System (100%)	First Term	Midterm Exam	Second Term	Lab Work	Final Examination
Additional Information					

Weekly Schedule

Week	Theoretical Content	Laboratory Work	Notes
1	Diagnostic test basics, collecting &transporting specimens, venipuncture, urine specimen, stool specimen.		4h
2	Biochemical tests: Fasting blood glucose, Post-prandial glucose, Oral glucose tolerance test.		4h
3	Blood urea, Blood creatinine, Creatinine clearance, Uric acid.		4h
4	Cholesterol, Lipoproteins, triglycerides.		4h
5	Blood proteins, Bilirubin.		4h
6	Calcium, Inorganic phosphate, Serum chloride		4h
7	Alkaline phosphatase, Acid phosphatase, Alanine amiotransferase, Aspartate aminotransferase, Lactate dehydrogenase, Creatine phosphokinase.		4h
8	Serological tests: VDRL, ASO- Titer, Hepatitis tests.		4h
9	C-reactive protein test, Rheumatic factor test, Rosebengal test, Typhoid fever test(Widal test), Pregnancy Test.		4h

10	General urine examination, urine specimen collection.		4h
11	Hematological tests: RBC count, Hb, PCV, RBC indices, WBC count, Platelets count.		4h
12	Blood typing, Coombs test, Bleeding time, ESR.		4h
13	Microbiological tests: culture and sensitivity tests, Staining methods		4h
14	Culture media, Enriched culture media for general use		4h
15	Tests for identification of bacteria, Disk diffusion tests of sensitivity to antibiotics, Choice of drugs for disk test, bacterial disease and their laboratory diagnosis.		4h

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College of Pharmacy
Department: Clinical Laboratory Science
Stage:

Course Syllabus

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Name of the Second Teacher of the Course: Abdulelah Abdulhussein Suhain

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Name of the Fourth Teacher of the Course: Eman Tariq Ali

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Course Title	Microbiology	
Academic System	Semester	Academic
Course Objective	Provide a basic understanding of the morphology, anatomy, physiology and genetics of bacteria in addition, the methods of handling, visualizing, characterizing and identifying of bacterial disease.	
Textbooks	Medical microbiology, seventh edition E. Jawetz, J. L. ❖ Merlink, E.A.Adel 1987 ❖	
Reference Books	Principles of microbiology by Roland M. ❖ ❖ ❖ ❖	

Course Assessment for Semester System (100%)	Theoretical Content Exam	Laboratory Work	Quizzes	Project	End Semester Examination
	25	25	-	-	50
Course Assessment for Annual System (100%)	First Term	Midterm Exam	Second Term	Lab Work	Final Examination
Additional Information					

Weekly Schedule

Week	Theoretical Content	Laboratory Work	Notes
1	Importance ofmicrobiology, History of microbiology	Orientation to the laboratory. Rules of conduct and general safety. Microscopic techniques. Bright-field light microscope.	
2	Anatomy of bacteria: surface appendage, capsule, cell wall of Gram positive and Gram negative, cytoplasmic membrane	Examination of stained microorganisms, smear preparation and simple staining, Gram staining	
3	Bacterial physiology, physical and chemical growth determinate, growth and growth curves, bacterial reproduction	The hanging drop slide and bacterial motility, acid –fast staining procedure	
4	Genetics: Definition, genetic, element, mutation (spontaneous,	Bacterial spores and endospores staining,	

	gene transfer, transformation, conjugation and gene transduction)	microbiological culture media and sterilization, methods of inoculation and isolation of pure culture	
5	Recombinant DNA biotechnology	Action of dyes and antibiotics, enzymes assays for some specific microbial enzymes	
6	Sporulation and germination	Assay for specific metabolic activities, acid and gas production from, carbohydrate fermentation, triple sugar iron test, IMVIC tests	
7	Sterilization (chemical and physical methods)	Systemic bacteriology. Staphylococci spp.	
8	Chemotherapy	*Streptococci* species	
9	Morphology of bacteria, staining and classification	*Salmonella* species	
10	Staphylococci species, *Streptococcus pyogenes, Streptococcus pneumoniae*	*Shigella* species	
11	Aerobic spore forming bacteria *Bacillus* species (*B. anthracis, B.subtilis, B.cereus*)	*Pseudomonas* species	
12	*Clostridium perfringens, Clostridium tetani, Clostridium botulinum*	*Proteus* species	
13	*Corynebacterium diphtheriae*	*Escherichia coli*	
14	*Propionibacterium acnes, Listeria*	*Klebsiella* species	

15	*Mycobacterium tuberculosis, M.leprae*	*Candida albicans*	
16	*Chlamydiae,* Actinomycetes		
17	Identification and classification of Gram negative bacteria		
18	Enterobacteriaceae: *E.coli, Klebsiella spp., Citrobacter, Serratia , Hafmia, Enterobacter*		
19	*Shigella spp., Salmonella spp., Proteus spp., Pseudomonas spp.*		
20	*Vibrio cholera, Brucella spp., Haemophilus spp., Campylobacter spp.*		
21	*Helicobacter spp., Bordetella pertussis, Treponema pallidum (spirochates), Yersinia pestis, Pasteruella multocida*		

Ministry of Higher Education
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College of Pharmacy
Department:
Stage:

Course Syllabus

Name of the First Teacher of the Course: Dr. Zuhair Ghalib Shaheen

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Name of the Third Teacher of the Course:

