

Course Description Form

1. Course Name: clinical chimestry	
2. Course Code:	
3. Semester / Year:1+2-3 2023/2024	
4. Description Preparation Date:2023-2024	
5. Available Attendance Forms: Daily attendance	
6. Number of Credit Hours (Total) / Number of Units 2 Hours (Total) 30 week	
7. Course administrator's name (mention all, if more than one name)	
me: Ameer Hassan Idan mail: ameer.alzamely@gmail.com:	
Course Objectives .8	
Course Objectives	● Definition of theoretical clinical chemistry ● Identifying diseases related to theoretical clinical chemistry and how to diagnose them. ● Understanding the mechanism of disease development, its causes, and methods of clinical diagnosis ● Understanding the external influences that lead to the emergence of diseases ● The theoretical and practical application of disease diagnosis methods on modern devices available such as the spectrophotometer, centrifuge, the water bath, and the ELISA device ● Analyzing the results achieved by students and comparing them with standard results
9. Teaching and Learning Strategies	
Strategy	1. Education Strategy Collaborative Concept Planning 2- Brainstorming education strategy. 3. Education Strategy Notes Series 4- Presentation, training, discussion research and reports
10. Course Structure	

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2	Knowledge	WATER HOMEOSTASIS	Use whiteboard and display	Daily exam and oral questions
2	2	Knowledge	WATER HOMEOSTASIS	Use whiteboard and display	Daily exam and oral questions
3	2	Knowledge	MINERAL METABOLISM: - Electrolytes: Na, K, Cl, Mg, Ca - Trace elements: Fe, Cu, Zn, Mn, F	Use whiteboard and display	Daily exam and oral questions
4	2	Knowledge	MINERAL METABOLISM: - Trace elements: Fe, Cu, Zn, Mn, F	Use whiteboard and display	Daily exam and oral questions
5	2	Knowledge	BLOOD GASES: - Acid - Base balance - Blood pH & Blood buffer	Use whiteboard and display	Daily exam and oral questions
6	2	Knowledge	BLOOD GASES: - Blood pH & Blood buffer	Use whiteboard and display	Daily exam and oral questions
7	2	Knowledge	Diabetes mellitus	Use whiteboard and display	Daily exam and oral questions
8	2	Knowledge	Diabetes mellitus	Use whiteboard and display	Daily exam and oral questions
9	2	Knowledge	LIVER: - Physiology and role in metabolism - Bilirubin metabolism - Bile salts & gall stones	Use whiteboard and display	Daily exam and oral questions
10	2	Knowledge	LIVER: - Liver function tests Disorders of the Liver: i) Jaundice & Neonatal Jaundice	Use whiteboard and display	Daily exam and oral questions
11	2	Knowledge	LIVER: ii) Alcoholic Liver disease iii) Hepatitis	Use whiteboard and display	Daily exam and oral questions

			iv) Cirrhosis v) Liver tumors		
12	2	Knowledge	KIDNEY: - Functions - Renal functions tests	Use whiteboard and display	Daily exam and oral questions
13	2	Knowledge	KIDNEY: - Proteinuria - Renal failure (Acute:Chronic)	Use whiteboard and display	Daily exam and oral questions
14	2	Knowledge	Disorder in lipid metabolism Cholesterol T.G,phospholipids	Use whiteboard and display	Daily exam and oral questions
15			HEART: - Enzymes affected in heart diseases and pulmonary	Use whiteboard and display	Daily exam and oral questions
16	2	Knowledge	HEART: embolism (infarction, angina, pulmonary embolism)	Use whiteboard and display	Daily exam and oral questions
17	2	Knowledge	Pancreatic function ,exocrine,function,Pathology P.F.T Disease	Use whiteboard and display	Daily exam and oral questions
18	2	Knowledge	Serum protein components diseases	Use whiteboard and display	Daily exam and oral questions
19	2	Knowledge	Serum protein components diseases	Use whiteboard and display	Daily exam and oral questions
20	2	Knowledge	TUMOR MARKERS	Use whiteboard and display	Daily exam and oral questions
21	2	Knowledge	TUMOR MARKERS	Use whiteboard and display	Daily exam and oral questions
22	2	Knowledge	TUMOR MARKERS	Use whiteboard and display	Daily exam and oral questions
23	2	Knowledge	Enzymes isoenzymes patterns to pathology .T,Aldolase, CK, LDH, LP , A.la T ASP .T AS Acp ,A	Use whiteboard and display	Daily exam and oral questions
24	2	Knowledge	Enzymes isoenzymes patterns to pathology .T,Aldolase, CK, LDH, LP , A.la T ASP .T AS Acp ,A	Use whiteboard and display	Daily exam and oral questions
25	2	Knowledge	Enzymes isoenzymes patterns to pathology .T,Aldolase, CK, LDH, LP , A.la T ASP .T AS Acp ,A	Use whiteboard and display	Daily exam and oral questions
26	2	Knowledge	General aspect of hormone	Use whiteboard and display	Daily exam and oral questions

27	2	Knowledge	Transport regulation Thyroid	Use whiteboard and display	Daily exam and oral questi ons
28	2	Knowledge	gastrointestinal steroid Hormones	Use whiteboard and display	Daily exam and oral questi ons
29	2	Knowledge	Parathyroid ,adrenal hormone	Use whiteboard and display	Daily exam and oral questi ons
30	2	Knowledge	Sex hormones	Use whiteboard and display	Daily exam and oral questi ons

11. Course Evaluation

5 marks are calculated on reports
5 points are calculated on daily exams
5 degrees are calculated on the daily preparation
And the rest of the grade is for the monthly exams

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	TEXTBOOK OF BIOCHEMISTRY For Medical Students
Main references (sources)	Clinical Biochemistry
Recommended books and references (scientific journals, reports...)	Biochemistry (with Clinical Concepts & Case Studies) .Dr. U. Satyanarayana, Dr. U. Chakrapani
Electronic References, Websites	ncbi,google scholar, reserachgate

Dr. Ameer Hassan Idan

