MATH 1010: Applied Finite Mathematics

13R-T1: September – December 2012

| Instructor: | R. Borgersen Phone: 474-9791 | Office: 425 Machray Hall Email: <u>Robert_Borgersen@umanitoba.ca</u> |
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| Office Hours: | Wednesdays 12:30-1:30, Thursdays 11:30-1:00, and appointments can be made at <u>http://home.cc.umanitoba.ca/~borgerse/Math1010</u> | |
| Lectures: | A01: TR 10:00-11:15am A02: MWF 11:30-12:20pm No classes or labs Oct 8 (Than | 224 Education 100 Fletcher Argue ksgiving) or Nov 12 (Remembrance Day). |
| Textbook: | Notes for MATH 1010 Applied Finite Mathematics by Trim/Moghaddam | |
| Website: | General Website: <u>http://www.math.umanitoba.ca/courses/MATH1010</u> Course Website: <u>http://home.cc.umanitoba.ca/~borgerse/Math1010</u> Students are expected to check the course website regularly for updates. | |

Voluntary Withdrawal Deadline: Wednesday November 14th, 2012

<u>Info on Tutorials</u>

Tutorials are designed to further students' knowledge of course material. A teaching assistant will be available to answer and work through questions emphasizing course content. Attendance is strongly advised.

Course Outline

We will cover the following content in this course (though not necessarily in this order):

- Linear Equations and Inequalities
- Matrices and Systems of Linear Equations
- Linear Programming
- Graph Theory
- Mathematics of finance

Student Evaluation

| Four assignments (Dates TBA) | 5% each = 20% |
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| Two one-hour term tests: Wed Oct 3 and Mon Nov 5 (outside of class time) . | 15% each = 30% |
| Final exam (Time/Date/Location TBA) | 50% |

Collaboration on Assignments

Do not share your solutions and/or work towards solutions with any other classmate – that is, never let another student see your paper. That being said, students are encouraged to collaborate on assignments. Learning mathematics from other students can be equally (if not more) important than learning from the instructor. Study groups are encouraged, and discussions with fellow students, the TAs, and the math help center can play a valuable (many times even a crucial) role in learning the content.

There are some significant dangers with collaboration that lead to some confusion and fear for students. In addition to the guideline above of not sharing your paper with anyone, here are some other general guidelines that should help. If you find either of these guidelines confusing or unclear, please talk to your instructor.

- If you collaborate on any given problem, you should make a note under the problem who you collaborated with. If you obtain some information from any source (published or unpublished, on the web, or anywhere else), you should include appropriate references (no particular reference style is required). Note this should be done on a per question basis, as in any given assignment you may collaborate with different people/resources on different questions.
- If you are working together in a group, it can be tempting to share your papers and, in the end, have everyone submit essentially the same solution. This is UNACCEPTABLE. Students are encouraged to discuss and collaborate on how to do the problems, but in the end students must produce their own solution, written completely separately from everyone they are collaborating with. Many students fear that discussing the problem will result in their papers looking exactly the same, but this is usually not the case.

Cheating and Academic Dishonesty

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

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.

All students are advised to familiarize themselves with the Student Discipline Bylaw, which 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.