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Course Title	Public Health				
Academic System	Semester		Academic		
Course Objective	-introduction and classification of the human Parasitology, intestinal protozoa, Amoeba, Flagellate of digestive tract, Flagellatae of genital organs, Flagellatae of blood and tissue, Trypanosoma gambiens, Malaria, plasmosoma, Toxoplasma, Hymenolepis, Trematoda, Ascaris, Methods of diagnosis of parasites. Virology, introduction, virus and bacteria, classification of Viruses, Replication, Chemotherapy, Herps, Orthomyxo, Paramyxo, Retro, Hepto, Oncogenic Virus.				
Textbooks	Practical medical virology and Parasitology -				
Reference Books	Medical Parasitology, 1ed, 2007 ❖ ❖				
Course Assessment for Semester System (100%)	Theoretical Content Exam	Laboratory Work	Quizzes	Project	End Semester Examination
	25%	25%	5%	---	50%
Course Assessment for Annual System (100%)	First Term	Midterm Exam	Second Term	Lab Work	Final Examination

Additional Information	

Weekly Schedule

Week	Theoretical Content	Laboratory Work	Notes
1	introduction		1 h
2	intestinal protozoa		1h
3	Amoeba		1h
4	Flagellate of digestive tract		2h
5	Flagellatae of genital organs		1h
6	Flagellatae of blood and tissue,		2h
7	Trypanosoma		1h
8	Malaria,		2h
9	plasmosoma,		2h
10	Toxoplasma,		1h
11	Hymenolepis,		1h
12	Trematoda		1h
13	Virology Introduction		1h
14	virus and bacteria		1h
	classification of Viruses		1h
	Replication of Viruses		1h

	Chemotherapy virus		1h
	Herps virus		1h
	Orthomyxo virus		1h
	Paramyxo virus		1h
	Retro virus		1h
	Hepto virus		1h
	Oncogenic Virus		1h

Ministry of Higher Education
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College of Pharmacy
Department: Clinical
Laboratory Science
Stage: ٣rd **year**

Course Syllabus

Name of the First Teacher of the Course: Kassim Fawzi Abdulkareem

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Name of the Second Teacher of the Course:

Academic Rank:

Degree:

Email:

Name of the Third Teacher of the Course:

Academic Rank:

Degree:

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Course Title	Pathophysiology				
Academic System	Semester		Academic		
Course Objective	To describe the basic concepts of pathophysiology at the cellular level related to injury, the self-defense mechanism , mutation and cellular proliferation. Outline basic pathological factors that influence disease process . Describe the impact and abnormal functions upon organs associated with the disease process of targeted body systems. Describe the clinical manifestations associated with diseased organs.				
Textbooks	Essentials in Pathophysiology by: Carol Mattson Porth 2nd Ed.				
Reference Books	Pathological Basis of Disease by Robbin. 8th Ed. ❖ ❖				
Course Assessment for Semester System (100%)	Theoretical Content Exam	Laboratory Work	Quizzes	Project	End Semester Examination
	%20	25%	5%	---	%50
Course Assessment for Annual System (100%)	First Term	Midterm Exam	Second Term	Lab Work	Final Examination
Additional Information					

Weekly Schedule

Week	Theoretical Content	Laboratory Work	Notes
1	Cell injury and tissue response	Introduction and slide preparation	
2	Disorders of electrolyte and acid base balance	Cell injury and degenerations	
3	Disease of cardiovascular system	Growth disturbance	
4	Disorders of respiratory system	inflammation	
5	Disorders of renal system	Thrombosis	
6	Disorders of GI and hepatobiliary system	Neoplasia	
7	Disorders of thyroid and adrenal function	Disorders of respiratory system	
8	Neoplasia	Disorders of cardiovascular system	
9	disorders of reproductive system	Disorders of renal system	
10	Diabetes mellitus and metabolic disorders	Disorders of GIT	
11	Immunopathology	Disorders of endocrine system	
12	Tuberculosis	Liver disorders	

Ministry of Higher Education
And Scientific Research
University of Basra

College of Pharmacy
Department:
Stage:

Course Syllabus

Name of the First Teacher of the Course: Hussein Katai Abdul-Sada

Academic Rank: Teacher

Degree: Ph.D

Email: noorhus2013@yahoo.com

Name of the Second Teacher of the Course:

Academic Rank:

Degree:

Email:

Name of the Third Teacher of the Course:

Academic Rank:

Degree:

Email:

Course Title	Public Health				
Academic System	Semester	Academic			
Course Objective	Health and health meaning, health, CHIP of disease, health care evaluation, Cardiovascular disease, skin diseases, Oncological diseases, Respiratory diseases, Sexual transmission diseases, immunization, home and personal hygiene.				
Textbooks	- **Public Health Textbook/ online resource** - **Oxford Text book of Public Health, (4TH ed)** ❖ ❖				
Reference Books	Public health and diseases, William and Barrein, 2nd edition, 2005. ❖ ❖ ❖ ❖ ❖				
Course Assessment for Semester System (100%)	Theoretical Content Exam	Laboratory Work	Quizzes	Project	End Semester Examination
	25%	---	5%	---	70%
Course Assessment for	First Term	Midterm Exam	Second Term	Lab Work	Final Examination

Annual System (100%)					
Additional Information					

Weekly Schedule

Week	Theoretical Content	Laboratory Work	Notes
1	Health and health meaning	----	3 h
2	Health Care Evaluation		1h
3	Public Health of Cardiovascular disease		2h
4	Public Health of Skin disease		2h
5	Public Health of Oncological disease		1h
6	Public Health of Respiratory Disease		2h
7	Public Health of Sexual diseases		1h
8	Immunization and Vaccination		2h
9	Personal Hygiene		2h