



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



CHEMISTRY DEPARTMENT | FIRST CYCLE OF STUDY | Chemistry/Chemistry Education

Course name	Sampling and Preparation of Samples for Chemical Analysis			
Course code	Course status	Semester	Hours of instruction	ECTS
1C16HOS1101	required	IV	2+3	6
Teacher(s)	Prof. Mališa Antić PhD			

Prerequisite course(s)	Entry requirements
Analytical Chemistry 1 and Analytical Chemistry 2	Attended courses

Course goals

Introduction to methods for taking and storing samples (sampling) in solid, liquid and gaseous state. Introduction to methods for preparation and purification of solid, liquid and gaseous samples for instrumental analysis.

Learning outcomes

After passing the exam in course *Sampling and preparation of samples for chemical analysis*, the student should have the ability to independently take and prepare a sample for chemical analysis.

Course content

Methods for taking samples (sampling) in solid, liquid and gaseous state. Storage and protection of samples. Preparation of inorganic samples in solid state (soil, sediment) for instrumental analysis. Preparation of inorganic samples in liquid state (water) for instrumental analysis. Preparation of organic samples in solid state for instrumental analysis. Preparation of low volatile organic samples in liquid state for instrumental analysis. Preparation of volatile organic samples in liquid state for analysis. Preparation of gaseous samples for chemical analysis

Teaching methods

Lectures, seminar work, field and laboratory exercises.

Books and other learning materials

1. L.H. Keith: **Environmental Sampling and Analysis, A Practical Guide**, Lewis Publishers, Chelsea, 1991.
2. W.G. Cochran: **Sampling Techniques**, Wiley, New York, 1977.
3. F. Rouessac, A. Rouessac: **Chemical Analysis – Modern Instrumentation Methods and Techniques**, Wiley, Chichester, 2007.

Course activities and grading method

Seminary work. Oral exam.

Activity	10	Tests	30
		Final exam	60

Additional course notes

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Name of the teacher who prepared this form | Mališa Antić