Study programmes: BACHELOR STUDIES – Mathematics

Course name: Functional analysis

Lecturers: Danko Jocić, Miloš Arsenović, Đorđe Krtinić

Status: Compulsory

ECTS: 5

Attendance prerequisites: Analysis 1

Course aims: Expanding and integrating previous knowledge of mathematical analysis mathematical analysis in order to understand the fundamental principles of functional analysis.

Course outcome: The student needs to learn the basic notions and theorems of functional analysis.

Course content: Basic notions of functional analysis. Banach and Hilbert spaces. Linear operators on Banach and Hilbert spaces and their properties.

Literature:

1. M. Arsenović, M. Dostanić, D. Jocić: Teorija mere, Funkcionalna analiza, teorija operatora, Beograd 2012.

| Number of hours: 4 | Lectures: 2 | Tutorials: 2 | Laboratory: - | Research: - | | |
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| Teaching and learning methods: Frontal / Tutorial | | | | | | |
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| Assessment (maximal 100 points) | | | | | |
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| Course assignments | points | Final exam | points | | |
| Lectures | - | Written exam | 35 | | |
| Exercises / Tutorials | - | Oral exam | 35 | | |
| Colloquia | 30 | Written-oral exam | - | | |
| Essay / Project | - | | | | |