

**(Table 5.2) Course unit description**

Study program : Chemistry				
Type and level of studies: Master in chemistry				
<b>Course unit: : Inorganic synthesis and methods for characterization</b>				
<b>Teacher in charge : Prof. Dr Biljana Petrovic</b>				
Language of instruction: English				
ECTS: 6				
Prerequisites: None				
<i>(Winter Semester or Summer Semester): Summer semestar</i>				
<b>Course unit objective</b>				
The main goal of course is to acquire modern knowledge in the field of synthesis of various classes of inorganic compounds and methods of their purification and characterization as well as enabling students for independent synthesis and analysis of inorganic compounds.				
<b>Learning outcomes of Course unit</b>				
The outcomes of the course is to train students for the preparation and characterization of pure, on a laboratory level, elements and alloys as well as different classes of simple and complex inorganic compounds.				
<b>Course unit contents</b>				
<i>Theoretical classes</i>				
The concept and importance of synthesis in inorganic chemistry. Equipment in inorganic synthesis. Solvents. Methods of obtaining, purification and characterization: elements and alloys, different classes of prime compounds, double salts, chelates and other complex compounds. Chromatography. TLC. CD. MCD. HPLC. ERP. Raman spectroscopy, cyclic voltammetry. X-ray-structural analysis.				
<i>Practical classes</i>				
Preparation, purification and characterization of elements and alloys, different classes of prime compounds, double salts, chelates and other complex compounds.				
<b>Literature</b>				
1. W. L. Jolly, Synthesis and characterization of inorganic compounds, Prentice Hall International, Hearts 1970.				
<b>Number of active teaching hours</b>				<b>Other classes /</b>
Lectures: 2	Practice: 2	Other forms of classes: /	Independent work: /	
<b>Teaching methods</b>				
Lectures, Laboeratorz practise, Seminars				
<b>Examination methods ( maximum 100 points)</b>				
<b>Exam prerequisites</b>	<b>No. of points:</b>	<b>Final exam</b>	<b>No. of points:</b>	
Student's activity during lectures	<b>10</b>	oral examination	<b>15</b>	
practical classes/tests	<b>20</b>	written examination	<b>15</b>	
Seminars/homework	<b>10</b>	.....		
Project				
Other (kolokvia)	<b>20</b>			
<b>Grading system</b>				
<b>Grade</b>	<b>No. of points</b>	<b>Description</b>		
<b>10</b>	<b>91-100</b>	Excellent		
<b>9</b>	<b>81-90</b>	Exceptionally good		
<b>8</b>	<b>71-80</b>	Very good		
<b>7</b>	<b>61-70</b>	Good		
<b>6</b>	<b>51-60</b>	Passing		
<b>5</b>	<b>0-50</b>	Failing		