Level: bachelor

Course title: Selected Mathematics contents

Status: elective

ECTS: 5

Requirements: none

Learning objectives

To enable students to solve mathematical problems by using computer and to apply the solutions in appropriate chemistry contents.

Learning outcomes

The students should have developed:

General abilities: basic knowledge of this field, following the literature, analysis of various solutions and the choice of most adequate solution, application in practice and other subjects. **Subject-specific abilities:** advance mathematical thinking, solving advanced mathematical problems necessary for mathematical modelling process on the chemical problems.

Syllabus

Theoretical instruction

- Matrices and matrix equations with mathematical modelling in chemistry.
- Graphing functions from elementary functions to complicated ones by using software GeoGebra, and mathematical modelling in chemistry.
- Graphing derivative and integrals, by using the GeoGebra software, and mathematical modelling in chemistry.

Practical instruction

Problem solving.

Weekly teaching load				Other:
Lectures:	Exercises:	Other forms of	Student research:	
1	2	teaching:		