

(—; 3-0-1)

Introduction to Galois Theory

MATH-314*

This course is designed to teach the basic results of Galois Theory – the fundamental theorem of Galois Theory, insolvability of the quintic polynomials, characterization of polynomials by radicals, computation of Galois groups of polynomials of small degree, and some Inverse Galois Problems (if time permits).

Textbook: *Galois Theory*, 2nd Edition
by J. Rotman (Springer University Text)

Additional Textbook (Optional): *Generic Polynomials*
by C. U. Jensen, A. Ledet and N. Yui
(Cambridge University Press)

Prerequisite: MATH-313*.

Instructor: N. Yui

Evaluation: 3 Assignments 50%
Projects 50%

Projects will be assigned to all students. You can choose to do the assigned project in group (consisting of up to two students), or alone.

You are asked to give oral presentation of the project in class, and hand in written-up version of the project. The presentations will be scheduled after the February break.

Projects will be worth 50% of the total mark.