Study program: Class teacher Education

Type and level of studies: Master Studies

Course unit: Contemporary Approaches in Mathematics Teaching

Teacher in charge: dr Aleksandra Mihajlović, Associate Professor

Language of instruction (English or other foreign language): English

ECTS: 6

Prerequisites:

Semester (Winter Semester or Summer Semester)

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 activ				
Lectures (including tutorials): 7x2hrs	Seminars: 2x2hrs	Other forms of classes:	Independent work: 60hrs	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 2x1 word project Total Marks 100 Project Other

Grading system

Grade	No. of points	Description
10	••••	Excellent
9	****	Exceptionally good

8	****	Very good
7	****	Good
6	••••	Passing
5	••••	Failing