

Course Unit Descriptor

Study Programme: Doctoral Academic Studies in Chemistry			
Course Unit Title: Selected chapters of biochemistry			
Course Unit Code: DSH-721			
Name of Lecturer(s): Professor Neda Mimica-Dukić, Professor Suzana Jovanović-Šanta			
Type and Level of Studies: PhD 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: 15			
Prerequisites: -			
Course Aims: The aim of the course is to enable students to deepen and integrate knowledge about biosynthetic pathways and the role of particular classes of biomolecules.			
Learning Outcomes: After the successful completion of the course, the student should be able to apply knowledge from the relevant chapters of biochemistry in the preparation of the doctoral dissertation, as well as to master them and connect with the contents of other subjects.			
Syllabus: <i>Theory</i> It focuses on specific areas of biochemistry, depending on the research area of the doctoral dissertation: Bioenergy; Metabolism of carbohydrate, lipids, nucleic acids, proteins; Regulation of metabolic processes, role of enzymes, hormones, signal transmission. <i>Practice</i> Study the available data and develop a mini-project on a topic related to the doctoral thesis.			
Required Reading: 1. D. Voet and J. Voet: Biochemistry, John Wiley and Sons, 2004, 3rd ed. 2. L. Lehninger, D. L. Nelson, M. M. Cox, K. Ocorr: Principles of Biochemistry , W H Freeman & Co 2005 3. J.M. Berg, J. L. Tymoczko, L. Stryer: Biochemistry, Fifth Edition ,W.H.Freeman & Co., 2002. 4. Review and original scientific articles from selected research areas			
Weekly Contact Hours: 10	Lectures: 5	Practical work: 5	
Teaching Methods: Lectures, laboratory work, study projects			
Knowledge Assessment (maximum of 100 points): 100			
Pre-exam obligations	points	Final exam	points
Active class participation		written exam	
Project presentation	50	oral exam	50
Preliminary exam(s)		

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