

COURSE INFORMATION SHEET
FALL 2008

- Course:** MATHEMATICS 273 -- Numbers and proofs (an honours course)
Lecture/Time: Lecture 01, MWF 11:00 – 11:50
Instructor: Kristine Bauer
Office/Phone/Email: MS 578/ 220-7675 / kristine@math.ucalgary.ca
 - Prerequisites:** 70% or higher in Pure Math 30 or equivalent.
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responsibility to ensure that they have the pre- and co-requisites for the course, and if they do not they will be withdrawn from the course without notice.**
 - 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.
 - 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.
 - 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:

<i>Presentations</i>		5 %
<i>Quizzes</i>	[Best 4 of 5]	25 %
<i>Midterm Test</i>		30 %
<i>Final Exam</i>		40 %

A passing grade on any particular component of the course is essential to passing the course as a whole. There will be a final examination scheduled by the Registrar's Office. The use of aids such as calculators, open book, etc. **is not** permitted.
 - 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.
 - 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. See: <http://www.ucalgary.ca/honesty/>
 - Dates and times of class exercises held outside of class hours (evening tests, Saturday laboratory examinations, weekend field trips, etc.):**
**** THERE WILL BE NO OUT-OF-CLASS-TIME ACTIVITY. ****
- REGULARLY SCHEDULED CLASSES HAVE PRECEDENCE OVER ANY OUT-OF-CLASS-TIME ACTIVITY. If you have a conflict with this out of class time activity, please inform your instructor at least one week in advance of the activity so that other arrangements may be made for you.
- TEXTBOOK:** D'Angelo and West, Mathematical thinking: problem solving and proofs, 2nd Edition, 2000.
 - Course webpage:** Go to blackboard.ucalgary.ca.
 - Exam dates:** The midterm exams will be held in class on Friday October 17 and Friday November 14. The final exam will be scheduled by the registrar during the period from December 10, 2007 to December 19, 2007. The use of calculators is not permitted during midterm or final exams.
 - Continuous tutorial:** The continuous tutorial, held in MS569, is one of your most important resources for this course, since it offers on-demand help, five days per week! You should think of the Continuous Tutorial as a drop-in tutorial to which you can bring all your questions. The continuous tutorial is open from 12:00 – 15:50 every weekday.

- 13. SCUM:** The **S**ociety for **C**algary **U**ndergraduate **M**athematics is located in MS 337A. The office is open daily, you are welcome to drop by.
- 14. LAB:** There is a Lab scheduled on Fridays from 12:00 -12:50 for this course which meets in MS 427. Quizzes are scheduled during lab time, attendance is mandatory.
- 15. Presentations:** Each student will be required to present 1-2 problems from a list during class time. I expect that it will take about 5-10 minutes to present the solution to one of these problems. I will determine a grade for the problem presentation based on (1) whether or not the solution is correct and (2) how clearly the solution was presented.

LECTURE SCHEDULE: (Tentative)

		W	F	MATERIAL	EVENTS
September	8	10	12	Appendix A and introduction	
	15	17	19	Chapter 1: Sets & functions	Assignment 1
	22	24	26	Chapter 4: Countability	QUIZ 1: Assignments 1 Assignment 2
	29			Chapter 3: Induction	
October		1	3	(Chapter 3)	Assignment 3
	6	8	10	Chapter 6: Divisibility	QUIZ 2: Assignments 2 & 3 Assignment 4
	13	15	17	Chapter 7: Modular Arithmetic	No class MONDAY, Oct. 13 Assignment 5
	20	22	24	Chapter 8: Rational numbers	QUIZ 3: Assignments 4 & 5 Assignment 6
	27	29	31	Chapter 13: Real numbers	MIDTERM EXAM: FRIDAY 10/31
November	3	5	7	Chapter 14: Sequence & series	Assignment 7
	10	12	14	Chapter 15: Limits	No class MON., Nov. 10 QUIZ 4: Assignments 6 & 7 Assignment 8
	17	19	21	Chapter 18: Complex Numbers	Assignment 9
	24	26	28	Chapter 5: Binomial Theorem	QUIZ 5: Assignments 8 & 9 Assignment 10
December	1	3	5	Review	

