Course Code	Course Title	Credits (ECTS)
PHAR-370	Business Management and	5
	Pharmacoeconomics/Διοίκηση	
	Επιχειρήσεων και	
	Φαρμακοοικονομικά	
Department	Semester	Prerequisites
Life & Health Sciences	Spring	None
Type of Course	Field	Language of Instruction
Required	Pharmacy	Greek/English
Level of Course	Year of Study	Lecturer
1 st Cycle	3 rd year	Staff
Mode of Delivery	Work Placement	Co-requisites
face-to-face	N/A	None

Objectives of the Course:

The pharmacoeconomics course focuses on the empirical investigation of the economic and health impact of major pharmaceutical policies, regulations, market conditions, prescription drug use, and pharmaceutical care. Discussions of the origin, organization, delivery and financing of health care in the community. Important health care issues and how they relate to pharmacy practice are discussed.

Other topics to be covered are the management theory and its underpinning of professional practice and organisational structures, the concepts of economics and financial control and their application to practice and the role of human resources management

Learning Outcomes:

After completion of the course students are expected to understand and explain:

- 1. The financial aspects of drug utilization.
- 2. Various assessment models such as cost effectiveness studies, cost minimization studies, cost utility studies and cost benefit studies.
- 3. Health related "quality of life.
- 4. History, background, and formation of major drug industries Oligopolistic practices, mergers, combines, costs of research, and production.
- 5. Improving the health management system.
- 6. Pharmaceuticals and health care economics
- 7. Managing drug therapy utilization
- 8. Improving the safety of the medication use process
- 9. Introduction to economic analysis
- 10. Types of economic evaluations
- 11. Pharmacoeconomic literature evaluation and decision analysis
- 12. Health related quality of life

- 13. appreciate the role of economics as it affects the Pharmaceutical market
 - 14. appreciate management theory and aspects of change management as applied to pharmacy

Course Contents:

- Principles of evidence-based medicine. Dimensions of evidence (level, quality, size of effect, and relevance of outcome measures). Analysis and biostatistical issues.
- 2. Measures of effect, size relative and absolute differences, number needing to be treated (NNT). Methods of systematic review and meta-analysis.
- 3. Basic procedures for performing simple cost-effectiveness analyses. Incremental costs and benefits, incremental cost-effectiveness ratios, cost offsets. Basic approaches to economic analysis of drugs cost minimisation, cost benefit analysis, cost-effectiveness analysis, and cost utility analysis.
- 4. Principles of economic analysis scarcity, opportunity costs, 'cost-effective' versus 'affordable'. Decision-making at the margin; importance of rational drug use in maintaining cost-effectiveness in real life.
- 5. Measuring utilities and quality of life during drug therapy.
- Problem-based pharmacoeconomics applying the principles and techniques to a wide range of drug interventions relevant to developing and developed countries.
- 7. The use of pharmacoeconomic analysis in pricing decisions and formulary decision-making.
- 8. Advanced modeling techniques the use of decision analytic techniques and cohort simulation models (Markov process and Markov chain). The importance of simple models and transparency. Sources of common errors in pharmacoeconomic analysis and their impact on decision-making.
- 9. The world drug situation. The evolving essential drug program. Where pharmaco-economics 'fits' in achieving cost-effective use of resources in developing, developed and transitional countries.
- 10. Basic understanding of elements of management theory, change management and how these will affect practice.

Learning Activities and Teaching Methods:

Lectures, class discussion, assignments

Assessment Methods:

Final Examination, Course work

Required Textbooks/Reading:

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Authors	Title	Publisher	Year	ISBN
S.B. Kayne	Pharmacy business	Pharmaceutical	2006	
	management	Press		
Κυριόπουλος	Τα οικονομικά της	Εκδόσεις		
Γιάννης, Γείτονα	υγείας	Παπαζήση		
Μαίρη				
Karen Rascati	Essentials of			

1		
Pharmacoeconomics		

Recommended Textbooks/Reading:

Authors	Title	Publisher	Year	ISBN
M.A. Chisholm-	Pharmacy	Jones &	2010	
Burns, A.M.	Management,	Bartlett		
Vaillancourt, M.	Leadership, Marketing	Publishers		
Shepherd	and Finance			