Study program: Class Teacher Education

Type and level of studies: Master studies, second cycle degree program

Course unit: Contemporary Approaches in Mathematics Teaching

Teacher in charge: Aleksandra Mihajlovic, PhD, Full Professor

Language of instruction: English

ECTS credits and course status: 6 ECTS, elective

Prerequisites: /

Semester: Summer semester (II)

Course unit objective

To enhance students knowledge and understanding of innovative teaching approaches and current research and implications for classroom practice; to train students to be able to transform mathematical content through use of various contemporary teaching methods.

Learning outcomes of Course unit

Upon completion of this course, students will: develop ways of exploring mathematics teaching and learning, will be able to use and creatively integrate different teaching approaches, will develop their research skills.

Course unit contents

Theoretical and practical classes

Part 1 (4 credits): Contemporary teaching approaches and current researches in mathematics teaching and learning. Concept and characteristics of some teaching approaches and methods: problem oriented instruction, differentiated instruction, programmed instruction, heuristics method of teaching, open-ended approach, interdisciplinary teaching, project-based learning, inquiry-based learning.

Part 2 (2 credits): Comparative analyses of mathematical education in different countries.

Literature

Teaching student-centred mathematics : grades 3-5 / John A. Van de Wale ; Louann H. Lovin Teaching student-centred mathematics : grades K-3 / John A. Van de Walle ; LouAnn H. Lovin

Materials from lectures

Number of active				
Lectures (including tutorials): 30	Seminars: 30	Other forms of classes: /	Independent work: Independent study	Other classes: /

Teaching methods

6 x 2hrs Lectures (including tutorials, class is a combination of theoretical and practical activities), 2 x 2hrs Seminars, Independent Study

Examination methods (maximum 100 points)					
Exam prerequisites	No. of points:	Final exam	No. of points:		
Student's activity during lectures		oral examination			
practical classes/tests		written examination			
Project		2x1 word project	100		
Other					

Grading system					
Grade	Number of points	Description			
10	91-100	Excellent			
9	81-90	Exceptionally good			
8	71-80	Very good			
7	61-70	Good			
6	51-60	Passing			
5	≤50	Failing			