



The University of Jordan

Accreditation & Quality Assurance Center

COURSE Syllabus

1	Course title	Pharmacy practice 1
2	Course number	1203405
3	Credit hours (theory, practical)	2 theoretical hours
	Contact hours (theory, practical)	2 theoretical hours
4	Prerequisites/corequisites	Pharmacology II (1203364)
5	Program title	PharmD
6	Program code	
7	Awarding institution	The University of Jordan
8	Faculty	Pharmacy
9	Department	Biopharmaceutics & Clinical Pharmacy
10	Level of course	Undergraduate
11	Year of study and semester (s)	Second semester
12	Final Qualification	PharmD
13	Other department (s) involved in teaching the course	NA
14	Language of Instruction	English
15	Date of production/revision	1/ september/2015

16. Course Coordinator:

Office numbers, office hours, phone numbers, and email addresses should be listed.

Coordinator/ Lecturer	Eman Elayeh	Office Number	206	Office phone	Ext: 23341
Office hours	Monday & Wednesday 11-12	Course website	http://elearning.ju.edu.jo/course/view.php?id=4786	E-mail	emanelayeh@gmail.com

17. Other instructors: NA

Office numbers, office hours, phone numbers, and email addresses should be listed.

18. Course Description:

As stated in the approved study plan.

This course introduces students to their professional responsibilities as pharmacists. The course is intended to provide students with a systematic approach to patient-centred pharmaceutical care that will be applied and practiced throughout the curriculum

1. 19. Course aims and outcomes:**2.****A- Aims:**

- 1. Understand the basic concept of pharmaceutical care and clinical pharmacy practice.**
- 2. Be familiar with medical terminology and patient history taking.**
- 3. Develop a basic clinical pharmacy practice skills.**
- 4. Develop relevant communication skills.**
- 5. Identify the sources for and collect the essential elements of a pharmaceutical care database.**
- 6. Develop a complete medical problem list.**
- 7. Assess medical problems, and evaluate the appropriateness of treatment of each problem.**
 - A. Determine the etiology, status, status, and severity of the medical problem.**
 - B. Assess the appropriateness of treatment of each medical problem (e.g., is treatment not being addressed (undertreatment), is the best drug being used based on the principles of evidence-based medicine, what are the risks vs. benefits of treatment of a particular medical problem, is the drug therapy causing harm).**
- 8. Evaluate an individual's drug therapy regimen:**
 - A. Consider such factors as efficacy and effectiveness, adverse effects, patient values, cost, and ability to adhere to recommendations.**
 - B. Apply criteria for determining medication appropriateness.**
- 9. C. Apply the criteria for identifying drug-related problems.**

- 10. Select, recommend, and implement appropriate drug therapy and other non-pharmacologic modes of therapy (e.g., diet, exercise) to prevent and treat medical problems, and provide a rationale/justification for your recommendations.**
- A. Discuss efficacy (best research evidence) and adverse effects of the recommended drug therapy; select the most appropriate therapy based on the principles of evidence-based medicine (i.e., best research evidence, clinical expertise, patient values).**
 - B. Recognize whether the choice or dose of drug will be affected by other patient diseases or problems.**
 - C. Determine whether any clinically significant drug interactions are likely to occur during therapy for multiple problems.**
 - D. Consider pharmacokinetic and pharmacodynamic properties in selecting the most appropriate therapy for a particular patient.**
 - E. Consider drug administration or select the next best alternative if therapy fails based on the therapeutic goal.**
- 11. F. Always consider patient values, cost, and ability to adhere to recommendations.**
- 12. Monitor for both efficacy and adverse effects of drug therapy.**
- A. Determine an overall therapeutic goal when a particular problem is to be treated; establish a therapeutic goal for each form of therapy.**
 - B. List monitoring parameters that will determine whether goals are being met.**
- 13. C. Identify the common and/or significant adverse reactions for each drug selected, and identify the parameters necessary to monitor for drug toxicity.**
- 14. Continually evaluate drug therapy and the outcomes of an implemented pharmacotherapeutic plan. Assess effectiveness, adverse effects, and benefits of drug therapy. Decide to discontinue, conclude, continue, or revise the pharmacotherapeutic plan.**
- 15. Communicate recommendations and plan to patients (and/or others involved in the care), physicians, and other members of the health care team.**
- 16. Document recommendations and interventions.**

B- Intended Learning Outcomes (ILOs): Upon successful completion of this course students will be able to ...

