

#### MATH\*1030 Business Mathematics

# Winter 2022 Department of Mathematics and Statistics Credit Weight: 0.50

## Course Details

# **Calendar Description**

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.

Pre-Requisite(s): 4U Advanced Functions

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

## Method of Delivery: Face-to-Face

Winter semester classes will begin as scheduled Jan. 10, 2022; however, classes will be held virtually for the first two weeks. Please note that the ongoing COVID-19 pandemic may necessitate a revision of the format of course offerings and academic schedules. Any such changes will be announced via CourseLink and/or class email. All University-wide decisions will be posted on the COVID-19 website.

## Meeting Information: If classes will be Face-to-Face

Days: Monday, Wednesday and Friday

Time: 12:30PM - 01:20PM Room: <u>ROZH</u>, Room 104

# Instructional Support

### Instructor

## **Dr. Nagham Mohammad**

Email: naghamm@uoguelph.ca

Office Hours via Zoom: Please note that further details will be posted in the

Announcements.

# **Teaching Assistants**

1- Matthew Baxter mbaxte02@uoguelph.ca

2- Bryson Boreland bborelan@uoguelph.ca

3- David Lyver dlyver@uoguelph.ca

4- Immanuel Thomas Kielstra ikielstr@uoguelph.ca

5- Michael Pupulin mpupulin@uoguelph.ca

6- Shah, Keval kevaldha@uoguelph.ca

7- Nasar, Ahmad anaser@uoguelph.ca

8- Kasiri, Mohsen mkasiri@uoguelph.ca

# **Learning Resources**

Students must buy the 'fillable' lecture notes for this course at the University Bookstore (cost about \$35). You can either order the Workbook from the bookstore website (sent in a couple of days) or go to the bookstore and buy it in person. (No textbook required).

#### **Course Website**

<u>CourseLink</u> (powered by D2L's Brightspace) is the course website and will act as your classroom. It is recommended that you log in to your course website every day to check for announcements, access course materials, and review the weekly schedule and assignment requirements.

https://courselink.uoguelph.ca

# **Learning Outcomes**

# **Course 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.

#### **Missed Lectures:**

If you miss lectures then you are responsible for finding out what you missed. Your instructor will not reteach missed material.

#### **Out-of-Class Workload:**

As in any university course much of your learning in this course will take place outside of class time. Each week you have 3 hours of lectures. Therefore, you should plan to spend 3-6 hours each week in out-of-class learning. This learning consists mostly of making sure, you understand the concepts and steps that were used in class to solve problems and then solving problems from the Homework problems on your own. Homework problems and solutions are posted in the Contents section of Courselink. Homework is not graded, but will be the basis for the Tests, so you are strongly encouraged to do (as a minimum) the assigned questions.

**Calculator Policy:** For the tests, only a non-programmable, non-graphical **are** allowed.

## **Grading Scheme:**

There are 2 grading schemes in order to minimize the impact of a poor performance on either of the 2 midterms. The scheme that gives you the best mark will be used automatically.

## Scheme 1 Scheme 2

Top Hat Questions – 5%
3 Lab Assignments: 15%
Midterm Test 1 – 20%
Midterm Test 2 – 20%
Final Exam – 40%

3 Lab Assignments: 15% Best Midterm Test – 25% Worst Midterm Test – 10%

Final Exam – 50%

\*Note\* If we will not get back to face-to-face, we will not use Scheme 1

## **Final Examination:**

A two-hour final examination will be held on **Thursday April 14<sup>th</sup>**, **7:00pm-9:00pm**. Please do not make any travel arrangements. Information regarding midterm tests, and final exam (e.g. material covered and locations) will be posted on the CourseLink. Students must present a valid Student ID card to write all tests and final exam. **Students who miss the final exam due to a valid, documented reason must contact their program counsellor for advice on university regulations regarding final exams.** 

# **Top Hat**

To facilitate discussion and to enhance your learning in and out of class, we will be using educational software called *Top Hat*. *Top Hat* allows you to answer questions and engage in discussion using your smartphone, tablet or laptop. You will need to purchase the *Top Hat* app. instructions for purchasing, downloading and setting up the *Top Hat* software will be provided by e-mail.

