COURSE INFORMATION SHEET
FALL 2006

1. **Course:**   **PURE MATHEMATICS 431** – *Groups, Rings and Fields*
   Lecture/Time/Session: L01   MWF   10:00
   Instructor(s):   W.K. Nicholson
   Office/Phone/Email: MS 314   220-3954   wknichol@math.ucalgary.ca

2. **Prerequisites:**   Mathematics 311 and Mathematics 315 or consent of the Division.

   NOTE: The Faculty of Science policy on pre- and co-requisite checking is outlined in the current University Calendar (see www.ucalgary.ca/pubs/calendar) *Faculty of Science, section 5C.* **It is the students' responsibility to ensure that they have the pre- and co-requisites for the course, and if they do not they will be withdrawn from the course without notice.**

3. **Fee policy:** After the last day to drop/add courses, there will be no refund of tuition fees if a student withdraws from a course, courses or the session.

4. **Academic Accommodations:** It is the student's responsibility to request academic accommodations. A student with a documented disability who may require academic accommodation must register with the Disability Resource Centre to be eligible for formal academic accommodation. DRC registered students are required to discuss their needs with the instructor no later than fourteen (14) days after the start of this course.

5. **The University policy on grading and related matters** is described in the current University Calendar, *Academic Standings*. In determining the overall grade in the course, the following weights will be used:

Assignments	[5]	30%
Mid-term Test	[1]	35%
Final Exam		35%

   There will be a final examination scheduled by the Registrar's Office.

6. **Missed Components of Term Work.** The regulations of the Faculty of Science pertaining to this matter are outlined in the current University Calendar, *Faculty of Science, section 6A.* It is the student's responsibility to familiarize herself/himself with these regulations

7. **Academic misconduct** (cheating, plagiarism, or any other form) is a very serious offence that will be dealt with rigorously in all cases. A single offence may lead to disciplinary probation or suspension or expulsion. The Faculty of Science follows a zero tolerance policy regarding dishonesty. Please read the sections of the current University Calendar under the heading *Student Misconduct* and the information on integrity at. www.ucalgary.ca/honesty

8. **Dates and times of class exercises held outside of class hours (evening tests, Saturday laboratory examinations, weekend field trips, etc.):**
   REGULARLY SCHEDULED CLASSES HAVE PRECEDENCE OVER ANY OUT-OF-CLASS-TIME-ACTIVITY

   THERE WILL BE NO OUT OF CLASS ACTIVITY SCHEDULED FOR THIS COURSE.

Department approval: _____T. Bloq_____   Date: __25/08/06__

9. **Text:** Introduction to Abstract Algebra, 2nd Edition

   Author: W. Keith Nicholson

10. In addition to the instruction provided by their lecturer and tutorial instructor, there is a continuous tutorial available where students may obtain individual help with questions about the course material and exercise problems. Faculty members and graduate students will be available in the continuous tutorial room to answer questions in a one-to-one fashion. The location and hours of operation of the continuous tutorial will be announced by the lecturer.

11. Calculators **ARE NOT** permitted at quizzes, mid-term test, or the final exam.

12. **SCUM**
    The Society for Calgary Undergraduate Mathematics is located in MS337A. They sell exam packages, run final reviews, and can often assist with problems. The office is open from 10am to 3pm Monday-Friday, and you are welcome to drop by. They look forward to meeting you!

13. **GRADING:**   The final grade will be based on the following:

    Assignments: 30%   **Midterm Exam:** 35%   **Final Exam:** 35%

14. **MIDTERM:**   3 hours, **TBA**;   35% of the final grade.

15. **FINAL EXAMINATION:**   3-hours (scheduled by the Registrar), 35% of the final grade.

16. **LECTURES:**   Mondays, Wednesdays and Fridays at 10:00.

17. **TUTORIALS:**   Thursdays at 10:00.

18. **ASSIGNMENTS:**   There will be 5 assignments, each worth 6% of the final grade.

19. **LECTURE SCHEDULE:**   Here is an approximate outline of the contents of the course. Knowledge of Chapters 1, 2, 3 and 4 is assumed (except for 1.5, 2.11, 3.5, 4.4, 4.5 and 4.6), although some review will be given as the material is encountered. Chapters 6 and 10 are pretty much independent of the rest, so the exams are structured as follows:

Midterm Exam:	Covers Chapters 5, 7, 8 and 9 – Factorization and Groups.
Final Exam:	Covers Chapters 6 and 10 – Fields.

Week	Material	Comments
Sep 11-15	Review, 5.1, 5.1	Lectures begin Monday September 11
Sept 18-22	5.2, 7.1, 7.1	
Sept 25-29	7.2, 7.2, 8.1	
Oct 2-6	8.1, 8.2, 8.2	
Oct 9-13	_ _, 8.3, 8.3	Thanksgiving: Monday October 9
Oct 16-20	8.4, 8.4, 9.1	
Oct 23-27	9.1, 9.2, 9.2	
Oct 30-Nov3	9.3, 9.3, 4.3	
Nov 6-10	6.2, 6.2, 6.3	**Midterm: TBA**
Nov 13-17	_ _, 6.3, 6.3	Reading Days: November 11-14
Nov 20-24	6.4, 6.4, 10.1	
Nov 27-Dec1	10.1, 10.1, 10.2	
Dec 4-8	10.2, 10.2, 10.3	Lectures end Friday December 8
Dec 11-20		Final Exams