A. Knowledge and Understanding: Student is expected to

- A1. Understand the basic concept of pharmaceutical care and clinical pharmacy practice.
- A2. Be familiar with medical terminology and patient history taking.
- A3. Understand different types of DRPs.
- A4. To have better understandings on adverse drug reactions and pharmacovigilance system.
- A5. To have better understandings of drug-drug interactions.

B. Intellectual Analytical and Cognitive Skills: Student is expected to

- B1- Develop a basic clinical pharmacy practice skills.

B2- Develop relevant communication skills.

B3- Identify the sources for and collect the essential elements of a pharmaceutical care database.

B4- Classify drug therapy problems according to their appropriate interventions.

B5- Communicate recommendations and plan to patients

C. Subject-Specific Skills: Student is expected to

C1- Be able to collect data base according to pharmacist patient data base model, and determine which types of information is needed for each case.

C2- Be able to assess the reliability of patient's data base.

C3-Assess medical problems, and evaluate the appropriateness of treatment of each problem.

C4- Evaluate an individual's drug therapy regimen

C5- Select, recommend, and implement appropriate drug therapy and other non-pharmacologic modes of therapy (e.g., diet, exercise) to prevent and treat medical problems, and provide a rationale/justification for your recommendations.

C6- Continually evaluate drug therapy and the outcomes of an implemented pharmacotherapeutic plan

D. Transferable Key Skills: Students is expected to

D1-Communicate effectively with patients, physicians, and other health care professionals.

D2.Effectively assess patients adherence and be able to solve such problems

Program Competencies Achieved:

1. Identify basic principles of drug pharmacokinetics and recognize disease conditions and other factors that interfere with safety and efficacy of medicines
2. Assess patients medical records
3. Interview patients to obtain further information about their medical history, use of medicines, drug allergies and any other factors potentially affecting their therapy
4. Respect and protect the confidentiality of patient's information
5. Maintain, review and update medicine records of patients
6. Verify that patient therapy is based on best scientific evidence available
7. Engage patients in decisions about their therapy
8. Advise patients and other health professionals on proper usage of medicines including their strength, frequency, dosage form and route of administration
9. Identify any medicament-related problems and take appropriate actions to resolve them

10. Recommend necessary modifications to patient therapy to optimize its safety and efficacy

11. Communicate effectively with patients and other healthcare professionals
12. Prepare and deliver presentations effectively
13. Express ideas, instructions and information in a clear and comprehensible manner
14. Considers audience feedback to verify their proper understanding
15. Respond effectively to enquiries presented by patients and other healthcare professionals
16. Exhibit negotiation and influencing skills to resolve conflicts
17. Build positive relationships with patients and other healthcare professionals
18. Acknowledge and respect cultural and religious differences among patients and colleagues

19. Listen to patients and respect their views and choice of treatment options

20. Topic Outline and Schedule:

3.

