# MATH\*1030 Syllabus Page (Fall 2020)

**Instructor: Daniel Kraus** 

Class: Asynchronous (pre-recorded) online lectures

Office: MACN 511 (no in-person meetings)

Email: dkraus@uoguelph.ca

Virtual Office Hours: M/W/F 1-2 PM

(via video meeting or email; can also set up appointments)

Prerequisite: 4U Advanced Functions Restrictions: MATH\*1080, MATH\*1200.

(Not available to students registered in the BSC program).

Credit Weight: 0.50

**Academic Department: Mathematics & Statistics** 

Campus: main Semester Offering: Fall

Teaching Assistants: Announced via email

# **DISCLAIMERS:**

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 <a href="https://news.uoguelph.ca/2019-novel-coronavirus-information/">https://news.uoguelph.ca/2019-novel-coronavirus-information/</a> and circulated by email.

The University will not normally require verification of illness (doctor's notes) for fall 2020 or winter 2021 semester courses. However, requests for Academic Consideration may still require medical documentation as appropriate.

By enrolling in a course, unless explicitly stated and brought forward to their instructor, it is assumed that students agree to the possibility of being recorded during lecture, seminar or other "live" course activities, whether delivery is in-class or online/remote.

If a student prefers not to be distinguishable during a recording, they may:

- 1. turn off their camera
- 2. mute their microphone
- 3. edit their name (e.g., initials only) upon entry to each session
- 4. use the chat function to pose questions.

Students who express to their instructor that they, or a reference to their name or person, do not wish to be recorded may discuss possible alternatives or accommodations with their instructor.

#### 1 Course Notes:

Students must buy the 'fillable' lecture notes for this course at the University Bookstore (cost about \$35). (No textbook required).

### 2 What to have with you while watching the lectures:

- The fillable lecture notes that you bought at the University Bookstore.
- Blank paper, pens/pencils.
- Scientific calculator, graphing calculator (optional, but recommended).

# 3 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.

# 4 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.

## 5 Online quizzes:

Online quizzes will be accessible via the CourseLink "quizzes" section. There will be six online quizzes over the course of the semester. All quizzes will be available for you to take at 8:00 AM (Toronto time) on the specified day in the schedule. All quizzes will be due by 11:59 PM (Toronto time) on the specified day in the schedule.

The first quiz is based on a high-school algebra review, posted in the Content section of CourseLink. 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 on their own. This material will not be covered in any of the lectures. The completed notes for Chapter 2 are posted in the Content section of CourseLink.

There is no time limit to complete quiz #1, and this quiz can be taken as many times as you like (within the allowed dates). Your highest grade out of all attempts will be recorded. This is to help you get used to the format.

Quizzes #2-6 will cover the remainder of the course topics (see the schedule on CourseLink). Each of these remaining five quizzes will allow three attempts each, and each attempt will have a two-hour time limit. Your highest grade out of the three attempts on a particular quiz will be recorded.

# **6 Weekly Schedule:**

You can of course watch the lectures at your own pace as they become available (via YouTube links on CourseLink) since there is no scheduled lecture time for this course. This schedule is meant to mimic what a typical semester with three lectures per week would have resembled and gives you an idea of the pace you should keep in order to stay up to date with the material.

Date	Sections	Notes
Sep 11		Read over course outline and any announcements
Sep 14	1.1 - 1.4	Quiz #1 (Chapters 1–2) available
Sep 16	3.1 - 3.5, 4.1	
Sep 18	4.2 - 4.4, 5.1 - 5.2	
Sep 21	5.3 - 5.5	
Sep 23	6.1	
Sep 25	6.2 - 6.4	Quiz #1 due
Sep 28	6.4 - 6.6	
Sep 30	6.7 - 6.8	
Oct 2	6.9	
Oct 5	6.10	Quiz #2 (Sections 3.1–6.10) available
Oct 7	7.1 - 7.2	
Oct 9	7.3 - 7.4	Quiz #2 due
Oct 12		Thanksgiving
Oct 14	7.5	
Oct 16	7.5, 8.1	
Oct 19	8.2 - 8.3	Quiz #3 (Sections 7.1–8.1) available
Oct 21	8.3 - 8.5	
Oct 23	8.6 - 8.8	Quiz #3 due
Oct 26	8.8, 9.1 - 9.2	
Oct 28	9.2 - 9.5	
Oct 30	10.1 - 10.2	
Nov 2	10.2 - 10.3	Quiz #4 (Sections 8.2–10.2) available
Nov 4	10.4 - 10.6	
Nov 6	10.7, 11.1 - 11.2	Quiz #4 due
Nov 9	11.3	
Nov 11	11.4	
Nov 13	11.4	
Nov 16	11.5 - 11.6	Quiz #5 (Sections 10.3–11.4) available
Nov 18	11.6 - 11.7	
Nov 20	11.8 - 11.9	Quiz #5 due
Nov 23	12.1	
Nov 25	12.2	
Nov 27	12.3	
Nov 30	Catch up if behind	Quiz #6 (Sections 11.5–12.3) available
Dec 2	Catch up if behind	
Dec 4	Catch up if behind	Quiz #6 due

#### 7 Homework:

- Homework questions are based on lectures and are posted in the Content section of CourseLink.
- Homework solutions are posted in the Content section of CourseLink (attempt the problems first!). Homework is not graded, it but will be the basis for the quiz questions, so you are strongly encouraged to do (as a minimum) the assigned questions.
- You should attempt any corresponding questions as soon as the appropriate sections have been covered in lecture.

