



Philadelphia University
Faculty of Pharmacy
Department of Pharmaceutical Sciences
Second Semester, 2017/2018

Course Syllabus

Course Title: Pharmacoeconomics	Course code: 0510521
Course Level: 5 th year	Course prerequisite : Pharmaceutics (2) 0510323
Lecture Time: (1) Sun, 13:10 -14:00 (2) Mon, 9:45 -10:45 (3)Wed, 11:15 -12:15 (4) Thurs, 13:10-14:00	Credit hours: 1 hours

Academic Staff

Specifics

Name	Rank	Office Number and Location	Office Hours	E-mail Address
Ms.Enas Abu- Qudais	Lecturer	P 528 Pharmacy Faculty	Sun-Thurs 9-10Am	eabuqudais@philadelphia.edu.jo

Course description:

This course covers the principles of Pharmacoeconomics and to introduce the fundamental topics, define the terminology used in pharmacoeconomic research, focuses on different types and measurement of pharmaceutical costs and outcomes, and investigates how they are analyzed in pharmacoeconomic techniques such as Cost-Benefit Analysis, Cost-Effective Analysis, Cost-Utility Analysis, Cost-Minimization Analysis, and Cost-Consequence Analysis.

It also introduces the fundamental topics and define the Terminology used in pharmacoeconomic research in addition to giving examples in evaluating published research.

Course objectives:

Teach the students and let them understand , interpret and determine the usefulness of pharmacoeconomics based on the concept and types of costs used in pharmacoeconomic assessments and on types of economic analyses used in health care with special attention paid to their practical application in assessing disease load in the community.

After the course the student is expected to know the basic pharmacoeconomic concepts and when should a pharmacoeconomic study be performed for a health care regimen, and be able to select the appropriate analysis method for each study.

Course resources

Text book:

1. Essentials of Pharmacoeconomics. Edit.:Karen L.Rascati – 2nd edition.
Pub.:Lippincott Williams & Wilkins, 2014.

In addition to the above, the students will be provided with handouts by the lecturer

Teaching methods:

Lectures and discussion

Learning outcomes:

- **Knowledge and understanding**

- **Understanding the Key words and Terms used in Pharmacoeconomics field .**

- Design a pharmacoeconomic study employing economic burden of illness, cost minimization, cost benefit, cost effectiveness or cost utility analyses.

- Select the appropriate perspective for the cost equation, distinct between costs and charges, apply discount rates, and conduct sensitivity analyses.

- Establish the effectiveness in money equivalents; selecting clinical parameters or utilities using results from clinical trials, observational studies or meta-analyses.

- **Cognitive skills (thinking and analysis).**

- a- Selection of the appropriate Pharmacoeconomic type for each case study .

- b- successful Application of pharmacoeconomic theories.

- c- Relating the concept of pharmacoeconomics to patient care.

- d- Reaching to correct outcomes out of the analysis.

- **Communication skills (personal and academic).**
 - a- The ability to communicate with the medical staff and the study perspectives .
 - b. Training to take responsibility to communicate .
 - c. Demonstrate effective written and oral communication skills.

- **Practical and subject specific skills (Transferable Skills).**
 - a. The application of pharmacoeconomics to drug therapy decision and formulary management
 - b . Differentiation between types of Pharmacoeconomics analysis.
 - c. Identifying the elements of pharmacoeconomic Study.
 - d. Measuring and estimating costs

Assessment instruments

- Short reports and/ or presentations, and/ or Short research projects
- Quizzes.
- Home works
- Final examination:

<u>Allocation of Marks</u>	
Assessment Instruments	Mark
First examination	20%
Second examination	20%
Final examination	40%
Reports, research projects, Quizzes, Home works, Projects	20%
Total	100%

Documentation and academic honesty

- *Documentation style*

Whenever applicable, students should conduct their assignments themselves whether individually or in a group work referencing all information, data, figures and diagrams taken from literature. The references should be given according to the acceptable format.

- *Protection by copyright*

Students should realize that some published information or data are the property of their authors and they are not allowed to use it without asking permission from the originators.

- *Avoiding plagiarism.*

Plagiarism is the unauthorized use or close imitation of the language and thoughts of another author and the representation of them as one's own original work, without proper acknowledgment of the author or the source. Students must pursue their studies honestly and ethically in accordance with the academic regulations. Cheating in exams and plagiarism are totally unacceptable and those who, intentionally, commit such acts would be subjected for penalties according to the University regulations.

Course/module academic calendar

week	Basic and support material to be covered
1,2	Pharmacoeconomics Definition <ul style="list-style-type: none">• Introduction• What is Pharmacoeconomics?• Why is Pharmacoeconomics Important?• Relationship of Pharmacoeconomics to Other Research• Types of Pharmacoeconomic Studies
3-4 First examination	Measuring and estimating costs <ul style="list-style-type: none">▪ Costing Terms▪ Cost Categorization and Alternative methods▪ Perspective▪ Timing adjustment costs▪ Resources for cost Estimations▪ Examples
5-8 Second examination	Cost Minimization Analysis (CMA) Cost effectiveness Analysis (CEA) <ul style="list-style-type: none">• Presentation of Cost-Effectiveness Analysis• Cost Effectiveness Grid• Cost Effectiveness Plane• Intermediate vs Primary Outcomes• Efficacy vs Effectiveness• Review
9-11	Cost Utility Analysis (CUA)

	<ul style="list-style-type: none"> • Overview of CUA • Steps in calculating QALYs
12-14	Cost Benefit analysis (CBA) <ul style="list-style-type: none"> • Definition • Advantages and Disadvantages of CBA • Conducting a CBA • Differences between costs versus benefits • Measuring Indirect and Intangible Benefits • Calculating Results of Costs and Benefits
15-16	Final Examination week

Expected workload:

On average students need to spend 2 hours of study and preparation for each 50-minute lecture/tutorial.

Attendance policy:

Absence from lectures and/or tutorials shall not exceed 15%. Students who exceed the 15% limit without a medical or emergency excuse acceptable to and approved by the Dean of the relevant college/faculty shall not be allowed to take the final examination and shall receive a mark of zero for the course. If the excuse is approved by the Dean, the student shall be considered to have withdrawn from the course.

Websites

<http://www.philadelphia.edu.jo/pharmacy/resources.html>