

Study programmes: BACHELOR STUDIES - Mathematics				
Course name: CODE M7.01 - Teaching practice of mathematics and informatics				
Lecturers: Teachers on department of didactics of mathematics				
Status: Compulsory				
ECTS: 6				
Attendance prerequisites: Analysis 1; Geometry 1; Geometry 2; Introduction to logic; Linear algebra; Elementary theory of numbers; Programming 1.				
Course aims: Acquiring the methodological and practical knowledge and skills necessary for quality teaching work and carrying out professional practice.				
Course outcome: At the end of the course students will be expected to have <ul style="list-style-type: none"> - completed their professional practice; - a deeper understanding of the basic concepts in mathematics and informatics; - acquired the knowledge and skills necessary for quality presentation of mathematical and informatics content. 				
Course content: Within the course certain contents from the mathematical and informatical curriculum in elementary and high schools are studied. At the theoretical lessons the selected topics in mathematics and informatics are studied in details, with a special emphasize on didactical preparation and methods of exposure. The way of presenting these topics is focused on deeping the understanding of basic concepts in mathematics and informatics. Thereby students become able to use educational programme packages that could be used in teaching (LaTeX, Matlab, GeoGebra, GCLC, ...). At the practical teaching lessons the students perform professional practice in mathematics and informatics. Professional practice is done in two cycles of 30 hours. Students perform one cycle of professional practice in elementary schools and perform the second cycle in high schools. Within each cycle of professional practice the students attend classes held by the teachers employed at the chosen schools. Also, students get acquainted with administrative part of work at schools. They are required to teach at least two lessons in the schools that are chosen for them. In order for a student to be sent to a professional practice it is necessary to pass a test of elementary knowledge in mathematics, as a pre-examination requirement.				
Literature: <ol style="list-style-type: none"> 1. Polya, G., <i>How to solve it (A new aspect of mathematical method)</i> , Princeton University Press, 1945. 2. Alan Sultan, Alice F. Artzt, <i>The Mathematics That Every Secondary School Math Teacher Needs To Know</i>, Routledge, Taylor & Francis, 2011. 3. Textbook and workbook in mathematics for elementary and high schools. 4. Selected papers from educational journals in mathematics (<i>Nastava matematike, The Teaching of Mathematics, ...</i>) 				
Number of hours: 6	Lectures: 0	Tutorials: 4	Practice: 2	Research: -
Teaching and learning methods: Tutorial/Practice				
Assessment (maximal 100 points)				
Course assignments	points	Final exam		points
Lectures	-	Written exam		-
Exercises / Tutorials	20	Oral exam		-
Colloquia	-	Written-oral exam		30
Professional practice	25+25			