Title of the course: Analysis for Informatics students (code: I212)

Status of the course: Obligatory for the module of *Information technologies*

Number of ECTS: 8 points

Requirements: none

Learning Objectives: Study of basic notions and theorems from the Real Analysis, and their learning and teaching through examples.

Learning Outcome:

Minimal: Students should learn the standard notions and theorems from the first Analysis course, and show their knowledge in solving easy and average examples from Analysis.

Desirable: Besides the minimal knowledge, students should show the ability in understanding and proving the main theorems and solve more difficult examples from Analysis.

Syllabus:

Theory: The field of real numbers and its topological structure. Real function of one real variable, its limit and continuity. Differential calculus and its application to the analysis of functions. Integrals. The Newton-Leibniz formula and its applications.

Practice: Solving examples in the classes and/or at home, writing seminar papers. **Weekly teaching load**

Number of lectures:	Theory classes: 3	Practice classes: 3