Study Programme: Master in Elementary Teacher

**Course Unit Title:** Contemporary methodology of teaching mathematics

Course Unit Code: MU-4-1-1-0

Name of Lecturer(s): Valéria Pintér Krekity, Zita Diana

**Type and Level of Studies:** Master Studies (MA)

Course Status (compulsory/elective): Elective- basic subject of the course

Semester (winter/summer): Winter

Language of instruction: Hungarian

Mode of course unit delivery (face-to-face/distance learning): Face-to-face learning

Number of ECTS Allocated: 12

## **Prerequisites: -**

Course Aims: Introduction to contemporary trends in teaching mathematics worldwide.

# Learning Outcomes:

Students able to develop and implement methodical scientific and professional tasks in mathematics as well as independent researches in the field of teaching mathematics. The basic task of the course is to enable students to connect theory and practice of teaching mathematics.

# Syllabus:

Theory

Didactic and operational principles of teaching mathematics. Types of learning, frames and learning conditions, learning phases, implementation and transfer of knowledge. Learning mathematical concepts, rules, and problem solving in mathematics teaching. Basic management and modernization of in-class teaching. Changes in methods, forms of work and organization using new technologies. Mathematical-cybernetic modeling in teaching. Evaluation of teaching mathematics. Basic methodology of research and improvement of in-class teaching.

# Practice

Elaboration and presentation of topics selected by the student and discussions.

# **Required Reading:**

# Compulsory:

Pintér, J. – Pintér Krekity, V. (2010): Matematikadidaktika, Forum Könyvkiadó, Újvidék és Újvidéki Egyetem, Magyar Tannyelvű Tanítóképző Kar, Szabadka.

Scientific articles published in international and Serbian academic literature.

# Optional:

Newest researches and scientific articles related to the topic and published online.

Weekly Contact Hours: 7 (105)		Lectures: 4 (60)		Practical work: 3 (45)	
Teaching Methods:					
Lecture, practice, presentation, discussion, individual work, consultation.					
Knowledge Assessment (maximum of 100 points): 100					
Pre-exam	points		Final exam		points
obligations					
Active class	10		written exam		
participation	10				
Practical work	10		oral exam		50
Preliminary exam(s)					
Seminar(s)	30				
The methods of knowledge assessment may differ; the table presents only some of the options: written exam,					
oral exam, project presentation, seminars, etc.					