

(Table 5.2) Course unit description

Study program : Doctoral studies			
Course unit: Selected chapters of Bioinorganic Chemistry			
Teacher in charge : prof. dr Srecko Trifunovic			
Language of instruction (<i>English or other foreign language</i>) Serbian			
ECTS: 10			
Course unit objective Course objectives are to teach students the knowledge and skills that will enable them to supplement their knowledge of inorganic, organic and biochemistry and to establish a proper relationship to inorganic substances have specific biological and pharmacological significance, as well as to familiarize themselves with the guidelines in the synthesis of new pharmacological important compounds.			
Learning outcomes of Course unit Knowledge gained in this course will enable students to take a stand on compounds that surround them and will know istivremeno chemical and physiological behavior of inorganic compounds in the cell and the organism as a whole. Also, students strike will learn about the most crucial results of the field bionorganske chemistry. Students will master the techniques and skills laboratoriskog work of preparing individual preparation of biological and physiological significance. Rationality (choice of rational amounts of reactants, ...), logic (causal connection method of Compound), accountability (using appropriate amounts of reactants, understanding the effect of the compound), the limits of their own knowledge (understanding that it is impossible to know everything and that they need information still available).			
Course unit contents <i>Bioelement. Bioligands. The biological function of metals. Metalloenzymes that catalyze the hydrolysis processes. Metalloenzymes that catalyze oxidation-reduction processes. Transportation metals and their STORAGE. Metals and nematali in biology and medicine. The application of metal compounds in the treatment of certain diseases. The consequences of excess and deficiencies of metals in the body.</i>			
Literature 1. W. Kaim, B. Schwederski, Bioinorganic Chemistry: Inorganic elements and the chemistry of life, Wiley, 2006. 2. S. R. Trifunovic, Bioinorganic Chemistry, reviewed script Kragujevac Faculty of Science, 1998; Jacimirski (translation J. Vucetic) 3. Jacimirski, Introduction to Bioinorganic Chemistry, Chemical Engineering, Belgrade, 1991;			
Number of active teaching hours			Other classes
Lectures: 75	Practice:	Other forms of classes	
Independent work:			
Teaching methods			
Examination methods (maximum 100 points)			
Exam prerequisites	No. of points:	Final exam	No. of points:
Student's activity during lectures		oral examination	40
practical classes/tests		written examination	20
Seminars/homework	30	
Project	10		
Other			
Grading system			
Grade	No. of points	Description	
10	...	Excellent	
9	...	Exceptionally good	
8	...	Very good	
7	...	Good	
6	...	Passing	
5	...	Failing	