

Planning and Quality Assurance Affairs

Form (A)

Course Specifications

General Information

Course name	General Biochemistry
Course number	MDCN1229
Faculty	
Department	
Course type	Major Needs
Course level	1
Credit hours (theoretical)	2
Credit hours (practical)	0
Course Prerequisites	

Course Objectives

- 1 - Demonstrate an understanding of fundamentals and concept of biochemistry
- 2 - develop critical thinking and analytical abilities

Intended Learning Outcomes

Knowledge and Understanding	* 1- Understand the chemistry of water, acid-base, buffers, Henderson-Hasselbach equation * 2- Describe the chemistry of carbohydrates, classification, structure, properties and explain the proteins classification, structure, amino acids * 5- Understand lipids classification, structure, cell membrane, membrane transport process... fat soluble vitamins * 6- Describe the important of nucleic acids, structure of nucleotides & nucleic acids, DNA, RNA. * 7- Determine the enzymes, properties, function, mode of action, Michaelis-Menten equation, enzyme inhibitors
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Course Contents

1 - This subject is designed to enhance the understanding of the fundamentals and concept of biochemistry, including the major constituents of cell, Biomolecules, water, acid-base, buffers, Henderson-Hasselbach equation, carbohydrates classification, structure, properties, etc., proteins classification, structure, amino acids etc., lipids classification, structure, cell membrane, membrane transport process... fat soluble vitamins, Nucleic acids, transport of glucose from blood to cells. Bioenergetics, enzymes, properties, function, mode of action, Michaelis-Menten equation, enzyme inhibitors.

Teaching and Learning Methods

1 - Lectures 2 - PowerPoint Presentations 3 - Assignments

Students Assessment

<u>Assessment Method</u>	<u>TIME</u>	<u>MARKS</u>
Quizzes	30	20
Midterm	60	30
Final	120	50

Books and References

Essential books	CAMPBELL, M.K.; FARRELL, S.O. AND McDougal, O. M. (2018): BIOCHEMISTRY, 9TH EDITION, INTERNATIONAL STUDENT EDITION, THOMSON BROOKS/COLE, USA.
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