Study programmes: BACHELOR STUDIES - Mathematics

Course name: Measure Theory and Integration

Lecturers: Miloš Arsenović, Dragoljub Kečkić

Status: Compulsory

ECTS: 5

Attendance prerequisites: Analysis 2.

Course aims: Students acquire basic knowledge related to Lebesgue measure and Lebesgue integral in the classic framework.

Course outcome: Students understand basic convergence theorems of Lebesgue integral.

Course content: Measure. Outer measure. Measurable sets and Lebesgue measure. Lebesgue integral. Convergence theorems. Relationship between Lebesgue and Riemann integral. **Literature**:

1. M. Arsenović, M. Dostanić, D. Jocić: Teorija mere, funkcionalna analiza, teorija operatora, Matematički fakultet, Beograd 1998.

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

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