

# Math 1078: Elementary Calculus

Winter 2023

**Instructor:** Alex Hudyma

**Office:** RB 2005

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**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, 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.

<b>Grading Scheme:</b>	Participation	10%
	Assignments	10%
	Test I	17 ½%
	Test II	17 ½ %
	Oral Exam	15%
	Final Exam	30%

**Participation:** Recordings of the lecture content will be posted weekly, and each will have a corresponding “quiz” to be completed through MathMatize. These will be short and based on the material from the recording.

**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 (see schedule below). If a test is missed due to illness or another legitimate reason, contact me as soon as possible to schedule an alternate test.

**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](mailto:sas@lakeheadu.ca)).

<b>Important Dates:</b>	January 9 <sup>th</sup>	First Day of Winter Term
	January 20 <sup>th</sup>	Final Date to Register
	February 10 <sup>th</sup>	Test I
	February 20 <sup>th</sup> -24 <sup>th</sup>	Winter Reading Week
	March 10 <sup>th</sup>	Test II
	March 10 <sup>th</sup>	Final Date to Withdraw
	April 7 <sup>th</sup> -11 <sup>th</sup>	Oral Exams
	April 11 <sup>th</sup>	Last Day of Winter Term
	April 14 <sup>th</sup> -24 <sup>th</sup>	Examination Period
	April 25 <sup>th</sup>	Exam Contingency Date
	April 28 <sup>th</sup>	Marks Due