



УНИВЕРЗИТЕТ У БАЊОЈ ЛУЦИ
UNIVERSITY OF BANJA LUKA
ПРИРОДНО-МАТЕМАТИЧКИ ФАКУЛТЕТ
FACULTY OF NATURAL SCIENCES AND MATHEMATICS



CHEMISTRY DEPARTMENT

FIRST CYCLE OF STUDY

Chemistry Education

Course name	School Experiments in Chemistry Teaching			
Course code	Course status	Semester	Hours of instruction	ECTS
1C16HNS408	required	VII	2+4	7
Teacher(s)	Prof. Saša Zeljković PhD			

Prerequisite course(s)	Entry requirements
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Course goals
Introduction to the methodological approach in the selection, performance and processing of school experiments for teaching chemistry in primary and secondary school, given the age and abilities of students, but also the available material resources.

Learning outcomes
The student is able to assess the safety of laboratory work and organize a school laboratory. The student knows how to use a computer in the school laboratory and internet databases and literature as a source of school experiments. The student has formed a collection of experiments for use in future work at the school.

Course content
Safety and protection measures at work. Appearance, content and organization of the school chemical laboratory. Types of school experiments. Exam preparation. Demonstration trials. Demonstration experiments in the popularization of chemistry. Individual and group experiments. Experiments in poorly equipped laboratories. Experiments in chemistry teaching for above and below average students. The chemistry of everyday life through experiments. Chemistry in the house. Literature and the Internet. Computers and video presentations in chemistry teaching. Demonstration of the software, chemical libraries and databases use. Laboratory experiments in knowledge testing. Experimental exercises: Preparation and work on experiments suitable for primary and secondary school students.

Teaching methods
Lectures, laboratory exercises, seminar work, practical presentation of selected experiments.

Books and other learning materials
R.Halaši, M.Kesler: Methodology of teaching chemistry and demonstration experiments (in Serbian), Nauchna knjiga, Belgrade 1976. M. Sikirica: Methodology of teaching chemistry: a manual for teachers of chemistry (in Croatian), Školska knjiga, Zagreb, 2003. Internal practicum for laboratory exercises (in Serbian).

Course activities and grading method
Teaching activity refers to the laboratory exercises. The seminar paper contains the experiment preparation on a given topic. Teaching activity and seminar work are a condition for taking the final exam. The final exam consists of a practical presentation of laboratory experiments and an oral exam. The results of these tests are included in the final grade only if they exceed 50% of the points provided for a given form of test during the semester.

Seminar paper	35	Final exam	60
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Laboratory activity	5		
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Additional course notes
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Name of the teacher who prepared this form	Saša Zeljković
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