Course Unit Descriptor

Study Programme: Master Academic Studies in Biochemistry

Course Unit Title: Phytotherapy

Course Unit Code: IB-511

Name of Lecturer(s): full professor, Neda Mimica-Dukić, assistant professor Nataša Simin

Type and Level of Studies: Master of Science Degree

Course Status (compulsory/elective): elective

Semester (winter/summer): winter

Language of instruction: English

Mode of course unit delivery (face-to-face/distance learning): Face-to-face

Number of ECTS Allocated: 6

Prerequisites: None

Course Aims:

To provide students with knowledge of basics of modern phytotherapy, particularly rational phytotherapy. To introduce students with the latest scientific achievements in application of drugs, phytopreparations and compounds isolated from plants in the treatment of various diseases, with the proposed mechanism of action. To enable students to comprehend the side effects of improper use of phytopreparations.

Learning Outcomes:

After successful completion of this course the student is able to: (1) explain the role and place of phytopreparations in modern therapies (2) point to the significance of rational phytotherapy, (3) describe certain mechanisms of action of phytopreparations, (4) describe the side effects (contraindications) from the use of certain phytopharmaceutical.

Syllabus:

Theory

Phytotherapy through history. Definition and types of phytotherapy and phytopreparation. The main forms of phytotherapy. Basics of rational phytotherapy. Phytopreparations in the treatment of central nervous system diseases, mechanism of action. Phytopreparations in the treatment of cardiovascular diseases, disorders of lipid metabolism, digestive disorders, respiratory and urinary tract infections, skin diseases. Mechanisms of action, therapeutical dosage and side effects. Drugs and herbal remedies in chemoprevention of cancer deseases.

Practice

Analysis of commercial phytopreparates. Evaluation of the quality of certain phytopharmaceuticals in accordance to Pharmacopeia. Independent product development.

Required Reading:

- 1. Heinrich M., Barnes J., Gibbons, S., Williamson, E. Fundamentals of Pharmacognosy and Phytotherapy, 2nd Edition, . Elsevier, 2012
- 2. Capasso, F., Gaginella, T. S, Grandolini, G., Izzo, A. A: Phytotherapy. A quick reference to herbal medicine. Springer Werlag, 2003.

Weekly Contact Hours: 5	5 (75) Lectures: 2 (30)	Pract	ical work: 3 (45)			
Teaching Methods: Lectures, laboratory work, seminar(s)						
Knowledge Assessment (maximum of 100 points): 100						
Pre-exam obligations	points	Final exam	points			

Active class	5	written exam	65
participation			
Practical work	15	oral exam	
Preliminary exam(s)			
Seminar(s)	15		

The methods of knowledge assessment may differ; the table presents only some of the options: written exam, oral exam, project presentation, seminars, etc.