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 Analysts. Dynamical systems include ordinary differential equations, phase plane analysis, stability analysis, linearization, limit cycles, Poincaré-Benedixson 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 Campus
University College Utrecht

Host Institution Faculty
Science

Host Institution Degree

Host Institution Department
Math

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