

Study programmes: Bachelor studies – Mathematics			
Course name: M3.02-Geometry 2			
Lecturers: Vladica S. Andrejić, Miroslava Ž. Antić, Ivan Dimitrijević, Mirjana Đ. Đorić, Zoran P. Rakić, Tijana Šukilović, Srđan N. Vukmirović			
Status: Compulsory			
ECTS: 5			
Attendance prerequisites: None			
Course aims: Acquiring general and particular knowledge in synthetic Euclidean geometry of plane and space, development of geometric intuitivity and preparing students for more advanced geometrical courses.			
Course outcome: At the end of the course students will acquire the basic knowledge in Euclidean geometry of plane and space. Students will be able for independent studies and solving problems.			
Course content: Axiomatic foundations of geometry. Polygons and polyhedra. Congruence. Continuity. Isometries of the Euclidean plane and space. Similarity. Inversive transformations. Hyperbolic geometry.			
Literature:			
Z. Lučić, <i>Euklidska i hiperbolička geometrija</i> , Beograd 1997.			
M. J. Greenberg, <i>Euclidean and non-Euclidean geometries</i> , 3 rd edition, W. H. Freeman and company, New York, 1994			
D. Lopandić, <i>Geometrija</i> , Naučna knjiga, Beograd, 1980.			
M. Radojčić, <i>Elementarna geometrija</i> , Naučna knjiga, Beograd 1961.			
Euklid, <i>Elementi</i> , Naučna knjiga, Beograd 1957.			
K. Borsuk, W. Szmielew, <i>Foundations of Geometry</i> , North-Holland, Amsterdam, 1960.			
H. Meschowski, <i>Temelji euklidske geometrije</i> , Školska knjiga, Zagreb, 1978.			
D. Hilbert, <i>Osnove geometrije</i> , Matematički institut, Beograd, 1957.			
M.Đorić, M. Antić, B. Živković, http://www.matf.bg.ac.rs/~mdjoric/gcclsolvedproblems/			
P. Janičić, <i>Zbirka zadataka iz geometrije</i> , Skripta internacional, Beograd, 2003.			
Number of hours: 6	Lectures: 3	Tutorials:	3
Teaching and learning methods: Frontal/Lectures / Tutorials			
Assessment (maximal 100 points)			
Course assignments	points	Final exam	points
Lectures		Written exam	30
Exercises / Tutorials		Oral exam	40
Colloquia	30		
Essay / Project			