

Course Plan for Bachelor Program - Study Plan Development and Updating Procedures/ Pharmacy Department	QF02/0408-40.E
---	----------------

Study Plan No.	2021/2022	University Specialization	Bachelor of Physiotherapy
Course No.	0201177	Course Name	Biochemistry for Physiotherapy
Credit Hours	1	Prerequisite *Co-requisite	-
Course Type	<input type="checkbox"/> Mandatory University Requirement <input type="checkbox"/> University Elective Requirement	<input checked="" type="checkbox"/> Faculty Mandatory Requirement <input type="checkbox"/> Support course family requirements	<input type="checkbox"/> Elective Requirement <input type="checkbox"/> Mandatory Requirement
Teaching Style	<input type="checkbox"/> Full Online Learning	<input type="checkbox"/> Blended Learning	<input checked="" type="checkbox"/> Traditional
Teaching Model	<input type="checkbox"/> 2 Synchronous: 1 Asynchronous	<input type="checkbox"/> 1 Face Asynchronous	<input checked="" type="checkbox"/> 1 Traditional

Faculty Member and Study Divisions Information (to be filled in each semester by the subject instructor)

Faculty Member and Study Divisions Information (to be filled in each semester by the subject instructor)					
Name	Academic rank	Office No.	Phone No.	E-mail	
Dr. Bayan Al-Momany	Assistant Professor				
Office Hours (Days/Time)	Office hours to be announced		Office hours to be announced		
Division number	Time	Place	Number of Students	Teaching Style	Approved Model
	-----	-----	-----	Traditional Learning	1 Traditional Learning

Brief Description

This course provides an overview of the key aspects of biomolecules in the human body. Topics addressing protein, carbohydrate, lipid, and nucleic acids structure and function including.

Learning Resources

Course Plan for Bachelor Program - Study Plan Development and Updating Procedures/ Pharmacy Department	QF02/0408-40.E
---	----------------

Course Book Information (Title, author, date of issue, publisher ... etc)	1. Chemistry for the Health Sciences. 8 th Edition , edited by Sackheim and Lehman, 2000, Macmillan Publishing Company. 2. Lippincott Illustrated Reviews: Biochemistry 5th edition, edited by Harvey R.A., 2010, Lippincott Williams & Wilkins.			
Supportive Learning Resources (Books, databases, periodicals, software, applications, others)	1. Champe and Harvey. Biochemistry: illustrated reviews. 3 rd Edition (2004). Lippincott Williams & Wilkins. 2. Marks, Marks and Smith. Basic Medical Biochemistry. 3 rd Edition (2003). Lippincott Williams & Wilkins.			
Supporting Websites				
The Physical Environment for Teaching	<input checked="" type="checkbox"/> Class room	<input type="checkbox"/> Labs	<input checked="" type="checkbox"/> Virtual Educational Platform	<input type="checkbox"/> Others
Necessary Equipment and Software	- PC/laptop with headphones and camera - Microsoft Office. - Microsoft teams. - Moodle.			
Supporting People with Special Needs				
For Technical Support	E-learning & Open Educational Resources Center E-mail: elarning@zuj.edu.jo Phone: +962 6 4291511 ext. 425/362.			

Course learning outcomes (K= Knowledge, S= Skills, C= Competencies)

No.	Course Learning Outcomes	The Associated Program Learning Output Code
Knowledge		
The student should be able to:		
K1	Delineate structure, function & interrelationship of various biomolecules (proteins, carbohydrate, lipids and nucleic acid)	MK3
K2	Summarize the fundamental aspects of enzymology.	MK3
K3	Discuss the main concepts of digestion and absorption of these biomolecules in human body..	MK3

Mechanisms for Direct Evaluation of Learning Outcomes

Type of Assessment / Learning Style	Fully Electronic Learning	Blended Learning	Traditional Learning (Theory Learning)	Traditional Learning (Practical Learning)
Second / Midterm Exam	%30	%30	30%	30%
Participation / Practical Applications	0	0	20%	30%
Asynchronous			0%	

Course Plan for Bachelor Program - Study Plan Development and Updating Procedures/ Pharmacy Department	QF02/0408-40.E
---	----------------

Interactive Activities				
Final Exam	%40	%40	50%	40%

Note: Asynchronous interactive activities are activities, tasks, projects, assignments, research, studies, projects, work within student groups ... etc, which the student carries out on his own, through the virtual platform without a direct encounter with the subject teacher.

Schedule of Simultaneous / Face-to-Face Encounters and their Topics

Schedule of Simultaneous / Face-to-Face Encounters and their Topics			
Week	Subject	Learning Style*	Reference **
1	Revision of functional groups in chemistry	Traditional lectures	Revision
2	The Molecules of Life Protein Structure and Function Amino Acids Structure of Proteins		Lippincott Illustrated Reviews: Biochemistry- Chapter 1 Chapter 2
3			
4			
5	Nucleic Acids DNA Structure, RNA Structure		Lippincott Illustrated Reviews: Biochemistry- Chapter 29 Chapter 30
6	Buffers Enzymes as Catalysts		Lippincott Illustrated Reviews: Biochemistry- Chapter 5
7			
8	Carbohydrates Chemistry		Lippincott Illustrated Reviews: Biochemistry- Chapter 7
9			
10	Lipids Chemistry		Lippincott Illustrated Reviews: Biochemistry- Chapter 15
11			
12			
13	Digestion and Transport of Dietary Molecules Carbohydrates Lipids Proteins		Lippincott Illustrated Reviews: Biochemistry- Chapter 7, 15, 19 and 20
14			
15			
16	Final Exam		

* Learning styles: Lecture, flipped learning, learning through projects, learning through problem solving, participatory learning ... etc.

** Reference: Pages in a book, database, recorded lecture, content on the e-learning platform, video, website ... etc.

Schedule of Asynchronous Interactive Activities (in the case of e-learning and blended learning)