Answering Top Hat questions for another student is an academic offence. For each Top Hat question asked during class, there will be two marks: one for answering (any answer), and another for a correct response. Only the best 70% of the Top Hat marks will be used to determine your Top Hat final grade.

\*Note\* There are no alternate dates nor make-up for missing any Top Hat questions. Dropping the lowest 30% of top hat marks is meant to take into account any absences.

\*Note\* If we will not get back to face-to-face classes, we will not use Top Hat

# **Midterm Tests:**

There will be two one-hour Midterm Tests; material to be covered will be announced closer to the Midterm date.

**Table 1: Midterm Tests Dates** 

Midterm Test 1	Friday Feb. 11 <sup>th</sup>	6:15 pm - 7:15 pm.	<b>Location</b> : G ROZH 104
Midterm Test 2	Friday March 11 <sup>th</sup>	6:15 pm - 7:15 pm.	<b>Location</b> : G ROZH 104

#### \*\*\*Notes\*\*\*

- There are no alternate test dates nor make-up.
- If a test is missed for a valid reason, the weight from that test will be carried to the Final Exam.
- Students must present a valid Student ID card to write all tests.

## **Lab Assignments:**

There are 3 scheduled Lab Assignments to be completed during Lab time. See the Table below. The Lab Assignments will be open book. TAs will be present to help. If you miss any of these assignments for a valid reason, the weight from that assignment will be carried to the final exam.

\*Note\* There are no alternate lab assignment dates nor make-up.

**Table 2: Lab Assignments Dates** 

Lab Assignment 1	Wednesday Feb. 2 <sup>nd</sup>	12:30 pm- 1:20 pm.
Lab Assignment 2	Wednesday March 2 <sup>nd</sup>	12:30 pm- 1:20 pm.
Lab Assignment 3	Friday April 1st	12:30 pm- 1:20 pm.

# **Remarking of Tests:**

If you have a question regarding the marking of a test you must first check the posted solutions. If you still have a question, then you should follow the procedure posted on the CourseLink. **You have 4 days to appeal a test grade.** 

# **Mathematics & Statistics Learning Centre**

The online Mathematics & Statistics Learning Centre (M&SLC) is available to students seeking help with understanding course content. The M&SLC is set up as a Resource in CourseLink. You will be registered automatically in the M&SLC when you register for MATH\*1030. You may access the M&SLC by logging into CourseLink, then clicking on the Resources tab.

N.B. You may not use the M&SLC site for assistance in answering Quiz questions.

The M&SLC will have discussion boards, chat rooms, and Virtual Classroom. Virtual Classroom will enable TAs to schedule live on-camera meetings with individual students or small groups with the use of screen sharing and a virtual whiteboard.

The M&SLC's hours for W22 will be posted on their webpage:

Mathematics and Statistics Learning Centre | Department of Mathematics & Statistics (uoguelph.ca)

https://mathstat.uoguelph.ca/tutoring

# **University Statements**

## **Email Communication**

As per university regulations, all students are required to check their e-mail account regularly:

e-mail is the official route of communication between the University and its students.

# When You Cannot Meet a Course Requirement

When you find yourself unable to meet an in-course requirement because of illness or compassionate reasons please advise the course instructor (or designated person, such as a teaching assistant) in writing, with your name, id#, and e-mail contact. The grounds for Academic Consideration are detailed in the Undergraduate and Graduate Calendars.

Undergraduate Calendar - Academic Consideration and Appeals <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>
Graduate Calendar - Grounds for Academic Consideration <a href="https://www.uoguelph.ca/registrar/calendars/graduate/current/genreg/index.shtml">https://www.uoguelph.ca/registrar/calendars/graduate/current/genreg/index.shtml</a>
Associate Diploma Calendar - Academic Consideration, Appeals and Petitions <a href="https://www.uoguelph.ca/registrar/calendars/diploma/current/index.shtml">https://www.uoguelph.ca/registrar/calendars/diploma/current/index.shtml</a>

## **Drop Date**

Students will have until the last day of classes to drop courses without academic penalty. The deadline to drop two-semester courses will be the last day of classes in the second semester.

