Level: bachelor	
Course title: Introduction to Analysis (M4-02)	
Status: obligatory	
ECTS: 8	
Requirements: none	
Learning objectives	
Acquiring basic knowledge and skills in mathematical analysis, set of real numbers, sequences of real numbers, limits of functions and continuity.	
Learning outcomes	
Students are expected to meet and learn basic notions of mathematical analysis: real numbers, topology of set of real numbers, sequences and continuous functions and theorems concerning their basic properties.	
It is desirable that students adopt the knowledge of basic theorems, their proofs and corresponding proof techniques.	
Syllabus	
Theoretical instruction	
Real numbers. Basic notions and properties. Topological structure of real numbers. Sequence and convergence. Cauchy sequences. Real function, limit of a function, monotone functions, asymptotic relations, asymptotes. Continuity, local and global properties of continuous functions.	
Practical instruction	
Theoretical results will be illustrated through good choice of examples and various techniques will be acquired.	

Weekly teaching load				Other: 0
Lectures: 4	Exercises: 3	Other forms of teaching: 0	Student research: 0	