

Math 1078: Elementary Calculus

Winter 2024

Instructor: Alex Hudyma **Office:** RB 2005 **Email:** akhudyma@lakeheadu.ca

Class Times: Monday Wednesday 5:30 - 7:00 pm in RB 1045

Lab Times: Tuesday 2:30 - 4:30 pm in AT 2006

Office Hours: Friday 1:30 - 2:30 pm in RB 2005 (or by appointment)

Textbook: There is no required textbook for the course as there are many great resources online. You will however be required to print (or download onto a tablet) the pre-made notes for the course. Practice problems will be assigned from the following open-source textbook:

Calculus Volume 1 by Edwin Herman, Gilbert Strang, found at [this link](#).

Course Webpage: There is a page for the course on myCourseLink through myinfo. Announcements, WeBWork login info, 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; compute derivatives using differentiation rules; compute higher order derivatives; differentiate transcendental functions; solve related rates and optimization problems using differentiation; graph a function by finding intervals of increase/decrease and concavity; 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	10%
	Test I	20%
	Test II	20%
	Oral Exam	15%
	Final Exam	30%

Participation: MathMatize games will be played at random during lecture. Completing a game will contribute 0.5% to your grade, so you must complete 10 throughout the semester to fulfil this component.

Assignments: Homework will be assigned every week and is to be completed the following Friday via the online homework system WeBWoRK. Please note that late assignments will not be accepted under any 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). Please note that there will be no makeup tests. If a test is missed due to illness or another legitimate reason, email me as soon as possible (with documentation if applicable).

Bonus Marks: For each test, submitting “evidence of studying” will earn you up to 5% extra on your test score. Your review will consist of two components: a review of the concepts, and completed practice problems. These need to be completed individually and not copied from another classmate. More information to be given in class.

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.

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 8 th	First Day of Winter Term
	January 19 th	Final Date to Register
	February 13 th	Test I
	February 19 th -23 rd	Winter Reading Week
	March 12 th	Test II
	March 8 th	Final Date to Withdraw
	April 9 th	Last Day of Winter Term

April 12th-22nd
April 23rd
April 26th

Examination Period
Exam Contingency Date
Marks Due