

# Course Outline

# 1 Course Information

### **Course Information**

- Course Name: Math 0110A, Introductory Calculus.
- Section Number: Section 001.
- Academic Term: Fall 2020; the classes runs from September 9<sup>th</sup> to December 9<sup>th</sup>.

### List of Prerequisites and Antirequisites

- *Prerequisites*: One or more of Ontario Secondary School MHF4U, MCR3U, Mathematics 0105A/B, Mathematics 0109A/B, or equivalent.
- Antirequisites: Mathematics 1225A/B, 1230A/B, Calculus 1000A/B, the former 1100A/B, 1500A/B, Applied Mathematics 1413.

Unless you have either the requisites for this course or written special permission from your Dean to enroll in it, you may be removed from this course and it will be deleted from your record. This decision may not be appealed. You will receive no adjustment to your fees in the event that you are dropped from a course for failing to have the necessary prerequisites.

# 2 Instructor Information

- Instructor Name: Asghar Ghobanpour, Ph.D.
- Email Address: aghorba@uwo.ca
- Office Hours: The office hours will be held online through Zoom. You can find the Zoom Meeting ID on OWL. Please use the sign up tool to make an appointment for the available hours.

Students must use their Western (@uwo.ca) email addresses and must include "MATH 0110" in the subject line when contacting their instructor.

# 3 Course Syllabus, Schedule, Delivery Mode

### **Course Syllabus**

Limits, continuity, definition of derivative, rules for differentiation, higher-order derivatives, velocity, acceleration, implicit differentiation, related rates, exponential functions, logarithmic functions, differentiation of exponential and logarithmic functions, maxima and minima, concavity, curve sketching, optimization.

#### What Is Expected of the Students?

- Students are required to become accustomed to course web page on OWL and know the structure in which the course materials and the requirements are organized on the website. In this regard, the introduction video in the overview tab would be a great help.
- Students are responsible for being aware of all relevant information posted on the OWL web site and must pay careful attention to the course schedule and deadlines.
- The student must assume responsibility of actively viewing and learning from course videos and completing all assessments implemented in the website including In-Unit assessments, quizzes and online tests and exam.
- Students should log into the OWL regularly and complete all the course components and take advantage of all the tools, such as forums and sign-up tools, to communicate and facilitate their learning.
- Regular homework is an essential part of the course; it is the student's responsibility to keep up with the assigned homework and to seek additional help if and when it is needed.
- working knowledge of, and any needed review of, all relevant pre-calculus concepts; this includes:
  - factoring, expanding (including factoring quadratics, collecting like terms, FOIL, etc)
  - add, subtract, multiply, divide (including with fractions)
  - knowing how the 'number line' works and how to plot (x, y) coordinates on a graph
  - knowing how to solve for x in linear expressions like 2(3+2x) = 7 + 3(x-1)
  - using the laws of exponents, including for fractional exponents

#### **Delivery Mode**

The course is designed as an asynchronous online course; the lecture videos will be posted on the course OWL page in weekly base. We may have zoom review sessions.

#### Key Sessional Dates

- Sept. 9 Classes begin
- Sept. 17 Last day to add a full course or first-term half course
- Oct. 12 Thanksgiving
- Nov. 2-8 Fall Reading Week
- Nov. 12 Last day to withdraw from a first-term half course without academic penalty
- Nov. 30 Last day to withdraw from a full course without academic penalty
- Dec. 9 Last day of classes in Fall Term
- Dec. 10 Study Days
- Dec. 11-22 December examination period

# 4 Course Materials

#### Textbook

• Custom Text for Maths 0110A/B, 1225A/B and 1230A/B, 1<sup>st</sup> Edition, ISBN: 9780176939571 (eBook). Available through the following link:

https://bookstore.uwo.ca/product/cebebookid9688080

• Custom Student Solutions Manual for Maths 0110A/B, 1225A/B and 1230A/B, 1<sup>st</sup> Edition, ISBN: 9780176939588 (eBook). Available through the following link:

https://bookstore.uwo.ca/product/cebebookid9688102

Students should check OWL (http://owl.uwo.ca) on a regular basis for news and updates. This is the primary method by which information will be disseminated to all students in the class. Students are responsible for checking OWL on a regular basis.

All course material will be posted to OWL:http://owl.uwo.ca.

If students need assistance, they can seek support on the OWL Help page. Alternatively, they can contact the Western Technology Services Helpdesk. They can be contacted by phone at 519-661-3800 or ext. 83800.

#### **Technical Requirements**

Math 0110A takes place entirely online and therefore it is essential that each student has access to the technology that will be used to deliver the course, including:

- Computer or tablet able to run a recent version of web browser such as Chrome, Safari or Firefox.
- Working microphone and webcam
- Stable high-speed internet connection.
- Document Scanner device or App.

# 5 Methods of Evaluation

The overall course grade will be calculated as listed below:

- Attendance: Completing In-Unit Questions (See OWL page)- 5%
- Online Quizzes: Weekly Online Quizzes- 10%
- Written Assignments: Three Assignments- 15%
- Midterm Test 1: Online Exam on OWL-20%
- Midterm Test 2: Online Exam on OWL-20%
- Final Exam: Online Exam on OWL- 30%
  - All the midterm tests and the final exam will be scheduled Registrar's Office.
  - No calculators or other electronic devices or any other aids are allowed on tests and exams.
  - Tests and examinations in this course will be conducted using the remote proctoring service, such as Proctortrack. See the Academic Policies section, for more information.

