

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.	0201339	Course Name	Drug Information and Health Informatics
Credit Hours	1	Prerequisite *Co-requisite	Pathophysiology + *Pharmacology (1)
Course Type	☐ Mandatory University Requirement ☐ University Elective Requirement	☐ Faculty Mandatory Requirement ☐ Support course family requirement	☒ 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	☒ 1 Traditional

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

Faculty Member's Curriculum Vitae (to be updated 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	1 Traditional

Brief Description

This course is designed to introduce students to the basic principles of drug information and their databases by using electronic and other technology-based systems including electronic health records, to capture, store, retrieve, and analyze data to use in patient care as medications and medical history of patients. In addition, the student will be able to use knowledge-based information which forms the scientific basis of health care and includes reference information (about drugs, procedures, disease states, etc.).

Learning Resources

Course Book Information (Title, author, date of issue, publisher ... etc)	Pharmacy Informatics, Anderson, P.O., S.M. McGuinness and P.E. Bourne, 2009.
Supportive Learning Resources (Books, databases, periodicals, software, applications, others)	Guide to Health Informatics, Coiera, E., 2015.
Supporting Websites	-
The Physical Environment for Teaching	☐ Class room ☒ Labs ☒ Virtual Educational Platform ☐ Others
Necessary Equipment and Software	Moodle

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Supporting People with Special Needs	-	
For Technical Support	E-Learning & Open Educational Resources Center Email: ellearning@zuj.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	Describe the role of pharmacy informatics in clinical practice	MK3
K2	Explain the technologies used in pharmacy informatics.	MK3
K3	Evaluate the effectiveness of informatics technology in selected healthcare settings.	MK3
Skills		
The student should be able to:		
S1	Recognize the impact of ethical standards on the use of technology and informatics in healthcare.	MS2
S2	Select appropriate software for accurately documenting health outcomes.	MS1
Competencies		
The student should be able to:		

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%	30%	60%
Asynchronous Interactive Activities	30%	30%	0%	0%
Final Exam	40%	40%	40%	40%

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).

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

Week	Subject	Learning Style*	Reference ** (Pages in Course Book)
1	What Is Pharmacy Informatics	Lecture	
2	Computer and Informatics Basics	participatory learning	
3	Information Systems: Hospital Information Systems	participatory learning	
4	Information Systems: Pharmacy Information Systems	participatory learning	
5	Information Systems: Bedside Bar Coding Technology and Implementation	participatory learning	
6	Avoiding Medication Errors	participatory learning	
7	Tertiary Information Sources for Professionals and Patients	participatory learning	
8	Clinical Decision Support Systems	participatory learning	
9	Midterm Exam	-	-
10	Hakeem (Guest Speaker)	participatory learning	
11	Telehealth	participatory learning	
12	Ethics and health informatics	participatory learning	
13	Standardization & Accreditation in Health Care Informatics	participatory learning	
14	Data Mining for Pharmacy Outcomes	participatory learning	
15	Final Exam	-	-
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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