

Course Plan for Bachelor Program - Study Plan Development and Updating Procedures/ Pharmacy Department	QF02/0408-4.0E
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Study Plan No.	2021/2022	University Specialization	Bachelor of Pharmacy
Course No.	0201554	Course Name	Selected Topics in Pharmacology
Credit Hours	3	Prerequisite *Co-requisite	Pharmacology (3)
Course Type	<input type="checkbox"/> Mandatory University Requirement <input type="checkbox"/> University Elective Requirement	<input type="checkbox"/> Faculty Mandatory Requirement <input type="checkbox"/> Support course family requirements	<input type="checkbox"/> Mandatory Requirement <input checked="" type="checkbox"/> Elective Requirement
Teaching Style	<input type="checkbox"/> Full Online Learning	<input checked="" type="checkbox"/> Blended Learning	<input type="checkbox"/> Traditional Learning
Teaching Model	<input type="checkbox"/> 1 Synchronous: 1 Asynchronous	<input checked="" type="checkbox"/> 1 Face to Face: 1 Asynchronous	<input type="checkbox"/> 2 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	
Office Hours (Days/Time)	Sunday, Tuesday, Thursday ()		Monday, Wednesday ()		
Division number	Time	Place	Number of Students	Teaching Style	Approved Model
				Blended Learning	1 Face to Face: 1 Asynchronous

Brief Description

This course is designed to cover some elected topics in pharmacology. It covers drug interactions, therapeutic drug monitoring, Drugs during pregnancy and lactation, drugs used for osteoporosis, drugs used for obesity, drugs used for erectile dysfunction, immunomodulators, drugs used for biliary and pancreatic diseases, Drugs for inflammatory bowel diseases and Targeted therapy in cancer: tyrosine kinase inhibitors, monoclonal antibodies and cytokines.

Learning Resources

Course Book Information (Title, author, date of issue, publisher ... etc)	1. Goodman and Gilman's The Pharmacological Basis of Therapeutics, Laurence L. Brunton, McGraw-Hill Education / Medical; 12th edition.
Supportive Learning Resources (Books, databases, periodicals, software, applications, others)	2. Lippincott Illustrated Reviews – Pharmacology; K. Whalen, C. Field, and R. Radhakrishnan; 7 th Edition; 2019; Wolters Kluwer 3. Selected review articles from the literature and internet.
Supporting Websites	https://elearning.zuj.edu.jo/login/index.php
The Physical Environment for Teaching	<input checked="" type="checkbox"/> Classroom <input type="checkbox"/> Labs <input checked="" type="checkbox"/> Virtual Educational Platform <input type="checkbox"/> Others
Necessary Equipment and Software	- PC/laptop with headphones - Microsoft Office.

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	- zoom - Moodle.
Supporting People with Special Needs	
For Technical Support	E-Learning & Open Educational Resources Center. Email: ellearning@zu.edu.jo ; Phone: +962 6 429 1511 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	Recognizing different aspects of drug interactions	MK3
K2	Recognizing drug's requirement and dose modifications for special population	MK3
K3	Recall the drugs required therapeutic monitoring.	MK3
K4	Outlines advances in treatment of some disease states	MK3
Skills		
The student should be able to:		
S1	Solve common medical problems related to the use of drugs	MS2
S2	Identify the evidence-based treatment of the covered disease conditions	MS2
Competencies		
The student should be able to:		
C1	Identify drug interactions and how to deal with them	MC1
C2	Engaged successfully in pharmacy care for the topics covered	MC1
C3	Develop his/her professional and personal performance by continuously following-up lectures, submitting tasks on time, and staying up to date with the latest drug information in the topics covered.	MC3

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)
Midterm Exam	30%	30%	30%	0%
Participation / Practical Applications	0%	0%	20%	50%
Asynchronous Interactive Activities	20%	20%	0%	0%
Final Exam	50%	50%	50%	50%

Note 1: Asynchronous interactive activities are activities, tasks, projects, assignments, research, studies, projects, and 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.

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Note 2: According to the Regulations of granting Master's degree at Al-Zaytoonah University of Jordan, 40% of final evaluation goes for the final exam, and 60% for the semester work (examinations, reports, research or any scientific activity assigned to the student).

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

Week	Subject	Learning Style*	Reference **
1	Drug interactions	lecture	77-78
2	Drug interactions	lecture	77-78
3	Therapeutic drug monitoring	lecture	37-38
4	Special Populations: Pregnancy	lecture	1846 and literatures
5	Special Populations: Pregnancy	lecture	1846 and literatures
6	Special Populations: Lactation	lecture	1847 and literatures
7	Drugs used in: Osteoporosis	lecture	1290 – 1301
8	Drugs used in: Obesity Phosphodiesterase inhibitors and Erectile dysfunction	lecture	891 1059 - 1060
9	Immunomodulators Midterm Exam	lecture	1005-1030
10	Immunomodulators	lecture	1005-1030
11	Immunomodulators	lecture	1005-1030
12	Drugs used for biliary and pancreatic diseases	lecture	1323 - 1350
13	Drugs for inflammatory bowel diseases	lecture	1351-1360
14	Targeted therapy in cancer: tyrosine kinase inhibitors, monoclonal antibodies and cytokines	lecture	1732-1754
15	Targeted therapy in cancer: tyrosine kinase inhibitors, monoclonal antibodies and cytokines	lecture	1732-1754
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)

Week	Task / Activity	Reference	Expected Results
1	----	----	----
2	Assignment 1: Drug interaction	Internet	Tutorial
3	Assignment 2: TDM	internet	Written Report
4	Quiz1: (Includes lectures for the 1 st , 2 nd , & 3 rd)		Quiz1

Course Plan for Bachelor Program - Study Plan Development and Updating Procedures/ Pharmacy Department	QF02/0408-4.0E
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	week)		
5	Assignment 3: Drugs for lactation	internet	Written Report
6	Assignment 4: Osteoporosis	Internet	Written Report
7	Assignment 5: Obesity	Internet	Written Report
8	Assignment 6: Erectile dysfunction Quiz 2: (Includes lectures for the 4 th , 5 th , 6 th , & 7 th week)	Internet	Case study Quiz 2
9	Midterm Exam		Midterm Exam
10	Assignment 7: Immunosuppressants	Internet	Written Report
11	Assignment 8: Tyrosine kinase inhibitors	Internet	Tutorial
12	Monoclonal antibodies in disease treatment	-----	Tutorial
13	Cytokines in disease treatment	-----	Tutorial
14	Lectures review	-----	-----
15	Lectures review	-----	-----
16	Final Exam		Final Exam