

جامعة كل العرب

Faculty : Pharmacy

Department: Clinical Pharmacy and Therapeutics

Academic Year: 2020 - 2021

Semester : First

(Course Syllabus)

Subject Name	Credit Hours	Course No.	Prerequisite	Concurrent course
Pharmacoeconomics	2	906514	Pharmacology III (906410)	-

Coordinator Name	Lecturer/s	Room No.	E-mail	Course website	Office Hours
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Course Description

The course starts to serve as an introduction, stressing the importance of the use of pharmacoeconomics to compare costs and outcomes of pharmacy interventions. This course covers the measurement of costs extensively. After that, it discusses the four basic types of pharmacoeconomic research, i.e. cost-minimisation analysis, cost-effectiveness analysis, cost-utility analysis, and cost-benefit analysis. All four analyses include the measurement of costs, but differ in the methods used to measure outcomes. As an advanced topic, the course outlines the use of decision analysis methods to model costs and outcomes, and the pricing policy for drugs in the Jordan Food and Drug Administration (JFDA).

Course Objectives

This course aims to introduce pharmacoeconomics to pharmacy students, and to make them understand the rationale behind studying pharmacoeconomics. Objectives of the course include:

1. Understanding the importance of pharmacoeconomics and its relationship to clinical pharmacy and pharmacy practice
2. Determining the difference between the four most common types of pharmacoeconomics studies.
3. Defining different costing terms, types, and ways of cost calculation.
4. Defining the term quality of life and its importance and applications from a healthcare perception.
5. Understanding the applicability of decision analysis method.
6. Determining the pricing policy of drugs in Jordan.

Intended Learning Outcomes

Following the successful completion of this course, the student should be able to:

A. Knowledge and understanding:

- A1. Define pharmacoeconomics.
- A2. Understand the importance and clinical relevancy of pharmacoeconomics.
- A3. Understand the relationship of pharmacoeconomics to other disciplines.



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A4. Describe the differences between the four most common types of pharmacoeconomics studies and their advantages and disadvantages.

A5. Categorize types of costs and sources for obtaining cost data.

A6. Understand when adjusting for timing of costs is appropriate.

A7. List the steps for performing a decision analysis.

B. Subject specific skills:

B1. Determine the perspective of a study based on types of costs measured.

B2. Compare average costs with marginal or incremental costs.

B3. Discuss the different methods of presenting cost-effectiveness results.

B4. Illustrate the use of a cost-effectiveness grid and a cost-effectiveness plane.

B5. Compare the different methods used in estimating utilities.

B6. Compare the different types of populations used to elicit utility estimates.

B7. Discuss the methods of measuring productivity and intangible costs, including the human capital (HC) and the willingness-to-pay (WTP) approaches.

B8. Determine methods of drug pricing in Jordan.

C. Cognitive and Intellectual skills:

C1. Calculate net present value.

C2. Critique pharmacoeconomic research articles.

C3. Compute quality-adjusted life-year (QALY) calculations.

C4. Compare three types of calculation methods used with CBA: net benefits (or net costs), benefit-to-cost (or cost-to-benefit) ratios, and internal rate of return (IRR).

D. Transferable Skills:

D1. Draw a decision tree.

D2. Calculate average costs and outcomes from a decision tree.

D3. Interpret sensitivity analysis graphs.

D4. Predict price of drugs in Jordan.

Teaching and Learning Methods:

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

ILOs	Learning Methods	Evaluation Methods
A1-A7 B1-B8 C1, C3-C4 D1-D4	Lectures	Multiple-choice question exams
C2	Research article discussion	Exams and open discussion with attending students



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Course Content:

Week	Date	Lecture number/ hours	Topic's Details	Exams/ quizzes	Main Reference (chapter)	ILOs achieved
1-2	-	3	Introduction to Pharmacoeconomics	-	Chapter 1: Introduction	A1-A4
2-4	-	4	Measuring and Estimating Costs	-	Chapter 2: Measuring and Estimating Costs	A5-A6 B1-B2 C1
5	-	2	Cost-Minimization Analysis	-	Chapter 4: Cost-Minimization Analysis	A4 C2
FIRST EXAM						
6-8	-	5	Cost-Effectiveness Analysis	-	Chapter 5: Cost-Effectiveness Analysis	A4 B3-B4 C2
8-10	-	5	Cost-Utility Analysis	-	Chapter 6: Cost-Utility Analysis	A4 B5-B6 C2-C3
SECOND EXAM						
11-12	-	3	Cost-Benefit Analysis	-	Chapter 7: Cost-Benefit Analysis	A4 B7 C4
12-14	-	4	Decision Analysis	-	Chapter 9: Decision Analysis	A7 D1-D3
14-15	-	2	Policy of Drug Pricing in Jordan	-	Principles of Drug Pricing for the Year 2016	B8 D4
FINAL EXAM						

Grade Distribution:

Your course grade will be determined by the following:

Assessment Method	% of Final Grade	Due Date
Midterm exam	30	To be decided
Project	20	To be decided
Final exam	50	To be decided

Distribution of examination material (may vary depending on material included).



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Course Policies:

A- Attendance policies:

Attendance: Mandatory.

First warning – with 3 absences

Last warning – with 4 absences

Failing in the subject – with 5 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:

N/A

D- Honesty policy regarding cheating, plagiarism, misbehavior:

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.

Midterm Exam:	30points
Assignments/quizzes:	20points
Final Exam:	50 points
Total:	100 points

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

Classroom

Required equipment:

Data show and internet connection

Make-up Exam Policy:

Make-up exams will be offered for valid reasons. They may be different from regular exams, both in content and format.

Textbooks information:

Main Reference:



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Essentials of Pharmacoeconomics, 2nd edition (2014) – Lippincott Williams & Wilkins. Author: Karen Rascati.

Other References:

Healthcare Economics Made Easy, 2nd edition (2017) – Scion Publishing Ltd. Author: Daniel Jackson.

Additional information:

No side talks during lecture

No mobile phones during lecture

Entering the lecture theatre after the instructor is not permitted.

Homework should be done by students independently and will be asked at the exams

Course Material and Announcements

Students need to use the e-learning page at the ASU website in order to get all lecture handouts and guidelines which will be uploaded there.

In addition, course related announcements and exam results will be posted on the e-learning page and is the responsibility of each student to check the site regularly.

Name of Course Coordinator: Feras Darwish El-Hajji

Date:

Head of curriculum committee: Reem Abutayeh

Head of Department: Dr. May Abu Taha Signature:

Dean: _____ Signature:

Copy to:
Head of Department
Head of curriculum committee
Course File



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