

MATH 228 (R1) *Introduction to Ring Theory*

- Lectures:** January 5 - April 12
Tuesdays-Thursdays 11:00 - 12:20 CEB 331
No classes on reading week: February 15-19
- Instructor:** Matilde N. Lalín
Office CAB 621, office hours M 12:30 - 13:30, T 10:00 - 11:00,
R 12:30 - 13:30, and by appointment
lalin@ualberta.ca
www.math.ualberta.ca/~mlalin/math22810
- Description:** Integers. Mathematical induction. Equivalence relations. Commutative rings, including the integers mod n , complex numbers and polynomials. The Chinese remainder theorem. Fields and integral domains. Euclidean domains, principal ideal domains and unique factorization. Quotient rings and homomorphisms. Construction of finite fields.
- Textbook:** Thomas W. Hungerford, “Abstract Algebra: An Introduction”
We will cover chapters 1-6. There may be some adjustments.
Additional topics may be added as time permits.
- Assignments:** They will be posted on the website.
They will be due on Tuesdays in class (due dates are on the website).
Late assignments will not be accepted. The worst mark will be dropped.
- Weights:** Midterm 35 %, Homework Assignments 15 %, Final 50 %.
- Exam Dates:** Midterm Exam - Tuesday March 2, 2010, in class.
Final Exam - Friday April 23, 2010, 9:00 - 12:00.
Deferred Final Exam - Saturday May 8, 2010, 9:00 - 12:00.
- Grading:** Based on a combination of absolute measures and distribution according to statistical properties for the same class in previous years. Here is a guide:

95 - 100:	A+	90 - 94:	A
85 - 89:	A-	80 - 84:	B+
75 - 79:	B	70 - 74:	B-
65 - 69:	C+	60 - 64:	C
55 - 59:	C-	50 - 54:	D+
45 - 49:	D	0 - 44:	F

Missed Midterm exam: A student who cannot write the midterm exam because of an incapacitating illness, severe domestic affliction or other compelling reasons can apply for deferral of the midterm exam weight to the final exam. Such an application must be made in writing to the professor within 48 hours of the missed examination and must be supported by a Statutory Declaration (in lieu of a medical statement form; a Statutory Declaration can be filled at the Student Services Office in the Faculty of Science) or other appropriate documentation. Deferral of term work is a privilege and not a right; there is no guarantee that a deferred examination will be granted.

Deferred Final Examination: A student who cannot write the final examination because of an incapacitating illness, severe domestic affliction or other compelling reasons can apply for a deferred final examination. Such an application must be made to the student's Faculty office within 48 hours of the missed examination and must be supported by a Statutory Declaration (in lieu of a medical statement form) or other appropriate documentation (Calendar section 23.5.6). Deferred examinations are a privilege and not a right; there is no guarantee that a deferred examination will be granted. Misrepresentation of Facts to gain a deferred examination is a serious breach of the Code of Student Behaviour.

Academic Integrity: The University of Alberta is committed to the highest standards of academic integrity and honesty. Students are expected to be familiar with these standards regarding academic honesty and to uphold the policies of the University in this respect. Students are particularly urged to familiarize themselves with the provisions of the Code of Student Behaviour (online at www.ualberta.ca/secretariat/appeals.htm) and avoid any behaviour which could potentially result in suspicions of cheating, plagiarism, misrepresentation of facts and/or participation in an offense. Academic dishonesty is a serious offense and can result in suspension or expulsion from the University.

Cell Phones: Cell phones are to be turned off during lectures. Cell phones are not to be brought to exams.

Students with Disabilities: Students who require accommodation in this course due to a disability are advised to discuss their needs with Specialized Support & Disability Services (2-800 Students Union Building).

Academic Support Centre: Students who require additional help in developing strategies for better time management, study skills or examination skills should contact the Academic Support Centre (2-703 Students Union Building).

Recording of Lectures: Recording is permitted only with the prior written consent of the professor or if recording is part of an approved accommodation plan.

Policy about course outlines can be found in section 23.4(2) of the University Calendar.

Disclaimer: Any typographical errors in this Course Outline are subject to change and will be announced in class. The date of the final examination is set by the Registrar and takes precedence over the final examination date reported in this syllabus.