# 6 Accommodation and Accessibility

#### **Accommodation Policies**

Students with disabilities work with Accessible Education (formerly SSD) which provides recommendations for accommodation based on medical documentation or psychological and cognitive testing. The Academic Accommodation for Students with Disabilities policy can be found at:

https://www.uwo.ca/univsec/pdf/academic\_policies/appeals/AcademicAccommodation\_disabilities.pdf

#### Academic Consideration for Student Absence

Students will have up to two (2) opportunities during the regular academic year to use an on-line portal to self-report an absence during the semester, provided the following conditions are met: the absence is no more than 48 hours in duration, and the assessment for which consideration is being sought is worth 30% or less of the student's final grade. Students are expected to contact their instructors within 24 hours of the end of the period of the self-reported absence, unless noted on the syllabus. Students are not able to use the self-reporting option in the following circumstances:

• for exams scheduled by the Office of the Registrar (e.g., December and April exams)

- absence of a duration greater than 48 hours,
- assessments worth more than 30% of the student's final grade,
- if a student has already used the self-reporting portal twice during the academic year

If the conditions for a Self-Reported Absence are not met, students will need to provide a Student Medical Certificate if the absence is medical, or provide appropriate documentation if there are compassionate grounds for the absence in question. Students are encouraged to contact their Faculty academic counselling office to obtain more information about the relevant documentation.

Students should also note that individual instructors are not permitted to receive documentation directly from a student, whether in support of an application for consideration on medical grounds, or for other reasons. All documentation required for absences that are not covered by the Self-Reported Absence Policy must be submitted to the Academic Counselling office of a student's Home Faculty.

For policy on Academic Consideration for Student Absences - Undergraduate Students in First Entry Programs, see:

https://www.uwo.ca/univsec/pdf/academic\_policies/appeals/Academic\_Consideration\_ for\_absences.pdf

and for the Student Medical Certificate (SMC), see: http://www.uwo.ca/univsec/pdf/academic\_policies/appeals/medicalform.pdf

#### **Religious Accommodation**

Students should consult the University's list of recognized religious holidays, and should give reasonable notice in writing, prior to the holiday, to the Instructor and an Academic Counsellor if their course requirements will be affected by a religious observance. Additional information is given in the Western Multicultural Calendar:

https://multiculturalcalendar.com/ecal/index.php?s=c-univwoc

You may also be eligible to write the Special Exam if you are in a "Multiple Exam Situation" (see http://www.registrar.uwo.ca/examinations/exam\_schedule.html).

If a student fails to write a scheduled Special Examination, the date of the next Special Examination (if granted) normally will be the scheduled date for the final exam the next time this course is offered. The maximum course load for that term will be reduced by the credit of the course(s) for which the final examination has been deferred. See Academic Calendar for details (under Special Examinations).

### 7 Academic Policies

The website for Registrarial Services is http://www.registrar.uwo.ca.

In accordance with policy, http://www.uwo.ca/its/identity/activatenonstudent.html, the centrally administered e-mail account provided to students will be considered the individual's official university e-mail address. It is the responsibility of the account holder to ensure that e-mail received from the University at his/her official university address is attended to in a timely manner.

Contingency plan for an in-person class pivoting to 100% online learning In the event of a COVID-19 resurgence during the course that necessitates the course delivery moving away from face-to-face interaction, all remaining course content will be delivered entirely online, either synchronously (i.e., at the times indicated in the timetable) or asynchronously (e.g., posted on OWL for students to view at their convenience). The grading scheme will not change. Any remaining assessments will also be conducted online as determined by the course instructor.

All of the remote learning sessions for this course will be recorded. The data captured during these recordings may include your image, voice recordings, chat logs and personal identifiers (name displayed on the screen). The recordings will be used for educational purposes related to this course, including evaluations. The recordings may be disclosed to other individuals participating in the course for their private or group study purposes. Please contact the instructor if you have any concerns related to session recordings.

Participants in this course are not permitted to record the sessions, except where recording is an approved accommodation, or the participant has the prior written permission of the instructor.

#### Scholastic offences

Scholastic offences are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence, at the following Web site:

http://www.uwo.ca/univsec/pdf/academic\_policies/appeals/scholastic\_discipline\_undergrad.
pdf.

Tests and examinations in this course will be conducted using the remote proctoring service, such as Proctortrack. By taking this course, you are consenting to the use of this software and acknowledge that you will be required to provide personal information (including some biometric data) and the session will be recorded. More information about this remote proctoring service is available in the Online Proctoring Guidelines at the following link:

https://www.uwo.ca/univsec/pdf/onlineproctorguidelines.pdf

Completion of this course will require you to have a reliable internet connection and a device that meets the technical requirements for this service. Information about the technical requirements are available at the following link:

https://www.proctortrack.com/tech-requirements/

## 8 Support Services

Please visit the Science & Basic Medical Sciences Academic Counselling webpage for information on add/drop courses, academic considerations for absences, appeals, exam conflicts, and many other academic related matters: https://www.uwo.ca/sci/counselling/

Please contact the course instructor if you require lecture or printed material in an alternate format or if any other arrangements can make this course more accessible to you. You may also wish to contact Student Accessibility Services (SAS) at (519) 661-2147 if you have any questions regarding accommodations.

Western University is committed to a thriving campus as we deliver our courses in the mixed model of both virtual and face-to-face formats. We encourage you to check out the Digital Student Experience website to manage your academics and well-being: https://www.uwo.ca/se/digital/.

Learning-skills counsellors at the Student Development Centre (http://www.sdc.uwo.ca) are ready to help you improve your learning skills. They offer presentations on strategies for improving time management, multiple-choice exam preparation/writing, textbook reading, and more. Individual support is offered throughout the Fall/Winter terms in the drop-in Learning Help Centre, and year-round through individual counselling.

Students who are in emotional/mental distress should refer to Mental Health@Western (http://www.health.uwo.ca/mental\_health) for a complete list of options about how to obtain help.

Additional student-run support services are offered by the USC, http://westernusc.ca/services.