

Course Descriptions Bachelor 2024-2025

Course Title Analysis I

Course Code EBC1016

ECTS Credits 6,5

Assessment Whole/Half Grades

| Period | Period | Start | End | Mon | Tue | Wed | Thu | Fri |
|--------|--------|------------|------------|-----|-----|-----|-----|-----|
| 1 | | 2-9-2024 | 20-10-2024 | | | L | | X |
| 2 | | 28-10-2024 | 15-12-2024 | | | L | | X |

Level Introductory

Coordinator Anna Zseleva For more information: anna.zseleva@maastrichtuniversity.nl

Language of instruction English

Goals Learn the concepts and techniques in the field of differential calculus that are prerequisite for 'probability theory', '(applied) statistics', 'mathematical economics' and 'operations research'.
Obtain the right attitude with respect to (abstract) mathematics.
Learn to write down a correct mathematical reasoning.
Learn to give (simple) proofs.

Description Logic and mathematical reasoning, sequences, differential calculus of functions of one variable.

Literature Syllabus.

Prerequisites

- Perform basic arithmetic operations and simplify algebraic expressions.
- Perform basic arithmetic operations with fractions.
- Solve simple (in)equalities.
- Manipulate exponentials and logs.
- Recognise the main characteristics of the graph of a function.
- Apply the arithmetic rules for differentiating functions.
- Optimize a function of one variable.
- Evaluate elementary integrals.

Teaching methods Lecture / Assignment

Assessment methods Participation / Written Exam

Evaluation in previous academic year For the complete evaluation of this course please click <http://iwio-sbe.maastrichtuniversity.nl/rapporten.asp?referrer=codeUM>

This course belongs to the following programme / specialisation

Bachelor Econometrics and Operations Research Year 1 Compulsory Course(s)