Course Plan for Bachelor Program - Study Plan Development and Updating Procedures/ Pharmacy Department	QF02/0408-4.0E

Study Plan No.	**2021/2022**		**University Specialization**		**Bachelor of Pharmacy**	
Course No.	**0201437**		**Course Name**		**Therapeutics (1)**	
Credit Hours	**3**		**Prerequisite *Co-requisite**		**Biopharmaceutics and Pharmacokinetics + Pharmacology (3)**	
Course Type	☐ Mandatory University Requirement	☐ University Elective Requirement	☐ Faculty Mandatory Requirement	☐ Support course family requirements	☑ Mandatory Requirement	☐ Elective Requirement
Teaching Style	☐ Full Online Learning		☐ Blended Learning		☑ Traditional Learning	
Teaching Model	☐ 1 Synchronous: 1 Asynchronous		☐ 1 Face to Face: 1 Asynchronous		☑ 2 Traditional	

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**
				Traditional Learning	**2 Traditional**

Brief Description

This course is designed to introduce students to important concepts in clinical therapeutics, pharmacotherapeutics, clinical decision making and key therapeutic principles that guide clinical practice. This course will also develop ability to manage patients and provide and monitor medication therapy for patients with selected conditions. This course will cover the following topics:

- Introduction to pharmacotherapy
- Continuous pharmacist education and Drug interaction
- Drug therapy of cardiovascular diseases
- Drug therapy of dyslipidemia
- Drug therapy of coagulation disorders
- Drug therapy of joint disorders

Learning Resources

Course Book Information (Title, author, date of issue, publisher ... etc)	1. Pharmacotherapy-A Pathophysiologic Approach, by Joseph DiPiro, 11th edition 2. Applied therapeutics: the clinical use of drugs by Koda-Kimble, 10th edition 3. Clinical pharmacy and Therapeutics, by Roger Walker and Clive Edwards, 3rd edition.
Supportive Learning Resources (Books, databases,	1. Clinical Pharmacology by P.N. Bennett and M.J. Brown, 11th edition. 2. Disease management guidelines

periodicals, software, applications, others)				
Supporting Websites				
The Physical Environment for Teaching	☑ **Classroom**	☑ Labs	☑ **Virtual Educational Platform**	☑ Others
Necessary Equipment and Software	**Moodle**			
Supporting People with Special Needs				
For Technical Support				

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	Identify patients' individual factors that may affect treatment	**MK3**
K2	Recognize the relationship of the above factors to the disease and drug factors.	**MK3**
K3	Describe and evaluate therapeutic regimens which are used in the management of the diseases covered in this course	**MK3**
K4	Recognizing conventional pharmacological approaches to the therapeutic management and/ or prophylaxis of these conditions.	
Skills		
The student should be able to:		
S1	Apply pharmaco-therapeutic principles to real patients' cases	**MS1**
S2	Determine the most appropriate therapy for patients according to patients', disease, and drug factors in order to maximize benefits and minimize risk of therapy	**MS1**
S3	Evaluate and interpret evidence from disease management guidelines	**MS1**
Competencies		
The student should be able to:		
C1	Relate pharmacology, pharmacokinetic and therapeutic principles to come up with best therapeutic plan for a specific patient with specific conditions	**MC1, MS1**

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	20%	20%	**0%**	0%

Activities				
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.*

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	Introduction-pharmacogenomics	Lecture	Chapter 1 (p. 1-7)
2	Introduction-Age	Lecture	Chapter 2 and 3 (p. 7-31)
3	Continuous Pharmacist education/ Drug Interaction	Lecture	
4	Hypertension /Heart Failure	Lecture	Chapter 5 and 6 (p. 45-95)
5	Ischemic Heart Disease	Lecture	Chapter 7 and 8 (p. 95-145)
6	Supraventricular Arrhythmia	Lecture	Chapter 9 (p. 145-173)
7	Atrial Fibrillation	Lecture	Chapter 9 (p. 145-173)
8	Stroke	Lecture	Chapter 11 (p. 203-217)
9	Dyslipidemia Midterm Exam	Lecture	Chapter 12 (p. 213-239)
10	Venous thromboembolism	Lecture	Chapter 10 (p. 173-203)
11	Coagulation and platelet disorders	Lecture	Chapter 67 (p. 1027-1045)
12	Osteoporosis	Lecture	Chapter 56 (p. 875-887)
13	Rheumatoid arthritis	Lecture	Chapter 57 (p. 887-903)
14	Osteoarthritis	Lecture	Chapter 58 (p. 903-915)
15	Gout and hyperuricemia	Lecture	Chapter 59 (p. 915-927)
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

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