# MATH\*1030 Syllabus Page (Winter 2016)

M/W/Fr, 3:30pm - 4:20pm, Rozh 101 (Section 01)

**Instructor: Marcus Garvie Office: MACN 552** 

Email: mgarvie@uoguelph.ca

Office Hours: Mond 10-12 noon, Tue 11-1pm Prerequisite: 4U Advanced Functions

Restrictions: MATH\*1080, MATH\*1200. Not available to students registered in the

BSC program.
Credit Weight: 0.50
Campus: main

**Semester Offering: Winter Teaching Assistants: TBA** 

#### **Course Notes:**

Students must buy the 'fillable' lecture notes for this course at the University Bookstore (cost about \$30).

(No textbook required).

# What to bring to class

- The fillable lecture notes that you bought at the University Bookstore.
- Blank paper, pens/pencils.
- Scientific calculator.

### **Class Schedule:**

See: <a href="http://www.uoguelph.ca/~mgarvie/Teaching/Class-schedule-1030-W16.pdf">http://www.uoguelph.ca/~mgarvie/Teaching/Class-schedule-1030-W16.pdf</a>

#### **Course and Lecture Content:**

This course is primarily intended for business and economics students. The course is designed to introduce and reinforce the essential mathematical skills needed to understand, analyze, and solve business-related mathematical problems. Topics covered include basic algebra; functions, including a review of exponential and logarithmic functions; sequences and series with financial applications; limits; continuity; and differential calculus including derivatives, higher order derivatives, and curve sketching.

### **Student Learning Outcomes:**

- Demonstrate understanding of pre-Calculus including basic algebra.
- Demonstrate a thorough grounding of elementary functions.

- Demonstrate the ability to sketch and interpret a wide variety of graphs.
- Demonstrate understanding of elementary Differential Calculus.
- Demonstrate how to apply mathematics to some simple financial problems.

# **High-school algebra quiz:**

Within the first 3 weeks of classes students must take a quiz covering high-school algebra. The quiz is based on a high-school algebra review, at

http://www.uoguelph.ca/~mgarvie/Teaching/HighSchoolAlgebraReview.pdf

Students should work through the review as soon as possible to prepare for the quiz. Students should also work through the Chapter 2 material in the lecture notes. The completed notes for Chapter 2 is available at

http://www.uoguelph.ca/~mgarvie/Teaching/Chapter2-filled-1030.pdf

The quiz is comprised of 20 randomized questions and is available from the 'Quizzes' section on Courselink. Students have 30 minutes (plus 2 minutes grace period) to complete the quiz. The quiz can be taken as many times as you like (within the 3 week period). Your highest grade out of all attempts will be recorded.

### Homework (questions uploaded as the relevant sections are covered):

- Homework questions are based on lectures and are available here: <a href="http://www.uoguelph.ca/~mgarvie/Teaching/Homework-Problems-1030-W16.pdf">http://www.uoguelph.ca/~mgarvie/Teaching/Homework-Problems-1030-W16.pdf</a>.
- Homework solutions are available here (attempt the problems first!): http://www.uoguelph.ca/~mgarvie/Teaching/Homework-Solutions-1030-W16.pdf.
- Homework is not graded, but will be the basis for the Midterms and Final Exam, so you are strongly encouraged to do (as a minimum) the assigned questions.
- You should attempt questions as soon as the appropriate sections have been covered in class.

#### **Tests and exam times:**

Exams are based mainly on examples done in class and homework.

- 10% High-school algebra quiz. Available on Courselink from Jan 11, 10:01am to Feb 1, 11:30pm
- 25% Midterm Exam 1: scheduled for Friday, Febuary 5, in class
- 25% Midterm Exam 2: scheduled for Wednesday, March 9, in class
- 40% Final Exam (multiple-choice): Monday, April 18, 7 9 pm, Room TBA

## **Teaching Assistants**

TBA:

### The Math & Stats Learning Centre:

The Mathematics & Statistics Department operates a drop-in learning centre where you'll find a team

of tutors that can help you understand and solve problems in Math\*1030. The learning centre is located on the third floor of the McLaughlin Library in the Science Commons. The hours of operation are as follows:

Monday	Tuesday	Wednesday	Thursday	Friday
9:30-15:30	10:00-16:00	9:30-15:30	10:00-16:00	9:30-14:30

