

UNIVERSITY OF ZAGREB SCHOOL OF MEDICINE

Plan of the course

Pharmacoeconomics

Academic year **2016/2017**

prof. dr. sc. Stjepan Orešković

I. COURSE AIMS

Name of the course: PHARMACOECONOMICS

Planned schedule: 25 hours (8 hours of lectures, 12 hours of seminars, 5 practicals)

Type of teaching: interactive lectures and seminars

Course duration: From 5 May-19 May 2017.

II. COURSE STRUCTURE

Course hours:

Lectures: 8

Seminar: 12

Practicum: 5

Total hours: 25

Planned schedule: 25 hours (8 hours of lectures, 12 hours of seminars, 5 practicals)

III. PLAN OF THE COURSE AND COURSE SCHEDULE

BLOCKS OF THE COURSE

Number of blocks: 1

Block number	Start	End
1.	5.5.2017	19.5.2017

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1.	5.5.2017	19.5.2017

BLOCKS OF THE COURSE SCHEME

Block 1

Date	Time	Group	Course hours type	Theme	Teaching staff
Friday 5.5.2017.	09:00-11:15; ŠNZ A prizemlje		Lectures	Pharmacoeconomics in the life of physician and patient	doc. dr. sc. Ivana Božičević

Date	Time	Group	Course hours type	Theme	Teaching staff
	11:30-13:00; ŠNZ A prizemlje		Lectures	Methods of pharmacoeconomics evaluation	prof. dr. sc. Miroslav Mastilica
	13:15-15:30; ŠNZ A prizemlje		Seminar	Methods of pharmacoeconomics evaluation	prof. dr. sc. Miroslav Mastilica
Friday 12.5.2017.	09:00-10:30; ŠNZ K		Lectures	Pharmacoeconomics in the life of physician and patient	doc. dr. sc. Ivana Božičević
	10:45-12:15; ŠNZ K		Seminar	Overview of leading sources of pharmacoeconomic analysis.	doc. dr. sc. Ivana Božičević
	13:00-13:45; ŠNZ K		Seminar	QALYs, DALYs and their role in drug assessment	izv. prof. dr. sc. Danijela Štimac
	13:45-16:00; ŠNZ K		Practicum	QALYs, DALYs and their role in drug assessment	izv. prof. dr. sc. Danijela Štimac
Friday 19.5.2017.	09:00-11:15; ŠNZ A prizemlje		Seminar	Principles of EBM and their relevance for pharmacoeconomic evaluation of therapeutic interventions	doc. dr. sc. Robert Likić
	12:00-13:30; ŠNZ A prizemlje		Seminar	Impacts of irrational drug prescription on the community health system and sustainability of the health system finance	mr. sc. Vanesa Benković
	14:00-15:30; ŠNZ A prizemlje		Seminar	Drug prescription study of one of the leading drugs in Croatia – group work	doc. dr. sc. Venija Cerovečki Nekić
	15:30-17:00; ŠNZ A prizemlje		Practicum	Possibilities of controlling irrational drug use : public health, family medicine, clinical and economic methods	doc. dr. sc. Venija Cerovečki Nekić

Lecture topics:

- Methods of pharmacoeconomics evaluation (2L+2S)
- Overview of leading sources of pharmacoeconomic analysis. (2L)
- Principles of EBM and their relevance for pharmacoeconomic evaluation of therapeutic interventions (2P)
- Pharmacoeconomics in the life of physician and patient (4L + 1S)
- Possibilities of controlling irrational drug use : public health, family medicine, clinical and economic methods (2S)
- QALYs, DALYs and their role in drug assessment (2P)
- Decision-making methods and criteria for putting a drug on a positive list (reference pricing, positive list, negative list, copayment, participation and drugs...) (2S)
- Drug prescription study of one of the leading drugs in Croatia – group work (2S)
- Rational decision-making when choosing a drug for a patient (2S)
- Impacts of irrational drug prescription on the community health system and sustainability of the health system finance (1S + 1P)

IV. EXAMINATIONS

Evaluation

- Evaluation of the entire course in written form
- Oral evaluation and free comments

