

MATH 335: INTRODUCTION TO MATHEMATICS

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Class: Mon & Wed 10:00 - 11:20, Fri 10:00 - 10:50 in SOWK 324 Math Fair: February 27^{th} @ the Aboriginal Math K-12 Symposium

Office Hours: MWF 12:00 - 1:00p, or by appointment.

Text: Parker - Baldridge, **Elementary Mathematics for Teachers**

Aharoni - Arithmetic for Parents: A Book for Grownups about

Children's Mathematics
Lewis - the math fair booklet

COURSE OBJECTIVES: MATH 335 is a course in mathematics and not a course in teaching methodologies. Intensive course with required tutorial. Combinatorics, probability, geometry and elementary number theory. Not for credit in the Faculty of Science. Students who obtain credit at UBC for any other mathematics course cannot in the same or later years obtain credit for MATH 335.

Topics include introductions to the following subjects:

- 1. Problem Solving Involving Combinatorics and Logic
- 2. Counting and Probability
- 3. Number Theory
- 4. Modular Arithmetic and Cryptography
- 5. Geometry
- 6. Measurement

Normal Grading Scheme:

Assignments 10% Math Fair 10% Quizzes and Workshops 10%

Term Tests (2) 10% and 15%

Book Report & Journal 10% Final Exam 35%

Note that a student must score at least 50% on the final exam to pass the course, regardless of the grade computed by the above calculation.

HELP DURING OFFICE HOURS: If you are having trouble with the course work at any point, come see me for extra help. Either see me during office hours or email me.

Important Dates:

- Monday, Jan. 5 First day of classes.
- Monday, Jan. 19 Last day to withdraw with no record of enrolment on your transcript and to receive a full refund of tuition fees.
- Monday, Feb. 9 Family day; no class.
- Wednesday, Feb. 11 MIDTERM TEST 1.
- Friday, Feb. 13 Last day to withdraw without academic penalty (W on transcript, but does not lower your GPA; no refund).
- Feb. 16-20 Mid-semester **study** break (no classes).
- Friday, Feb. 27 SNAP Math Fair @ the UBC Aboriginal Math Symposium.
- Friday, Mar. 27 MIDTERM TEST 2.
- Friday, Apr. 3 & Monday, Apr. 6 Easter (no classes).
- Friday, Apr. 10 Last day of class.
- Tuesday, Apr. 14 Wednesday, Apr. 29 Final exam period.

MATHFAIR: The Math Fair will be held on campus during the UBC's Aboriginal Math K-12 Symposium on February 27, 2015. It is a problem solving-based event, supported by the Faculty of Science, Pacific Institute of Mathematical Sciences (PIMS) and the First Nations House of Learning.

CALCULATORS: Electronic devices of any kind are prohibited from our classroom at all times! Students may use an abacus, a set of Napier's Bones, or any other non-electronic computing device if they desire.

ACADEMIC MISCONDUCT:

UBC takes cheating incidents very seriously. After due investigation, students found guilty of cheating on tests and examinations are usually given a final grade of 0 in the course and suspended from UBC for one year. Please refer to the Academic Calendar for more information: http://www.calendar.ubc.ca/vancouver/index.cfm?tree=3,54,0,0

HOMEWORK: There will be weekly assignments, which consist of two parts. The online components are due each Sunday at 8:00p and written components are due on each Wednesday at the beginning of class. **Late assignments will not be accepted!**

Your written assignments should be neatly presented on letter-sized paper (8 X 11), with a cover sheet containing only the course number, your name or student I.D. number (but not both) and the assignment number. The solutions should appear in order, and the pages should be stapled together.

PROBLEM SOLVING: Mathematics is not easy, but it is doable; you learn by doing. Problem solving and practice are the keys to success. You must find the time and the energy to solve a large number of the problems from the text, as well as other sources.