

Program	Level		Second cycle				
	Name of the program		Mathematics Education				
<b>COURSE</b>							
Course title	<b>History of Mathematics</b>						
Course code	Semester	Course status	ECTS	Contact hours (L+AE+LE)			
EDU 531	III	Mandatory course	5	2+0+0			
Lecturer							
Course Goals	The main goal of the course is to introduce students to the evolution of modern mathematical concepts and the place and role of mathematics in the history of ideas.						
Learning Outcomes	After completing the course, the student will: - have an insight into the origin and development of modern mathematical disciplines; - be familiar with the information necessary for the professional culture of mathematicians.						
<b>COURSE CONTENT</b>							
<ul style="list-style-type: none"> <li>- Axiomatic method. Euclid's fifth postulate. Geometry of Lobachevsky. Continuum hypothesis.</li> <li>- Infinitesimal calculus. Arithmetization of Analysis</li> <li>- Coordinate method. Differential geometry.</li> <li>- From arithmetic to abstract algebra.</li> <li>- Functional analysis</li> <li>- Topology. Set-theoretic topology. Algebraic topology.</li> <li>- Measure theory and probability theory.</li> <li>- Foundations of mathematics. Logicism, Intuitionism, and Formalism Gödelov theorem.</li> <li>- Theoretical computer science.</li> <li>- Professional culture of mathematicians. Centres of Mathematical Excellence. Professional associations.</li> <li>- International congresses of mathematicians. Fields Medal and other awards for outstanding achievements</li> <li>- Leading Mathematical Journals. Large Mathematical Editions. MathSciNet, EMIS and other bibliographic databases</li> <li>- Classification of mathematical sciences.</li> </ul>							
<b>LITERATURE</b>							
[1] E. E. Kramer, The Nature and Growth of Modern Mathematics, Princeton University Press 1982 [2] E. Stipanić, Putevima razvitka matematike, Vuk Karadžić, Beograd, 1987 [3] J. Stillwell, Mathematics and its history, Springer-Verlag, New York 1997							
<b>STUDENT WORKLOAD (hours in semester)</b>							
Lectures	30	Tutorial	0	Individual work	70	T o t a l	100
<b>GRADING</b>				<b>REMARKS</b>			
Criterion	Maximum points	Minimum points	<p><b>Midterm exam:</b> only once in semester (end of November or first week of December). Students altogether write 120 minutes long test. This test is evaluated by max 50 points. The minimal score of the test is 25 points.</p> <p><b>Final exam:</b> Students who do not reach the midterm exam minimal score must take the entire course in the final exam. In this case, the final exam is evaluated by max 100 points. The final exam's minimal score is 55 points. Students who reach the midterm exam minimal score take only the part of the final exam that is not covered by the midterm test. In this case, the final exam is evaluated by max 50 points. The minimal score is 30 points.</p>				
Midterm exams	50	25					
Homework assignment	-	-					
Project	-	-					
Laboratory assignments	-	-					
Final exam	50	30					
T o t a l	100	55					

