

Course title: Selected chemical experiments in teaching				
Lecturer: Mirjana Segedinac				
Status: elective				
ECTS: 15				
Requirements: none				
Learning objectives Development of the structure of knowledge about chemical experiments as a primary source of knowledge in specific problem situations.				
Learning outcomes Students will develop the ability to apply chemical experiments in specific chemical disciplines and use specific chemical experiment techniques in teaching.				
Syllabus <i>Theoretical instruction:</i> Planning, organization and students' own demonstration of chemical experiments in a specific chemical science discipline will be selected in accordance with the theme of the doctoral dissertation. Criteria for selection of experiments. Space and equipment. Measures of protection. Chemical experiments in professional education of different profiles of secondary vocational education. Chemical experiments in undergraduate and graduate studies. Special techniques of chemical experiment in teaching. Chemical experiments in optical projection. Simulation of chemical experiments. Computer based simulations - needs.				
Suggested literature: 1. Lister, T. <i>Classic Chemistry Demonstrations</i> , in C. O'Driscoll & N. Reed (eds.), The Royal Society of Chemistry, London, 1995. 2. Bell B., Gunter, C., <i>Organic Chemistry: Microscience Experiments, Teaching and Learning Materials</i> , in J.D. Bradley & J. Spriggs (eds.), University of the Witwatersrand, Johannesburg, 2006				
Weekly teaching load				Other:
Lectures: 5	Exercises:	Other forms of teaching:	Student research: 5	
Teaching methodology Interactive methods in the lectures and exercises, individual work of students in the framework of practical training, individual consultations.				
Grading (maximal number of points 100)				
Practical teaching 20 points, Seminar 20 points, Oral exam 60 points				