Math 1078: Elementary Calculus

Winter 2022

Instructor: Alex Hudyma Office: RB 2006 Email: akhudyma@lakeheadu.ca

Class Times: Monday Wednesday 5:30-7:00 pm ET

Lab Times: Tuesday 2:30-4:30 pm ET

Office Hours: By appointment via Zoom

Textbook: There is no required textbook for the course as there are many great resources online. Practice problems will be assigned from the following open-source textbook:

Calculus Volume 1 by Edwin Herman, Gilbert Strang, found at https://openstax.org/details/books/calculus-volume-1

Course Webpage: There is a page for the course on myCourseLink through myinfo. Announcements, WeBWorK login info, Zoom links, recorded lectures, the textbook, practice problems, important dates, the syllabus, and any other course information will all be posted here.

Course Content: By the end of the course students will be able to: compute both finite and infinite limits of a variety of functions; identify vertical and horizontal asymptotes; establish continuity of a function and classify discontinuities; apply the rules of differentiation; calculate higher order derivatives; differentiate transcendental functions; solve real world problems using differentiation; graph a function using the first and second derivative tests; compute antiderivatives of basic functions; and use the fundamental theorem of calculus to solve area problems.

Class Policies: Paying attention during lecture, asking and answering questions, and otherwise participating when prompted are all ways to respect myself and your fellow students. Lakehead University will not tolerate any form of harassment or discrimination to students or instructors. Academic dishonesty (plagiarism, cheating, or impersonation of any kind) is a serious offence and penalties will be strictly enforced.

Grading Scheme:	Participation	5%
	Assignments	15%
	Test I	15%
	Test II	15%
	Oral Exam	15%
	Final Exam	35%

Participation: "Attendance" will be recorded via playing games given at random during lecture. Completing a game will contribute 1% to your grade, so you must complete a minimum of 5 throughout the semester to fulfill this component.

Assignments: Homework will be assigned every week and is to be completed the following Friday by 11:59 pm ET via the online homework system WeBWoRK. Please note that late assignments will not be accepted under <u>any</u> circumstances, but your lowest assignment mark will be dropped in calculating your final grade.

Tests: There will be two tests given during the lab time (see schedule below). These will be open book. Please note that there will be **no** makeup tests. If a legitimate and documented reason is given (i.e. doctor's note) no later than 10 days after missing a test, then the weight will be transferred to the other tests.

Oral Exam: There will be a one on one oral examination to assess conceptual understanding of the material. The oral exam will be scheduled at the end of the semester. Students will be given a list of questions in advance to prepare, and during the exam will be asked randomly selected questions from the list.

Final Exam: The final exam will be scheduled by the registrar during the examination period. It will be a three hour cumulative exam, and it will be open book.

Accommodations: Lakehead University is committed to achieving full accessibility for persons with disabilities. This includes arranging academic accommodations for students with disabilities and/or medical conditions to ensure they have an equitable opportunity to participate in all of their academic activities. If you are a student with a disability and think you may need accommodations, you are strongly encouraged to contact Student Accessibility Services (SAS) and register as early as possible. For more information, please contact Student Accessibility Services http://studentaccessibility.lakeheadu.ca (SC0003, 343-8047, or sas@lakeheadu.ca).

Important Dates: January 10th First Day of Winter Term

January 21st Final Date to Register

February 8th Test I

February 21st-25th Winter Reading Week

March 8th Test II

March 11th Final Date to Withdraw

April 4th-6th Oral Exams

April 8th Last Day of Winter Term

April 11th-24th Examination Period

April 25th Exam Contingency Date

April 28th Marks Due