COURSE DETAIL

FUNDAMENTAL AND GALOIS GROUPS

Country

Taiwan

Host Institution

National Taiwan University

Program(s)

National Taiwan University

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Mathematics

UCEAP Course Number

174

UCEAP Course Suffix

UCEAP Official Title

FUNDAMENTAL AND GALOIS GROUPS

UCEAP Transcript Title

FUNDMTL&GALOIS GRPS

UCEAP Quarter Units

6.00

UCEAP Semester Units

4.00

Course Description

This course clarifies relations between the fundamental groups and the Galois groups. As Galois groups can be seen as etale fundamental groups of the base field, the algebraic fundamental groups of algebraic curves (or even schemes) can also be regarded as an etale realization of more general objects, which is the point of view proposed by Grothendieck. The course investigates the algebraic fundamental groups from this point of view. Topics include infinite Galois theory and finite etale algebras of fields; Galois covers and monodromy actions; universal covers and local systems; riemann surfaces; algebraic curves; fundamental groups of algebraic curves.

Language(s) of Instruction

English

Host Institution Course Number

MATH5274

Host Institution Course Title

FUNDAMENTAL GROUPS AND GALOIS GROUPS

Host Institution Course Details

https://nol.ntu.edu.tw/nol/coursesearch/print_table.php?course_id=221%20U 9190&c...

Host Institution Campus

Host Institution Faculty

Host Institution Degree

Host Institution Department

Course Last Reviewed

2022-2023

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