COURSE DETAIL

REAL ANALYSIS Country Norway **Host Institution** University of Oslo Program(s) University of Oslo **UCEAP Course Level Upper Division UCEAP Subject Area(s)** Mathematics **UCEAP Course Number** 111 **UCEAP Course Suffix UCEAP Official Title REAL ANALYSIS UCEAP Transcript Title REAL ANALYSIS UCEAP Quarter Units** 8.00 **UCEAP Semester Units** 5.30

Course Description

This course is a continuation of Calculus and Linear Algebra. The theory is generalized from finite dimensional spaces to spaces that may be infinite dimensional, and whose elements typically are functions, rather than numbers or what was previously considered as vectors. The course discusses key concepts including convergence, continuity, differentiability, completeness, and compactness. The theory is applied to problems from differential equations and Fourier analysis. The course provides training in mathematical reasoning and lays the theoretical foundation for further studies in mathematical analysis. The course requires students to have met specific prerequisites in order to enroll in the course.

Language(s) of Instruction

English

Host Institution Course Number

MAT2400

Host Institution Course Title

REAL ANALYSIS

Host Institution Campus

Mathematics and Natural Sciences

Host Institution Faculty

Host Institution Degree

Host Institution Department

Mathematics

Print