

Level: bachelor				
Course title: Functional Analysis (M4-24)				
Status: obligatory				
ECTS: 7				
Requirements: none				
Learning objectives General principle of analysis, connections of algebraic and topological structures.				
Learning outcomes Adoption of general principle of analysis in investigations of sequence and function spaces, the use of theoretical results in applications to the theory of ODE and PDE.				
Syllabus <i>Theoretical instruction</i> Banach spaces, Spaces of continuous linear operators, Hilbert spaces, Fourier analysis, Basic theorems of functional analysis, Spectral theory of bounded operators. <i>Practical instruction</i> Exercises, student's seminar paper.				
Weekly teaching load				Other: 0
Lectures: 3	Exercises: 3	Other forms of teaching: 0	Student research: 0	