

Study program: Integrated academic studies in medicine			
Type and level of the study program: integrated academic studies			
Course title: Pharmacoeconomics (M5-PHECO)			
Teacher: Tomić S. Zdenko, Milijašević Ž. Boris			
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 pharmacoepidemiological research, to be able to analyze data obtained in pharmacoepidemiological 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: exercises, other forms of education, research related activities:</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 FR. Introduction to Applied Pharmacoeconomics, McGraw-Hill com. New York 2001. 2. Bergek ML, Bingerfors K, Hedblow EC, Pashos CL, Torrence GW (eds.). Health Care Cost, Quality and outcomes. ISPOR, USA 2003. <i>Additional</i> -			
Number of active classes			Other:
Lectures: 15	Practice: 30	Other types of teaching:	
Teaching methods Theoretical and practical			
Student activity assessment (maximally 100 points)			
Pre-exam activities	points	Final exam	points
Lectures	5	Written	
Practices	5	Oral	40
Colloquium		Other	
Essay	50		