

## COURSE CONTENT

Academic Year : 2014/2015, Semester II.  
Course Code & Title : Galois Theory (MH4930 Special Topics in Mathematics)  
To apply : Please download the form available on the website.  
Prerequisites : MTH212 / MH2200 - Groups and Symmetry

### Lecturer

Frederique Oggier

### Track requirements

Undergraduate students of any track can use this course to contribute to their track requirements. The division will view it as being on all lists.

### Who is this an appropriate course for?

This is a course for students interested in pure mathematics, and in algebra in particular.

### Timetable

LEC	LE	T	08.30-10.30	SPMS-LT2	WK 1-13
	LE	TH	13.30-14.30	SPMS-LT5	WK 1-13
TUT	T	TH	14.30-15.30	SPMS-LT5	WK 2-13

### Course outline:

Galois Theory is a beautiful topic of algebra, which connects group theory and field theory. This course aims at providing an introduction to Galois theory.

**Learning Objective:** To understand Galois correspondence, compute some Galois groups, and understanding the implications of working in a setting where field extensions are Galois. Galois theory is useful for all students who are interested in further topics in algebra.

### Content

Field Extensions, Ruler and Compass Constructions, Normality and Separability, Galois correspondence, Solutions by Radicals, Finite Fields

### References/Textbook:

"Galois Theory" by Stewart.