



Study program: Integrated Academic Studies in Medicine			
Course title: Pharmacoeconomics			
Teacher: Zdenko S. Tomić, Olga J. Horvat, Boris Ž. Milijašević			
Course status: elective			
ECTS Credits: 3			
Condition:			
Course aim To provide students with knowledge on basic principles and importance of pharmacoeconomics.			
Expected outcome of the course Students should acquire knowledge on basic principles of conducting pharmacoeconomy research, to be able to analyze data obtained in pharmacoeconomy research. Students should be able to perform pharmacoepidemiological analysis for particular geographic area or healthcare institution.			
Course description <i>Theoretical education:</i> Pharmacoeconomical principles in creating lists of drugs. Information systems for monitoring drug use at national level - importance and possibilities. Principles of pharmacoepidemiological drug monitoring. The importance and possibilities of analyzing pharmacoepidemiological data with special emphasis on pharmacoeconomical evaluations. The concept of ATC/DDD classification and drug labelling. Definition of adverse drug effects. Post-marketing drug monitoring. The impact of adverse effects on pharmacoeconomical analysis. Basic principles of pharmacoeconomics. Principles of pharmacoeconomical analysis – cost of treatment, cost of minimization, costs - effectiveness relationship, costs and benefits, costs and usability. Effects of pharmacological properties of drugs on therapy expenses. Effects of pharmaceutical formulations on the cost of treatment. QUALY- importance, calculation principles. <i>Practical education:</i> Drug registration, licensing, procedures. Evidence based medicine. Principles of controlled clinical studies. Principles of meta-analysis. Implementation of results of clinical trials and meta-analysis into pharmacotherapeutic/pharmacoeconomic guidelines. Drug prices – international comparison. Specific characteristics of pharmacoepidemiology in outpatient and hospital practice. Specific characteristics of pharmacoeconomic calculations of particular pharmaceutical forms - combinations, drops, dermatological preparations, etc. Adverse effects risk assessment. Costs of adverse effects. Drug therapy risk assessment. Treatment cost assessment. Application of cost-minimization analysis. Application of cost-effectiveness analysis. Application of cost-benefit analysis. Application of cost-usability analysis. Assessing the impact of therapy on the quality of life.			
Literature <i>Compulsory</i> 1. Vogenberg F.R. Introduction to Applied Pharmacoeconomics. New York: Mc. Grow-Hill; 2001.; 2. Berger ML, Bingefors K, Hedblom EC, Pashos CL, Torrance GW. Health Care Cost, Quality, and Outcomes. Lawrenceville NJ: ISPOR Book of Terms; 2003.			
Number of active classes		Theoretical classes: 15	Practical classes: 30
Teaching methods Theoretical and practical			
Student activity assessment (maximally 100 points)			
Pre-exam activities	points	Final exam	points
Lectures	15	Written	70
Practices	15	Oral	
Colloquium		Other	
Essay	(2x35)		