This applies to all students (undergraduate, graduate and diploma) except for Doctor of Veterinary Medicine and Associate Diploma in Veterinary Technology (conventional and alternative delivery) students. The regulations and procedures for course registration are available in their respective Academic Calendars.

Undergraduate Calendar - Dropping Courses

https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-drop.shtml

Graduate Calendar - Registration Changes

https://www.uoguelph.ca/registrar/calendars/graduate/current/genreg/genreg-regregchg.shtml

Associate Diploma Calendar - Dropping Courses

https://www.uoguelph.ca/registrar/calendars/diploma/current/c08/c08-drop.shtml

# **Copies of Out-of-class Assignments**

Keep paper and/or other reliable back-up copies of all out-of-class assignments: you may be asked to resubmit work at any time.

# **Accessibility**

The University promotes the full participation of students who experience disabilities in their academic programs. To that end, the provision of academic accommodation is a shared responsibility between the University and the student.

When accommodations are needed, the student is required to first register with Student Accessibility Services (SAS). Documentation to substantiate the existence of a disability is required; however, interim accommodations may be possible while that process is underway.

Accommodations are available for both permanent and temporary disabilities. It should be noted that common illnesses such as a cold or the flu do not constitute a disability.

Use of the SAS Exam Centre requires students to book their exams at least 14 days in advance and not later than the 40th Class Day. For Guelph students, information can be found on the SAS website <a href="https://www.uoguelph.ca/sas">https://www.uoguelph.ca/sas</a>

For Ridgetown students, information can be found on the Ridgetown SAS website https://www.ridgetownc.com/services/accessibilityservices.cfm

# **Academic Integrity**

The University of Guelph is committed to upholding the highest standards of academic integrity, and it is the responsibility of all members of the University community-faculty, staff, and students-to be aware of what constitutes academic misconduct and to do as much as possible to prevent academic offences from occurring. University of Guelph students have the responsibility of abiding by the University's policy on academic misconduct regardless of their location of study; faculty, staff, and students have the responsibility of supporting an environment that encourages academic integrity. Students need to remain aware that instructors have access to and the right to use electronic and other means of detection. Please note: Whether or not a student intended to commit academic misconduct is not relevant for a finding of guilt. Hurried or careless submission of assignments does not excuse students from responsibility for verifying the academic integrity of their work before submitting it. Students who are in any doubt as to whether an action on their part could be construed as an academic offence should consult with a faculty member or faculty advisor.

Undergraduate Calendar - Academic Misconduct

https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08amisconduct.shtml

Graduate Calendar - Academic Misconduct https://www.uoguelph.ca/registrar/calendars/graduate/current/genreg/index.shtml

# **Recording of Materials**

Presentations that are made in relation to course work - including lectures - cannot be recorded or copied without the permission of the presenter, whether the instructor, a student, or guest lecturer. Material recorded with permission is restricted to use for that course unless further permission is granted.

#### Resources

The Academic Calendars are the source of information about the University of Guelph's procedures, policies, and regulations that apply to undergraduate, graduate, and diploma programs.

Academic Calendars https://www.uoguelph.ca/academics/calendars

#### **Disclaimer**

Please note that the ongoing COVID-19 pandemic may necessitate a revision of the format of course offerings, changes in classroom protocols, and academic schedules. Any such changes will be announced via CourseLink and/or class email.

This includes on-campus scheduling during the semester, mid-terms and final examination schedules. All University-wide decisions will be posted on the COVID-19 website (https://news.uoguelph.ca/2019-novel-coronavirus-information/) and circulated by email.

#### Illness

Medical notes will not normally be required for singular instances of academic consideration, although students may be required to provide supporting documentation for multiple missed assessments or when involving a large part of a course (e.g., final exam or major assignment).

## **Covid-19 Safety Protocols**

For information on current safety protocols, follow these links:

- <a href="https://news.uoguelph.ca/return-to-campuses/how-u-of-g-is-preparing-for-yoursafe-return/">https://news.uoguelph.ca/return-to-campuses/how-u-of-g-is-preparing-for-yoursafe-return/</a>
- https://news.uoguelph.ca/return-to-campuses/spaces/#ClassroomSpaces

Please note, these guidelines may be updated as required in response to evolving University, Public Health or government directives.