

DEPARTMENT OF MATHEMATICS
MATH 1010 APPLIED FINITE MATHEMATICS

September – December 2007

- A01: Instructor:** G. I. Moghaddam, 429 Machray Hall, 474-6849, e-mail: moghadm@cc.umanitoba.ca
Lecture: 205 Armes, Slot 5 (10:00–11:15 a.m.) Tues. and Thurs.
- A02: Instructor:** D. W. Trim, 410A Machray Hall, 474-8760, e-mail: dtrim@cc.umanitoba.ca
Lecture: 225 St. Pauls, Slot 6 (11:30 a.m.–12:20 p.m.) Mon., Wed., and Fri.
- A03: Instructor:** R. Borgersen, 356 Machray Hall, 474-6708, e-mail: umborger@cc.umanitoba.ca
Lecture: 208 Armes, Slot 12 (3:30–4:20 p.m.) Mon., Wed., and Fri.

Office Hours: Office hours will be posted on office doors.

Textbook: *Notes for MATH 1010 Applied Finite Mathematics* are available in the Bookstore

Course Outline:

1. Solving linear equations and inequalities
2. Solving applied linear programming problems using the method of corners
3. Matrices, solving systems of linear equations using row reductions, and inverse matrices
4. Introduction to graph theory – paths, circuits, Euler and Hamiltonian circuits, adjacency matrices
5. Mathematics of finance – simple and compound interest, annuities, and loans and mortgages

Specific information about which sections in the text are required reading will be given in lectures.

Tutorials: There are six lab sections. You must be registered in one of them, but you can attend whichever lab you find most beneficial. Labs commence on September 17.

Student Evaluation:

Four assignments count 20% of the final grade.

Two tests, each worth 15% of the final grade, will be conducted from 5:30 p.m. to 6:30 p.m. on

Thursday, October 4 and Wednesday, November 14.

A two hour final examination, to be scheduled by the Student Records Office, will count for the remaining 50% of the final grade.

Calculators, with single-line displays only, will be allowed in tests and final examination.

Notes:

(1) There are no make-up assignments for missed assignments. In addition, late assignments are not accepted. You will be given an “honesty declaration” sheet in class. You must attach a signed copy of it to each assignment. Your assignment will not be accepted without it.

(1) If you miss a test, you will be assigned a mark of “zero” unless reasons and acceptable supporting evidence are provided. Make-up tests will not be scheduled for missing tests.

(2) Students are advised to familiarize themselves with the General Academic Regulations of the University contained in the Undergraduate calendar. All forms of academic dishonesty are treated very seriously by the Department of Mathematics and the Faculty of Science. Submitting another person’s work as your own, copying from another person at an exam, or bringing unauthorized information into a test or examination is a serious offense. For further information, please see reverse.

(3) Voluntary Withdrawal Deadline is November 14, 2007.

The Department of Mathematics, the Faculty of Science and the University of Manitoba regard acts of academic dishonesty in quizzes, tests, examinations or assignments as serious offenses and may assess a variety of penalties depending on the nature of the offense.

Acts of academic dishonesty include bringing unauthorized materials into a test or exam, copying from another student, plagiarism and examination personation. Students are advised to read section 7 (Academic Integrity) and section 4.2.8 (Examinations: Personations) in the "General Academic Regulations and Requirements" of the current Undergraduate Calendar. *Note, in particular that cell phones and pagers are explicitly listed as unauthorized materials, and hence may not be present during tests or examinations.*

Penalties for violation include being assigned a grade of zero on a test or assignment, being assigned a grade of "F" in a course, compulsory withdrawal from a course or program, suspension from a course/program/faculty or even expulsion from the University. For specific details about the nature of penalties that may be assessed upon conviction of an act of academic dishonesty, students are referred to University Policy 1202 (*Student Discipline Bylaw*) and to the Department of Mathematics policy concerning minimum penalties for acts of academic dishonesty.

The *Student Discipline Bylaw* is printed in its entirety in the Student Guide, and is also available on-line or through the Office of the University Secretary. Minimum penalties assessed by the Department of Mathematics for acts of academic dishonesty are available on the Department of Mathematics web-page.

All Faculty members (and their teaching assistants) have been instructed to be vigilant and report incidents of academic dishonesty to the Head of the Department.