King Saud University
College Of Science
Department of Biochemistry
Course Outline (Description)

Course code	Title	Credit Hours	Year/Term
BCH 201	**General Biochemsitry-1-**	**3 (3+0)**	**1437-1438H/2nd semester**

*** Course Aims:**

To familiarize students with basic knowledge of basic biochemistry needed for higher level courses. This is the first part of a general introductory biochemistry course. This part covers relevant chemical concepts (chemical bonds, functional groups, equilibrium, and energy), building blocks of cellular components, structure and properties of water, buffers, structure and properties of amino acids, peptide bond, protein structure, structural and functional classification of proteins, the introduction to enzymes and metabolism.

*** Learning outcomes:**

NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
Knowledge		
-Biomolecules,their importance,types and function in relation to living cells, with particular emphasis on amino acids-types, structures, properties. -Structure and functions of macromolecules, and how the basic units are linked to make these macromolecules and supramolecularmolecules, with particular reference to structure, function and types of proteins. -how these biomolecules play a role in the metabolic pathways in living systems.	-In class lecturing where the previous knowledge is linked to the current and future topics. -Homework assignments -Tutorial discussion	-Quizes - major and final exam
Cognitive Skills		
-Identify the main functional groups in organic molecules. -Solve problems on buffer solution. -Calculation of the total energy that result from metabolic pathway.	-Homework assignment -Case studies related to the course topics. -Problem solving	-Quizzes -Major and final exam -Checking the problems solved in the homework assignments

*** Assessment Scheme:**

No.	Methods of Assessment		Marks (%)
1	2 Written examination2		40%
	First exam	27-6-1438	20
	Second exam	18-8-1438	20
2	- quizes		10%
3	-class participation		10%
total			60%
5- Final examination			40%

***Time & Venue:**

Teachers	Office	E-mail
Dr. Mohammed Alanazi	Building 5- 2A68	msanazi@ksu.edu.sa
Office hours : Sunday 10-12 Tuesday 10-12		

books

	Book Name	Authors
Text Book	**Lehninger, Principle of Biochemistry**	**Nelson and Cox 6th edition 2012**

Course Outline (Schedule)

wk	Topic
1,2	Introduction-Elements -Biomolecules- cells
3,4	Chemical bonds-functional groups - Chemical equilibrium-
5,6	Structure and properties of water -Ionization of water -Acids and bases - Buffer system
7,8	Amino acids
9,10,	Proteins and peptides
11,12, 13	Protein methods
14	Introduction to enzymes
15	Introduction to metabolism