Topic	Week	Instructor	Achieved ILOs	Evaluation Methods	Reference
Introduction to pharmaceutical care	1	Eman Elayeh	A1	Exams , quizzes,	
Overview of the pharmaceutical care process	2	Eman Elayeh	A1	Exams , quizzes	
The needs for pharmaceutical care	3	Eman Elayeh	A1	Exams , quizzes,	
Barriers to pharmaceutical care, Clinical & Economic Impact of Pharmaceutical Care Practice: Minnesota PC Project Minnesota PC project	4	Eman Elayeh	A1	Exams , quizzes	
Becoming a practitioner : the tools you need	5	Eman Elayeh	B1	Exams , quizzes	
Providing drug information in pharmacy practice	6	Eman Elayeh	B3	Exams , quizzes	
Collecting patient data base and medical history	7	Eman Elayeh	B3, C1, C2	Exams , quizzes	
The Assessment of drug related needs	8	Eman Elayeh	C3, C4	Exams , quizzes	
Drug related problems classification systems	9	Eman Elayeh	A3, B4	Exams , quizzes, workshops	
Identification of Drug related Problems	10	Eman Elayeh	A3, B4	Exams , quizzes, workshops	
Adverse drug reactions	11	Eman Elayeh	A4	Exams , quizzes	
Drug-Drug interactions	12	Eman Elayeh	A5	Exams , quizzes	
Pharmacy Care Plan (goals, interventions, documentation and consult note, monitoring and follow up)	13-14	Eman Elayeh	B5, C5, C6	Exams , quizzes	

21. Teaching Methods and Assignments:

Development of ILOs is promoted through the following teaching and learning methods:

Learning Methods	Evaluation Methods
Lectures	Exams, Quizzes
Assignment	Patient education material
Role plays	Exams, Quizzes
Visiting lecturers and practitioners from real practice	
Watching videos	

Learning skills:

- 1. Critical thinking**
- 2. Digital literacy**
- 3. Problem-solving skills**
- 4. Self-directed learning**
- 5. Team and group working**

22. Evaluation Methods and Course Requirements:

Opportunities to demonstrate achievement of the ILOs are provided through the following assessment methods and requirements:

- 1. Exams**
- 2. Quizzes**
- 3. Students reports on assignments**
- 4. Role plays**

23. Course Policies:**A- Attendance policies:**

Attendance: Mandatory.

First warning – with 4 absences

Last warning – with 5 absences

Failing in the subject – with 6 absences

B- Absences from exams and handing in assignments on time:

Will result in zero achievement unless health report or other significant excuse is documented.

C- Health and safety procedures:

NA

D- Honesty policy regarding cheating, plagiarism, misbehaviour:

The participation, the commitment of cheating will lead to applying all following penalties together

- 1) Failing the subject he/she cheated at
- 2) Failing the other subjects taken in the same course
- 3) Not allowed to register for the next semester. The summer semester is not considered as a semester:

E- Grading policy:

Exams and Quizzes.

Mid Exam:	40 points
Quizz:	10 points
Final Exam:	50 points
Total	100 points

F- Available university services that support achievement in the course:

Classrooms, internet classes

24. Required equipment:

Datashow and internet connection

25. References:

A- Required book (s), assigned reading and audio-visuals:

1. Pharmaceutical Care Practice: The Patient-Centered Approach to Medication Management Services (3rd edition) Cipolle, RJ, Strand, LM, & Morley, PC, McGraw-Hill, 2012. ISBN-13: 978-0071756389
2. Langely CA, Belcher D. Applied Pharmaceutical Practice. 1st ed. 2008. Pharmaceutical Press. London. 2009. ISBN 978 0 85369 746 6
3. Medication Therapy Management: A Comprehensive Approach. David M. Angaran, Karen Whalen. 2015. ISBN: 978-0-07-184869-5
4. Community and Clinical Pharmacy Services: A Step-by-Step Approach. Ashley W. Ellis, Justin J. Sherman. 2013. ISBN 978-0-07-176375-2

B- Recommended books, materials, and media:

26. Additional information:

Name of Course Coordinator: --Eman Elayeh-----Signature: ----- Date: -----

Head of curriculum committee/Department: ----- Signature: -----

Head of Department: ----- Signature: -----

Head of curriculum committee/Faculty: ----- Signature: -----

Dean: ----- -Signature: -----

Copy to:

Head of Department
Assistant Dean for Quality Assurance
Course File