#### 8 Course Grade:

The overall course grade will be based on the six online quizzes, as follows:

- 10% Quiz #1
- 90% Quizzes #2–6 (18% each)

## 9 Teaching Assistants

The teaching assistants (TAs) will help the instructor moderate the discussion forum on CourseLink and will be available for virtual office hours via video conference (times to be announced separately).

# 10 The Math & Stats Learning Center:

The Mathematics & Statistics Department operates a drop-in learning center where you'll find a team of tutors that can help you understand and solve problems in MATH\*1030. This semester, the learning center will be operated via CourseLink. 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

#### 11 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.

#### 12 Email Etiquette:

Please keep your messages to the point and polite, and clearly state your question, with name, student ID, and course details. I will try to answer all questions as quickly as possible. The TAs will also answer questions via email. The class list will be separated among the TAs and me so that email load is reasonable. More information will be provided in a separate announcement.

#### 13 CourseLink Discussion Forum:

The CourseLink discussion forum is organized by course topic so that you can ask publicly viewable questions and discuss the course material with others (including me) in an organized manner. The TAs and I will patrol the forum at various times during business hours (9 AM - 5 PM Toronto time) and respond to inquiries.

#### 14 Academic consideration:

• There will be NO SEPARATE MAKE-UP QUIZZES. If you miss a quiz due to serious illness of yourself or a death in your immediate family, or due to personal grounds, please contact me by email ASAP explaining the reason for missing the quiz. You do NOT need to get a doctor's note. If consideration is granted, YOU WILL HAVE AN OPPORTUNITY TO COMPLETE THE MISSED QUIZ. 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>

## 15 Regulations regarding a grade-reassessment:

If you believe that an error has been made in the determination of your final grade then you must **write** to the chair of the department (by the 10th class day of the new semester) requesting a grade re-assessment. This can lead to the grade staying the same, a grade increase, or a grade decrease. Please note that this should not be used as a means of 'trying to get a few extra marks', but for situations where you have grounds for believing that mistakes have been made in the determination of your final grade. For further information, see

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

#### 16 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:

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

#### 17 Academic Misconduct:

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 discourages misconduct. 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. The Academic Misconduct Policy is detailed in the Undergraduate Calendar:

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

# 18 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 Student Accessibilities Services (SAS) as soon as possible. For more information, contact SAS 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>.

#### 19 Online Behaviour:

# Inappropriate online behaviour will not be tolerated. Examples of inappropriate online behaviour include:

- Posting inflammatory messages about your instructor or fellow students
- Using obscene or offensive language online
- Copying or presenting someone else's work as your own
- Adapting information from the Internet without using proper citations or references
- Buying or selling term papers or assignments
- Posting or selling course materials to course notes websites
- Having someone else complete your quiz or completing a quiz for/with another student
- Stating false claims about lost quiz answers or other assignment submissions
- Threatening or harassing a student or instructor online
- Discriminating against fellow students, instructors and/or TAs
- Using the course website to promote profit-driven products or services

- Attempting to compromise the security or functionality of the learning management system
- Sharing your user name and password
- Recording lectures without the permission of the instructor

#### 20 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

 $\frac{https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-drop.shtml}{Graduate Calendar - Registration Changes}$ 

 $\underline{https://www.uoguelph.ca/registrar/calendars/graduate/current/genreg/genreg-regregchg.shtml}$ 

Associate Diploma Calendar - Dropping Courses

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

#### 21 Course Evaluation Information - see

https://mathstat.uoguelph.ca/sites/uoguelph.ca.mathstat/files/public/Teachevaluationform W16\_1.pdf.

# 22 Strike Action

In the unlikely event of strike action by faculty, staff, or TAs that makes it difficult or impossible to administer a midterm examination, the midterm exam will be cancelled and the weight of the midterm examination will be re-distributed to the final exam. If such an event occurs this will be announced in class and an email sent to students via CourseLink.

#### 23 Mental Health Services

One in five students in Canada experiences some sort of mental health issue at some point in their academic career. If you find yourself facing a mental health crisis, or just need to talk to someone, please consider taking advantage of one of the following resources available to University of Guelph students:

- Counselling Services (x53244) is located at Health Services (J.T. Powell Building) and offers individual and group counselling sessions by appointment or walk-in.
- **Student Support Network** is located in Raithby House (across from the cannon and offers confidential, peer-based, drop-in support.
- Good2Talk (1-866-925-5454) is a free, 24/7 student hotline that provides professional counselling and referrals for mental health, addictions and well-being.
- Here 24/7 (1-844-437-3247) specializes in assessment, referral and appointment booking and is available 24/7 for crisis support.

You are not alone, and you will not be judged for asking for help.