

COURSE DETAIL

ANALYSIS AND ALGEBRA

Country

Netherlands

Host Institution

Utrecht University - University College Utrecht

Program(s)

University College Utrecht

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Mathematics

UCEAP Course Number

109

UCEAP Course Suffix**UCEAP Official Title**

ANALYSIS AND ALGEBRA

UCEAP Transcript Title

ANALYSIS AND ALGEBR

UCEAP Quarter Units

6.00

UCEAP Semester Units

4.00

Course Description

The course covers two or three of the following main topics: Dynamical systems, Group Theory, or Complex Analysis. Dynamical systems include ordinary differential equations, phase plane analysis, stability analysis, linearization, limit cycles, Poincaré-Bendixson Theorem. Group theory is a natural setting in which to learn styles of proof-writing and abstract thought characteristic of much of modern mathematics. Complex analysis includes the calculus of complex-valued functions and power series, geometric properties of analytic functions, the Cauchy-Riemann equations, topological properties of integration in the complex plane, Cauchy's Theorem, Cauchy's Formula. Which of the above topics are covered may vary from year to year. This course replaces the former Math labs UCSCIMATL5, UCSCIMATL3, and UCSCIMATL6.

Language(s) of Instruction

English

Host Institution Course Number

UCSCIMAT23

Host Institution Course Title

ANALYSIS AND ALGEBRA

Host Institution Course Details

<https://cursusplanner.uu.nl/Curriculum>

Host Institution Campus

University College Utrecht

Host Institution Faculty

Science

Host Institution Degree

Host Institution Department

Math

Course Last Reviewed

2024-2025

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