

## Incoming student mobility

UNIOS University Unit: SCHOOL OF APPLIED MATHEMATICS AND INFORMATICS

COURSES OFFERED IN FOREIGN LANGUAGE  
FOR ERASMUS+ INDIVIDUAL INCOMING STUDENTS

Department or Chair within the UNIOS Unit	School of Applied Mathematics and Informatics
Study program	Graduate Mathematics and Informatics Education Study Programme
Study level	Graduate (master)
Course title	History of Mathematics
Course code (if any)	M117
Language of instruction	English
Brief course description	<p>Syllabus.</p> <ol style="list-style-type: none"> <li>1. Early mathematics: ancient Egyptian and Sumerian-Babylonian Mathematics. Ancient Greek mathematics: pre-euclidian, Euclidean and post-euclidean; mathematics in the Roman Empire.</li> <li>2. Mathematics of non-European nations: India, China. Arab and European mathematician of the Middle Ages.</li> <li>3. Renaissance: development of mathematical notation, the development of algebra, discovery of logarithms, applications of mathematics in physics, astronomy and art.</li> <li>4. The development of mathematical analysis after the renaissance: predecessors, discovery and development of calculus; series, continuity; complex numbers.</li> <li>5. Probability theory: the origin and development to axiomatization.</li> <li>6. The development of geometry after the Renaissance: discovery of projective and analytic geometry, non-Euclidean geometry. The emergence of topology.</li> <li>7. The development since the Renaissance algebra: beginnings of group theory, matrix theory, vector spaces, basic algebraic theorem.</li> <li>8. The development of number theory in the new century.</li> </ol>

## ERASMUS+

EU programme for education, training, youth and sport

	9. The emergence of set theory. A short review of mathematics in the XX. Century. And the most recent outcomes.
Form of teaching	
Form of assessment	Lectures are required. The exam consists of written and oral part, taken after the lectures. During semester students can write mid-terms which can replace a part of the written exam or the whole written exam. The students have to present seminar which will be assessed as well.
Number of ECTS	4
Class hours per week	3+0+0
Minimum number of students	
Period of realization	Summer semester
Lecturer	Tomislav Marošević