

Study Program: Mathematics			
Type and level of studies: Bachelor studies, VI semester			
Course name: History of Mathematics			
Lecturer: Hranislav M. Milošević			
Status: Compulsory			
ECTS: 6			
Attendance Prerequisites: Geometry 1, Algebra 1			
Course aims: Introduction to the origin and development of the most important mathematical concepts and ideas. Familiarizing with the development of mathematics in different historical periods, as well as the motives that led to the most important mathematical discoveries.			
Course outcome: Acquisition of knowledge about the development of mathematical sciences.			
Course content <i>Theoretical part</i> Introductory considerations on the history of mathematics. Contents and methods. Literature. Historical sources, archives and material monuments. Chronology and division. Prehistoric period. Ancient Egypt. Babylon. Mathematics in the civilizations of the Far East. Mathematics of ancient Greece. Tales. Pythagorean school. Integers and their proportions. Algebra and arithmetic. Zeno's paradoxes. Eudoxus. Democritus. Euclidean "Elements". Alexandrian school. Archimedes. Aristrachus. Apollonius. Mathematics in the late Hellenistic period. Mathematics in the Middle Ages. China. India. Countries of Islam. European mathematics, Mathematics in the Renaissance period. Solving algebraic equations. Contribution of Cavalry, Kepler, Descartes, Pascal and Fermat. Newton and Leibniz - the emergence of the infinitesimal calculus. Contributions by brothers Bernoulli, Euler, Lagrange and Laplace. Development of existing and creation of new mathematical areas. Gauss. Who are you. Riman. Discovery of non-Euclidean geometries. Weierstrass and Cantor. The emergence of set theory. Hilbert. Russian mathematicians of the XIX century. The emergence of computing and informatics. History of computer machine development. History of mathematics among Serbs. Middle Ages. Renewal of culture and mathematics in the 19th century on European foundations. Belgrade. Serbian mathematicians and their results from the 19th and 20th centuries. <i>Practical part</i> Practice classes are for students to consult the teacher on writing seminar papers.			
Literature <ol style="list-style-type: none"> Милан Божић, Преглед историје и филозофије математике, Завод за уџбенике, Београд 2010; Дирик Стројк, Кратак преглед историје математике, Завод за уџбенике и наставна средства, Београд 1991; Зоран Лучић, Огледи из историје античке геометрије, Службени Гласник, Београд 2009. 			
Number of active classes			Other classes:
Lectures :2	Practical classes: 2	Students' research work:	
Teaching methods			
Oral presentation method, interview method, active methods			
Assessment (maximum 100 points)			
Course assignments	points	Final exam	points
activity during lectures	10	written exam	-
practical classes	0		50
term test(s)	0	oral exam	
seminar(s)	40		
Total	50		50