

## 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 AND GALOIS GROUPS

### Host Institution Campus

### Host Institution Faculty

### Host Institution Degree

### Host Institution Department

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