Study programm: Bachelor studies – Mathematics

Course name: Apparent topology

Lecturers: Siniša Vrećica, Aleksandar Vučić, Vladimir Grujić, Branislav Prvulović

Status: Compulsory

ECTS: 5

Attendance prerequisites: Analysis 2B

Course aims: Introducing the students to the basic notions and constructions of Topology and their properties.

Course outcome: Students understand the basic notions and concepts of topology such as homeomorphism, topological invariants, graphs, topological surfaces, knots, fundamental group. They are familiar with a large number of examples of topological spaces. Using this knowledge, students could solve simple topological exercises and apply topological methods in some geometric problems.

Course content:

Topology of line and plane; Euler characteristic of graphs and surfaces; vector fields on surfaces; the notion of homotopy and homology; fundamental group; the basic notion in knot theory

Literature:

1. V.G.Boltjanskij, V.A.Jefremovič, Očigledna topologija, Zavod za udžbenike i nastavna sredstva, Beograd, 1984.

Number of hours: 4	Lectures: 2	Tutorials: 2	Laboratory: -	Research: -			
Teaching and learning methods: Lectures / Exercises							

Assessment (maximal 100 points)					
Course assignments	points	Final exam	points		
Lectures	-	Written exam	40		
Exercises / Tutorials	-	Oral exam	30		
Colloquia	30		-		
Essay / Project	-				