(Table 5.2) Course unit description

Study program : Chemistry				
Type and level of studies: Master academic studies				
Course unit: Intermediates in organic chemistry				
Teacher in charge : Milan D. Joksović				
Language of instruction: *English*				
ECTS: 6				
Prerequisites: Student of master academic studies				
Semester: *Winter Semester*				
Course unit objective Acquiring the students with the methods of intermediates generation in organic chemistry and their importance for the generalization of numerous reactions.				
Learning outcomes of Course unit Mastering the process of intermediates generation, stabilization methods and their importance in synthetic chemistry.				
Course unit contents *Theoretical classes* Free radicals, structure and preparation. Rearrangement reactions and radicals' stabilization reactions. Carbenium ions, structure and preparation. Rearrangement reactions and carbenium ions' stabilization reactions. Preparation of carbenes, structure and stabilization methods. *Practical classes* Practical classes are of theoretical nature and involve the analysis of intermediate species in corresponding reactions and predicting the possible products in different reaction conditions. Students will work on independent projects, along with continuous advising with the professor and group discussions with other students about certain questions regarding the modern concept of chemistry of intermediates in comparison to the old concept of chemical compounds.				
Literature 1. K. P. C. Vollhardt, N. Shore, W. H. Freeman and Company, *Organic Chemistry*, II and IV edition, (1994, 2003). 2. N. S. Isaac, *Reactive Intermediates in Organic Chemistry*, John Wiley Sons, London, 1975.				
Number of active teaching hours				**Other classes**
Lectures: 2	Practice: 2	Other forms of classes:	Independent work:	
Teaching methods Lectures, seminars and practical classes.				

Examination methods (maximum 100 points)			
Exam prerequisites	**No. of points:**	**Final exam**	**No. of points:**
Student's activity during lectures	**10**	oral examination	*30*
practical classes/tests		written examination	*30*
Seminars/homework	**30**	.....	
Project			
Other			

Grading system		
Grade	**No. of points**	**Description**
10	**91-100**	Excellent
9	**81-90**	Exceptionally good
8	**71-80**	Very good
7	**61-70**	Good
6	**51-60**	Passing
5	**0-50**	Failing