

COURSE INFORMATION SHEET WINTER 2008

- Course:** MATHEMATICS 205 -- Mathematical Explorations
Lecture/Time: Lecture 1 / MWF 11:00-11:50
Instructor: Kristine Bauer
Office/Phone/Email: MS 578 / 220-7675 / kristine@math.ucalgary.ca
- Prerequisites:** Pure Mathematics 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responsibility to ensure that they have the pre- and co-requisites for the course, and if they do not they will be withdrawn from the course without notice.**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:

Quizzes	[Best 5 of 8]	30%
Midterm Test		20%
Bonus Project(Optional)		10%
Final Exam		40/50%

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. Students are not permitted to use any aids during the final exam.
- 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.

9. Textbook: Thomas L. Pirnot, *Mathematics: All Around*, third edition (or second).
10. Course website: registered students will have access to the appropriate page using www.blackboard.ucalgary.ca. Also see www.math.ucalgary.ca (click on "Course Listings") for information about this and all other math classes. The syllabus for this course is posted on the math website.
11. Lab sections: all quizzes will take place in assigned labs. Here is the information about the labs:
 B01 and B03 : W 14:00 - 14:50 MS319 K. Bauer kristine@math.ucalgary.ca
 B02: R 12:00 - 12:50 MS431 A. Tang tang@math.ucalgary.ca
12. Bonus Project: Students will have the option of completing a bonus project comprising 10% of the final grade, reducing the weight of the final exam from 50% to 40%. The project is a poster presentation on a topic selected by the student and approved by the instructor. It is possible to work in small groups on this project, but every student who opts to submit a bonus project will be expected to provide a short written summary of the project (1-2 pages in length) written without consultation with any other students in the class. Failure to adhere to this rule will constitute academic misconduct. The bonus projects are due on the last day of class, which is Friday, April 18. The project will be graded on three components: (1) Mathematical content; (2) spelling, grammar and clarity of expression; (3) visual presentation.
13. MAPLE Quiz: One of the 8 quizzes for this course will be a take-home quiz completed using MAPLE software. You will have approximately 2 weeks to complete the quiz. Further details will be distributed later.
14. Missed components: There will be no make-up quizzes. If the mid-term exam must be missed for some legitimate reason, special arrangements can be made with the instructor. A missed final exam is subject to the usual rules for a deferred final exam.

Date	Topics	Deadlines
January 14-18	Chapter 2: Logic	
January 21-25	Chapter 2: Logic	
January 28 – Feb. 1	Chapter 4: Numeration Systems	Quiz 1: Chapter 2
February 4 – 8	Chapter 5: Number Theory and Modular Arithmetic	Quiz 2: Chapter 4
February 11 – 15	Chapter 5: Number Theory and Modular Arithmetic	
February 18 – 22		Reading week – no lectures.
February 25 – 29	Chapter 8: Geometry	Quiz 3: Chapter 5
March 3 – 7	Chapter 8: Geometry	MAPLE Quiz due 3/7.
March 10 – 14	Chapter 3: Graph Theory	Quiz 4: Chapter 8
March 17 – 21	Chapter 12/13: Counting & Probability	Quiz 5: Chapter 3. No lectures Friday, 3/21.
March 24 – 28	Chapter 12/13: Counting & Probability	
March 31 – April 4	Chapter 6: Algebraic Models	Quiz 6: Chapter 12/13
April 7 – April 11	Chapter 6: Algebraic Models	
April 14 – April 18	Chapter 7: Systems of Linear Equations	Quiz 7: Chapter 6. Bonus Projects due 4/18.
April 21 - 30		