Math 1078: Elementary Calculus Winter 2021

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

Class Times: Tuesday Thursday 1:00-2:30pm ET

Lab Times: Monday 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 <u>https://openstax.org/details/books/calculus-volume-1</u>

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.

Labs: The two hour lab on Mondays will give students the opportunity to ask questions about course content, homework, and practice 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%
	Test III	15%
	Oral Exam	10%
	Final Exam	25%

Participation: "Attendance" will be recorded via either completing polls or playing games given at random during lecture. Completing a poll or 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 Tuesday 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 three 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. Practice runs are to be scheduled on Monday, February 22nd for participation marks. 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 with no books, notes, or calculators allowed.

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 <u>http://studentaccessibility.lakeheadu.ca</u> (SC0003, 343-8047, or sas@lakeheadu.ca).

Important Dates:

January 11th First Day of Winter Term January 22nd Final Date to Register February 1st Test I February 15th-19th Winter Reading Week March 1st Test II March 12th Final Date to Withdraw March 22nd Test III April 12th Oral Exams April 13th Last Day of Winter Term April 16th-25th Examination Period April 26th Exam Contingency Date April 29th Marks Due