

# 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 Course Details****Host Institution Campus**

Mathematics and Natural Sciences

**Host Institution Faculty****Host Institution Degree****Host Institution Department**

Mathematics

**Course Last Reviewed**

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