Final exam:

- **Written exam (essay 2500 word) + 2 seminars during classes**

Exam terms:

- 2 June 2017
- 16 July 2017
- 15 September 2017

V./I. LIST OF LECTURERS AND TEACHING STAFF

1. prof. dr. sc. Stjepan Orešković
2. doc. dr. sc. Ivana Božičević
3. doc. dr. sc. Robert Likić
4. izv. prof. dr. sc. Danijela Štimac
5. doc. dr. sc. Venija Cerovečki Nekić
6. doc. dr. sc. Zlata Ožvačić Adžić
7. prof. dr. sc. Miroslav Mastilica

V./II EXTERNAL ASSOCIATES:

1. mr. sc. Vanesa Benković
2. Csaba Dohoczky, dr. med.

V./III UNTENURED LECTURERS:

VI. LITERATURE

Oreskovic, S., I. Bozicevic, M. Mastilica, I. Bakran, S. G. Popovic, R. Ben-Joseph. (2002) Health care resources use by asthmatics in Croatia. *Journal of Asthma* 39(4):351-8.

Oreškovic S. Farmakoekonomika - koncepcije, metode i proturječnosti. *Medicus* 2002;11:27-46

ADDITIONAL LITERATURE

- M Nuijten, A Szende, J Kosa, Z Mogyorosy, B Kramberger, K Nemecek, D Tomek, S Oreskovic, M Laskowska Health care reform in six central European countries: A focus on health economic requirements in the drug pricing and reimbursement processes. *European Journal of Health Economics*. 4 (4):286-291.
- Panos Kanavos. Financing Pharmaceuticals In

Transition Economies; *Croatian Medical Journal* 1999;

40: 244-259

- Ingrid Rosian, Claudia Habl, Sabine Vogler. Pharmaceuticals: Market Control in Nine European Countries; Osterreichisches Bundesinstitut fur Gesundheitswesen Austrian Health Institute. Vienna; November, 1998.
- Ben-Joseph R, Oreškovic S, Božicevic I, Mastilica M, Bakran I, Sulic-Pintaric Z, Kukac L, Alemao E. Economic costs of asthma management in Croatia. *Allergy* 2000;55(suppl 63):262.
- Mandic D, Oreškovic S, Francetic I. Oral antibiotic prescription in ambulatory care in 1999 - a contribution to the development of methods for drug consumption and prescription surveillance monitoring. *Collegium Antropologicum* 2001; 25: 459-65.
- Panos Kanavos. Financing Pharmaceuticals in Transition Economies. *Croatian Medical Journal* 1999; 40:244-259.

- Ramesh Govindaraj. Croatian Pharmaceutical Sector – Issues and Options. Pharmaceutical Issues Options. The World Bank
- D. Štimac, I. Vukušić, J. Čulig. Outpatient use of systemic antibiotics in Croatia. Pharmacy World & Science, 2005; 27:230-5.
- I. Vukušić, D. Štimac, J. Čulig. Cost-Efficiency of Nonsteroidal Anti-Inflammatory Drug Prescribing in Zagreb, Croatia. Coll Antropol 2005; 29: 143-
- Danijela Štimac, Ivan Vukušić, Josip Čulig, Zvonimir Šostar, Mila Bucalić. Outpatient Utilization of Psychopharmaceuticals: Comparison between Croatia and Scandinavian Countries (2001-2003). Coll. Antropol. 2009; Vol. 33: 237-243.
- Danijela Štimac, Josip Čulig, Ivan Vukušić, Zvonimir Šostar, Siniša Tomić and Mila Bucalić. Outpatient Utilization Patterns of the Six Main ATC Drug Groups in Republic of Croatia, City of Zagreb, and Croatia Counties in 2004. Coll. Antropol. 2009; Vol. 33: 1197-1204.

Danijela Štimac, Marina Polić-Vžintin, Marija Škes, Albert Cattunar, Robert Cerović, Dražen Stojanović. Utilization of cardiovascular drugs in Zagreb 2001-2005, Acta Cardiologica 2010; 65(2): 193-201.