

Department of Mathematics

Galois Theory

Math4120B/9020B : Field theory

Winter 2020.

Course description : Automorphisms of fields, separable and normal extensions, splitting fields, fundamental theorem of Galois theory, primitive elements, Lagrange's theorem. Finite fields and their Galois groups, cyclotomic extensions and polynomials, applications of Galois theory to geometric constructions and solution of algebraic equations.

References - Dummit and Foote "Abstract Algebra" chapters 13 and 14

- S. Lang "Algebra"

Meeting Times and location : MWF 10.30-11.30pm, MC 108

Marks : 5 assignments worth 10% each.

Final exam worth 50%

Approximate due dates of assignments January 17th, February 7th, March 2nd, March 18th, April 5th

Disclaimers:

Senate Policy on Prerequisites: Prerequisite checking is the student's responsibility. Unless you have either the prerequisites for this course or written special permission from your Dean to enroll in it, you may be removed from this course and it will be deleted from your record. This decision may not be appealed. You will receive no adjustment to your fees in the event that you are dropped from a course for failing to have the necessary prerequisites.

Scholastic Offences: Scholastic Offences are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence, at the following Web sites:

http://www.uwo.ca/univsec/handbook/appeals/scholastic_discipline_undergrad.pdf

http://www.uwo.ca/univsec/handbook/appeals/scholastic_discipline_grad.pdf

Absence/Missed work: If you are unable to meet a course requirement due to illness or other serious circumstances, you must provide valid medical or other supporting documentation to your Dean's office *as soon as possible* and contact your instructor *immediately*. It is the student's responsibility to make alternative arrangements with his or her instructor once the accommodation has been approved and the instructor has been informed. In the event of a missed final exam, a "Recommendation of Special Examination" form must be obtained from the Dean's Office *immediately*. For further information concerning UWO's Policy on Accommodation for Medical Illness please refer to this policy at:

https://www.uwo.ca/univsec/handbook/appeals/accommodation_medical.pdf

A student requiring academic accommodation due to illness should use the Student Medical Certificate when visiting an off-campus medical facility or request a "Record's Release Form" (located in the Dean's Office) for visits to Student Health Services. The form can be found here:

https://www.uwo.ca/univsec/handbook/appeals/medicalform_15JUN.pdf

Make-up exams and conflicts: If you know ahead of time that you are unable to attend a midterm or final exam, you must let your instructor know at least *two weeks in advance* so alternative arrangements can be made. See also the [University's policy on final exam conflicts](#).

Accessibility statement: Please contact the course instructor if you require material in an alternate format or if you require any other arrangements to make this course more accessible to you. You may also wish to contact Services for Students with Disabilities (SSD) at 661-2111 x 82147 for any specific questions regarding an accommodation.

Support Services:

-- Office of the Registrar: <http://www.registrar.uwo.ca>

-- Student Development Services: <http://www.sdc.uwo.ca>

-- Learning Skills Services: <http://www.sdc.uwo.ca/learning>

-- USC: <http://westernusc.ca/services>

-- Academic Calendar: <http://www.westerncalendar.uwo.ca>

-- ITS: <http://www.uwo.ca/its/helpdesk>

-- Students who are in emotional/mental distress should refer to Mental Health@Western for a complete list of options about how to obtain help: http://www.health.uwo.ca/mental_health

