Course name: Principles of teaching mathematics

Lecturers: Miodrag Mateljević

Status: Optional

ECTS: 8

Attendance prerequisites: -

Course aims: Acquisition of didactical knowledge and skills necessary for quality work in the classroom and further improvement of the profession.

Course outcome: Upon completion of the course the students improved their didactic knowledge.

Course content:

Aims of teaching mathematics

Teaching of mathematics in developed school systems

Principles of training

- active learning
- the best stimulus
- related phases

Problem solving

- problem-oriented teaching
- characteristic and examples of mathematical problems in real-world contexts
- problem solving strategies
- exploratory work in classroom organization of mini projects

Developing positive attitudes towards mathematics

Assessment

Literature:

- 1. Božić, M, Pavlović-Babić, D, Anić, I, Radak, V, Metodički praktikum za nastvanike matematike (u pripremi)
- 2. Polya, G, Mathematical Discovery, On understanding, learning and teaching problem solving, John Wiley & Sons, New York (etc.), 1962
- 3. Marjanović, M, Metodika matematike 1. deo, Učiteljski fakultet, Beograd, 1996.
- 4. Marjanović, M, Metodika matematike 2. deo, Učiteljski fakultet, Beograd, 1996.
- 5. Schoenfeld, A. H. (Ed.), Assessing Mathematical proficiency, Cambridge University Press, 2007

Number of hours: 7Lectures: 3Tutorials: 2Laboratory: -Research: 2Teaching and learning methods: Frontal / Tutorial

Assessment (maximal 100 points)			
Course assignments	points	Final exam	points
Lectures	10	Written exam	-
Exercises / Tutorials	30	Oral exam	30
Colloquia	-	Written-oral exam	-
Essay / Project	30		