# **Test preparation checklist:**

Checklist.pdf

### Tentative outlines for the midterms and final exam:

**TBA** 

# Sample (mock) exams

TBA

# Tests and solutions for this year

**TBA** 

### **Texts recommended for background reading:**

There are many books you can consult for background reading. For example:

- Calculus with Applications (9th Edit), M. Lial, R.N. Greenwell, N.P. Ritchey. Pearson/Addison Wesley, 2008.
- Concepts of Calculus with Applications, M. Goshaw. Pearson/Addison Wesley, 2008.
- Calculus (7th Edit), J. Stewart. Brooks Cole, 2012.
- Contemporary Business Mathematics with Canadian Applications (10 Edit), S.A. Hummelbrunner, K. Halliday, K.S. Coombs. Pearson, 2015.
- etc., etc.

#### **Attendance:**

Formal attendance will not be taken. However, I *strongly* encourage you to attend class regularly. It is your responsibility to find out what was covered if you miss class.

# **Email Etiquette:**

Although I try to respond to all email messages, please don't ask me math questions by email (come & see me instead - don't be shy!); ask for class notes; tell me that you are going to miss a lesson; or generally ask me a question that you can find out for yourself. Keep your messages to the point, polite, and clearly state your question, with name, student ID, and course details.

# **Exam policies:**

- All exams are **closed book**. You may not use the textbook, crib sheets, notes, or any other outside material. Do not bring your own scratch paper.
- You are not allowed to use laptop computers or cell phones in the exam. Ordinary scientific calculators AND graphing calculators are both permitted in exams.
- The Final Exam is cumulative, i.e., it covers the whole course material.

### **Academic consideration:**

- There will be NO MAKE-UP MIDTERM EXAMS. If you miss a Midterm exam due to serious illness of yourself or death of your immediate family, please contact me by email ASAP explaining the reason for missing the test. You do NOT need to get a doctor's note. If consideration is granted I will re-ajust the weight of assessed material (your grade will be based on the remaining assessment material). For further details concerning Academic Consideration see <a href="https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-ac.shtml">https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-ac.shtml</a>
- Athletes who compete away from the University of Guelph during one of the midterms can arrange for their coach to proctor their exam. Just get your coach to contact me and we will make the arrangements.
- If you miss the final exam due to catastrophic events such as serious illness of yourself or death of your immediate family, you will receive an "Incomplete" grade, then (depending on circumstance) you may be allowed to take a make-up exam to receive a letter grade.

### **Academic Accommodation of Religious Obligations**

If you are unable to complete a course requirement due to religious obligations, please let the instructor know within the first two weeks of class. See the academic calendar for more information: <a href="https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-accomrelig.shtml">https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-accomrelig.shtml</a>

#### **Academic Misconduct:**

Academic misconduct is broadly understood to mean offences against the academic integrity of the learning environment. Academic misconduct is not tolerated. Please report any and all occurrences. For more details about the University of Guelph's dedication and commitment regarding academic integrity, review <a href="https://www.uoguelph.ca/registrar/calendars/undergraduate/2014-2015/c08/c08-amisconduct.shtml">https://www.uoguelph.ca/registrar/calendars/undergraduate/2014-2015/c08/c08-amisconduct.shtml</a>.

# **Accessibility:**

The University of Guelph is committed to creating a barrier-free environment. Providing services for students is a shared responsibility among students, faculty and administrators. This relationship is based on respect of individual rights, the dignity of the individual and the University community's shared commitment to an open and supportive learning environment. Students requiring service or accommodation, whether due to an identified, ongoing disability or a short-term disability should contact the Centre for Students with Disabilities as soon as possible. For more information, contact CSD at 519-824-4120 ext. 56208 or email csd@uoguelph.ca or see the website <a href="http://www.uoguelph.ca/csd/">http://www.uoguelph.ca/csd/</a>.

# Course Policy regarding use of electronic devices and recording of lectures:

Electronic recording of classes is expressly forbidden without consent of the instructor. When recordings are permitted they are solely for the use of the authorized student and may not be reproduced, or transmitted to others, without the express written consent of the instructor.

# **Drop date:**

The last date to drop one-semester courses, without academic penalty, is March 11, 2016. For regulations and procedures for Dropping Courses, see the Academic Calendar: <a href="https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-drop.shtml">https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-drop.shtml</a>.

Please email me if you have any comments or questions!