

Course Description Form

1. Course Name:

Biochemistry

2. Course Code:

102

3. Semester / Year:

First years _ First semester -I

4. Description Preparation Date:

13-2-2024

5. Available Attendance Forms:

Recording the student's attendance in theoretical lectures

6. Number of Credit Hours (Total) / Number of Units (Total)

**(4) hours per week for the theoretical subject for a period of 15 weeks
(total 60 hours)**

7. Course administrator's name (mention all, if more than one name)

Name: Lecturer MSC· Shahad Abbass

8. Course Description

✚ The course is designed to introduce students to the fundamental concepts compound of Biochemistry the student at both structure and role of abnormal carbohydrates , lipids, amino acids ,proteins and enzmes.

9. Course Objectives

- ✚ Understand the clinical distinguish between carbohydrates , lipids, amino acids ,proteins and enzmes
- ✚ Understand the role of hormones and the metabolic reactios in the body .
- ✚ Use laboratory methods for monitoring biochemical reaction in biological

10. Chemistry of Carbohydrates

- ✚ Biomedical importance of carbohydrate
- Sugar derivatives of biologic importance
- Monosaccharides
- Disaccharides
- Polysaccharides
- Digestive of carbohydrates
- Absorption of carbohydrates

11. Course Structure

Theoretical = 2 h

Date of Class	Unit to be Covered and/or Activity
Week 1	Introduction of Chemistry of carbohydrates Biomedical importance of carbohydrate <ul style="list-style-type: none">• Sugar derivatives of biologic importance• Monosaccharides• Disaccharides• Polysaccharides• Digestive of carbohydrates Absorption of carbohydrates
Week 2	Chemistry of lipids <ul style="list-style-type: none">• Functions and importance of lipids• Classification of lipids• Identification characterization of fats in compound lipids
Week 3	Bile acid and bile salt
Week 4	Functions of proteins Amino acids

	Classification Functions of amino acids
Week5	Digestion and absorption of proteins Dynamic equilibrium
Week 6	Metabolism of amino acid Blood proteins

Week 7	Writing review of literature
Week 8	<p>Bilirubin</p> <ul style="list-style-type: none"> • Types of bilirubin • Jaundice • Classification of jaundice
Week 9	<p>Enzymes</p> <ul style="list-style-type: none"> • General properties of enzymes • Chemical composition of enzymes • Classification of enzymes co_enzymes • Enzymes specificity
Week 9	<p>urine</p> <p>Normal characteristic of urine</p> <p>Constituents of normal urine</p> <p>Urine collection</p>
Week 10	Discussion the finding of the study.

.Course Evaluation

First midterm theory exam	20%
Second midterm theory exam1	20 %
Final Exam	60%
Total	100 %