Study program: Integrated academic study of Pharmacy	

Course title: Pharmaceutical Informatics

Teacher: Božana S Nikolić, Zdenko S Tomić

Course status: elective

ECTS credits: 3

Condition: -

Course aim:
To familiarize students with good information practices in the promotion of rational pharmacotherapy (safe, effective and economically justified).

Expected outcome of the course:
Upon completion of the course, students will be trained to use authoritative sources of information in solving problems related to drug use, apply the concept of evidence-based pharmacotherapy, collect, evaluate and report information on the safe and reliable use of the drug to patients and health professionals.

Course description
Theoretical education
1. Informatics in medicine and pharmacy, the importance of information for healthcare
2. Drug information: legal aspects
3. Drug information: ethical aspects
4. Concept of evidence-based pharmacotherapy
5. Design of preclinical and clinical drug trials
6. Tools to assessment quality of study methodology
7. Descriptive statistics in clinical therapy trials: data interpretation
8. Inferential statistics in clinical therapy trials: data interpretation
9. Tools to assessment clinical significance of study results
10. Tools for assessment adverse drug reactions

Practical education
1. Introduction to the pharmaceutical informatics, search and use of information
2. The application of the concept of evidence based pharmacotherapy – critical assessment of guide
3. The application of the concept of evidence based pharmacotherapy – critical assessment of efficiency study
4. The application of the concept of evidence based pharmacotherapy – critical assessment of safety study
5. The application of the concept of evidence based pharmacotherapy – critical assessment of pharmacoeconomic study
6. Pharmacoinformatics center in a health system, pharmaceutical industry, university, regulatory authorities: survey of activities
7. Example of drug information consult documentation form, standard questions
8. Example drug monograph
9. Identifying information regarding the new, innovative drugs
10. Preparing a bibliography

Literature
Compulsory
1. Gabay M. The clinical practice of drug information. Jones & Bartlett Learning, 2015.
Additional
1. Internal script

Number of active classes	**Theoretical classes:** 30	**Practical classes:** 15

Teaching methods:
Lectures, interactive classes, practical classes, case analysis

Student activity assessment (maximally 100 points)

Pre-exam activities	Points	Final exam	Points
Lectures	10	Written	50
Practices	20	Oral	
Colloquium		....	

Essay	20		