

Course Overview

Biochemistry II

Course code :	AMT 402
Course title:	Biochemistry II
Level/semester:	Forth Semester
Preceding Courses & Main Subjects	- Biology – chemistry I
Credit hours: 4	Theoretical: 3
	Practical: 2

Course Title:-Theory

التمرينات العملية	عدد الساعات	عدد المحاضرات	الموضوعات الرئيسية التي يغطيها المقرر	م
	15	5	<p>Carbohydrates Metabolism</p> <p>1: Introduction and course overview 2: <i>Structural representation of sugars</i> 3: Carbohydrates Metabolism-Digestion and Absorption 4: Glucose Oxidation (Glycolysis) 5: Oxidative decarboxylation of Pyruvate and Tricarboxylic acid cycle (Krebs' cycle) 6: Pentose phosphate pathway and Fructose Metabolism 8 :Gluconeogenesis, Cori and Alanine cycle 9: Glycogen metabolism 10: Electron transport chain(respiratory chain) and oxidative</p>	1
	12	4	<p>Lipids metabolism</p> <p>1:Introduction and Lipids Metabolism-Digestion and absorption 2:Cholesterol metabolism 3:Lipolysis - Oxidation of fatty acids 4: Ketone body metabolism and ketoacidosis 5:<i>Fatty Acids Biosynthesis</i> 6:Lipids Transport - Lipoprotein metabolism</p>	2
	15	5	<p>Protein metabolism</p> <p>1: Introduction of Protein metabolism 2:: Introduction of Protein metabolism Digestion and Absorption 3: Amino Acids Metabolism 3: Urea cycle and hyperammonaemia 4: Inborn Error of Glycine Amino Acid 5: Inborn Error of Some Individual Amino Acids</p>	3

Course Title:-Practical

EXERCISE	CONTENTS	HOURS
1	- Introduction to clinical biochemistry laboratory & safety measures	2
2	- Estimation of Glucose in Urine	4
3	- Estimation of serum total lipids	4
4	- Estimation of serum triglycerides	4
5	- Estimation of serum Cholesterol (Total & HDL)	4
6	- Estimation of Glucose in Urine	4
7	- Estimation of serum albumin and total proteins	2
TOTAL		24