Hono(u)rs Algebra 4, MATH 371 Winter 2010

Burnside Hall 920, MWF 0835-0925

Instructor: Bryden Cais

Office: 1126 Burnside Hall

Email: bcais@math.mcgill.ca

Office Hours: **M:** 9:35–10:35, **W:** 15–16

Course Topics: January: Rings. February: Modules. March–April: Fields and Galois theory.

Text: We will follow "Abstract Algebra" by Dummit and Foote. We will cover (parts of) Chapters 7–10 and 12–14. It is assumed that you will be thoroughly familiar with the contents of 11.1–11.4 inclusive (vector spaces and lienar algebra), and you are encouraged to review this material as need be.

Prerequisites: Math 251, Math 370, or equivalent courses with my permission.

Webpage: A course webpage will be maintained here:

www.math.mcgill.ca/bcais/371Page/index.html

Assignments and links to other resources will be posted there.

Homework: There will be regular assignments, approximately one per week. These are due at the beginning of class on the date specified on the assignment. Late work is not accepted.

Midterm: There will be a 2-hour midterm exam on **Friday March 5, 14:35 - 16:25** in **BURN 1B36**.

Final Exam: There will be a comprehensive final exam.

Method of Evaluation: Your final mark will be the larger of the following two numbers:

$$(0.2)\text{Homework} + (0.3)\text{Midterm} + (0.5)\text{Final}, \qquad (0.2)\text{Homework} + (0.8)\text{Final}.$$

Academic Integrity: McGill University values academic integrity. Therefore all students must understand the meaning and consequences of cheating, plagiarism and other academic offences under the Code of Student Conduct and Disciplinary Procedures (see www.mcgill.ca/students/srr/honest/ for more information).

Language In accord with McGill University's Charter of Students' Rights, students in this course have the right to submit in English or in French any written work that is to be graded.

Disclaimer In the event of extraordinary circumstances beyond the University's control, the content and/or evaluation scheme in this course is subject to change.

Tentative Schedule (Section nos. refer to Dummit and Foote)		
Monday	1-4	**NO CLASS**
Wednesday	1-6	7.1
Friday	1-8	7.2
Monday	1-11	7.3
Wednesday	1-13	7.4
Friday	1-15	7.5
Monday	1-18	7.6
Wednesday	1-20	8.2
Friday	1-22	8.3
Monday	1-25	Buffer
Wednesday	1-27	9.1
Friday	1-29	9.2
Monday	2-1	10.1
Wednesday	2-3	10.2
Friday	2-5	10.3
Monday	2-8	10.4–10.5
Wednesday	2-10	10.5
Friday	2-12	Buffer
Monday	2-15	12.1
Wednesday	2-17	12.2
Friday	2-19	12.3
February 21–27: **No Class: Study Break**		
Monday	3-1	13.1
Wednesday	3-3	13.2
Friday	3-5	**Midterm Exam**
Monday	3-8	13.4
Wednesday	3-10	13.5
Friday	3-12	13.6
Monday	3-15	14.1
Wednesday	3-17	14.2
Friday	3-19	14.2 (cont.)
Monday	3-22	14.3
Wednesday	3-24	14.4
Friday	3-26	Buffer
Monday	3-29	14.5
Wednesday	3-31	14.6
Friday	4-2	**No Class: Easter**
Monday	4-5	**No Class: Easter**
Wednesday	4-7	14.7
Friday	4-9	14.8
Monday	4-12	14.8 (cont.)
Wednesday	4-14	Buffer