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

Course name	**Mathematics 1**			
Course code	**Course status**	**Semester**	**Hours of instruction**	**ECTS**
1C16HOS332	required	I	2+2	6
Teacher(s)	**Prof. Duško Bogdanić PhD**			

Prerequisite course(s)		Entry requrements
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Course goals

The goal of the course is to help students gain the basic knowledge of elementary mathematics (more specifically, linear algebra and analytic geometry) which they need in order to understand the subject matter of other courses they will take during their studies.

Learning outcomes

Students will gain the basic knowledge of mathematics which will make it possible for them to understand the subject matter of other courses they will take during their studies.

Course content

Sets.
Natural, whole and rational numbers.
Real and complex numbers.
Systems of linear equations
Matrices and determinants.
Vectors and coordinate systems.
Linear dependence of vectors.
Scalar and vector product.
The equation of a line in the plane.
The equation of a plane in the space.
Second degree curves.
Second degree surfaces.
Applications in chemistry.

Teaching methods

Lectures, practical classes, and revision.

Books and other learning materials

1.M. Janjic: **Matematika 1**, University of Banja Luka, 2000.
2. D. Adnadjevic, A.Vucic: **Matematika 1 za studente hemije**, University of Belgrade.

Course activities and grading method

Colloquia, written exam, and oral exam.

Activity	10	**Tests**	30
		Final exam	60

Additional course notes

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Name of the teacher who prepared this form	Duško Bogdanić