



Department of med. Laboratory tech.

College of Erbil health Tech.

University of Erbil Polytech.

Subject: Practical Clinical Biochemistry

Course Book – *For* 3rd grade

Theory Lecturer's name: Dr. Burhan

**Practical lecturers name: Ahmed Abduljalal
Abduljabbar**

Academic Year: 2023/2024

Course Book

1. Course name	Pract. Clinical biochemistry
2. Lecturer in charge	Msc.ahmed abduljalal
3. Department/ College	Medical lab tech.
4. Contact	e-mail: ahmed.abuljabbar@epu.edu.iq Tel: (optional) 07504681242
5. Time (in hours) per week	Theory 4 Practical: 8
6. Office hours	Availability of the lecturer to the student during the week Sunday and monday
7. Course code	
8. Teacher's academic profile	I have been teaching practical biochemistry for about 7 years in science education/ Salahddin university. I also taught in Cihan College for about 1 year. Currently serve as an academic member in Medical laboratory tech depart. At Erbil Polytechnic University.
9. Keywords	Lab. Technique, spectrophotometer, biomolecules
10. Course overview:	
<p>The main aim of this course is to teach the student general principle of Biochemistry and instrumentation as a science, and clarified the general concepts of it. This is will be including the general introduction into lab. Instrument in relation to human health, diseases identification, uses and maintenance.</p>	

11. Course objectives

The course is designed to familiarize students with diseases related to major macromolecules of life (carbohydrates, lipid, proteins, and vitamins) and to provide the primary knowledge and tools to all the medical or clinical laboratory workers, at the technician or technologist level with the continuing progression toward more complex and advanced technology, the basics, such as work protocol, results declaration and medical report finishing.

12. Student's obligation

Students Must follow lab. Instruction

1. The student should complete all the requirements starting from the attendance, completion of all tests, exams. Assignment, reports, assays and seminar.
2. All students are normally required to attend all learning and teaching sessions associated with the program of study on which they are registered and on time.
3. Student attendance and engagement can be monitored in relation to a variety of activities including:
 - attendance at specific events, where these are defined by the Department as being compulsory; these may include tutorials, seminars, practical classes, in-class tests, examinations etc.
 - attendance at lectures; Regulations governing student obligations
 - attendance at registration events, departmental meetings, personal tutorials or other engagement activities;

13. Forms of teaching

ریگهی وانه وونتەوه، داتاشۆ و پاوه رپۆینت، سەر تەختەرەش، تەختە سپی، سمارتبۆرد یان مەلزمە... هتد

Data Show

White board

Reporting

Weekly quizzes

Teaching methods will include the following: a) Lecture presentation by lecturer through using board or data show or both. b) Lecture presentation by students. c) Small groups such as task oriented d) Brain storming e) Panel discussion f) Data show and head line text .with classical board will be used to complete the subjects of the entire course

14. Assessment scheme

The grades scheme (for subject has both practical and theoretical parts)will be as the table below: Activities during semester Midterm –mid semester exams Final semester exams Total Practical 5 15 30 50 Theory 5 15 30 50 A. Activities during the course include:

quizzes, seminar presentation, report presentation and discussion, daily attendance, active participation in personnel or group discussions, etc. B. Midterm or mid semester exams will be on the mid semester calendar time (on 7th-8th week) and the normal course teaching sessions will be continue as scheduled during examination days. C. Final semester exams will be at the end of course.

15. Student learning outcome: This course will:

- The student will be armed with suitable scientific information to faceoff the cases on laboratory work of various clinical samples in governmental and private sectors with the following aims: 1. Diagnosis the kinds of instruments that are used in medical lab technology 2. Understanding technic and protocol for lab work. 3. Development skill in suitable clinical technique. 4. Planning the basic maintenance of medical instrument.

16. Course Reading List and References:

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17. The practical Topics:

Lecturer's name

1- Electrolyte balance

1/10/2021

2- Chloride and phosphorus

8/10/2021

3-Calicium and potassium

Lecturer's name:Ahmed ab.jalal
ex: (2- hrs)

ex: 15/10/2021

4- Iron

Lecturer's name:Ahmed ab.jalal
ex: (3- hrs)

ex: 22/10/2021

5- Blood Urea

Lecturer's name:Ahmed ab.jalal

	<p>ex: (3- hrs)</p> <p>ex: 29/10/2021</p>
6-Serum creatinine	<p>Lecturer's name:Ahmed ab.jalal</p> <p>ex: (2- hrs)</p> <p>ex 6/11/2021</p>
7- Uric acid	<p>Lecturer's name:Ahmed ab.jalal</p> <p>ex: (2- hrs)</p> <p>ex: 13/11/2021</p>
7- ALT	<p>Lecturer's name:Ahmed ab.jalal</p> <p>ex: (2- hrs)</p> <p>ex: 20/11/2021</p>
8-AST	<p>Lecturer's name:Ahmed ab.jalal</p> <p>ex: (3- hrs)</p> <p>ex: 27/11/2021</p>
9-ALP	<p>Lecturer's name:Ahmed ab.jalal</p> <p>ex: (3- hrs)</p> <p>ex: 3/11/2021</p>
10-GGT	<p>Lecturer's name:Ahmed ab.jalal</p> <p>ex: (3- hrs)</p> <p>ex: 10/11/2021</p>

11-Bilirubin	Lecturer's name:Ahmed ab.jalal ex: (3- hrs) ex: 17/11/2021
12-Acid phosphatase	Lecturer's name:Ahmed ab.jalal ex: (3- hrs) ex: 25/4/2017
13-Creatine kinase	Lecturer's name:Ahmed ab.jalal ex: (3- hrs) ex: 2/5/2017
14-Endocrine system	Lecturer's name:Ahmed ab.jalal ex: (3- hrs) ex: 9/5/2017
15-Hypothalamus	Lecturer's name:Ahmed ab.jalal ex: (3- hrs) ex: 16/5/2017
16-Pitutary glands	Lecturer's name:Ahmed ab.jalal ex: (3- hrs) ex: 23/5/2017
17-Thyroid glands	Lecturer's name ex: 29/5/2017
18-Hormons	Lecturer's name:Ahmed ab.jalal ex: (2- hrs)

	ex: 15/3/2022
19- Fat soluble-vitamins	Lecturer's name:Ahmed ab.jalal ex: (2- hrs) ex: 27/3/2022
20- Water soluble-Vitamins	Lecturer's name:Ahmed ab.jalal ex: (2- hrs) ex: 3/4/2022
20. Extra notes:	
<i>performed modern techniques to develop skill and knowledge of students and staff members</i>	
21. Peer review	پیداچوونہوہی ہاوہل
The course book has been peer reviewed by Speciallisties approved to be well suited for students capability of 1st. grade according to every Standareds.	
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