Math 1078: Elementary Calculus

Winter 2020

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

Class Times: Monday Wednesday 10:00-11:30am in RB 3049.

Lab Times: Wednesday 2:30-4:30 pm in RB 3049.

Office Hours: By appointment.

Textbook: There is no required textbook for the course. There are many great resources online, as well as in the library. Here are two suggestions for additional explanations and practice problems:

Essentials of Technical Mathematics with Calculus (2nd Edition, Part B) by Richard Paul

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, the WeBWoRK link, important dates, lecture notes, 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 Wednesdays will give students the opportunity to ask questions about course content, homework, and practice problems.

Class Policies: Showing up to class on time, keeping your phone on silent, and limiting talking to outside of the classroom 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:	Assignments	15%
	Test I	15%
	Test II	15%
	Test III	15%
	Final Exam	40%

Assignments: Homework will be assigned every week and is to be completed the following Thursday 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 three tests worth 15% each (see schedule below). There will be no books, notes, or calculators allowed. 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.

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.

Bonus Marks: There will be 10 small "pop quizzes" given during lecture throughout the semester. They will consist of a few short problems related to the lecture material that day. They will not be announced ahead of time and there will be no make up quizzes given under any circumstances. Each quiz completed (regardless of your score on the quiz) will earn you one extra bonus mark on the final exam for up to 10% bonus on the final.

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 6th First Day of Winter Term

January 17th Final Date to Register

January 29th Test I

February 17th Family day (University closed)

February 18th-21st Winter Reading Week

February 26th Test II

March 6th Final Date to Withdraw

March 18th Test III

 $\begin{array}{ll} \text{April } 3^{\text{rd}} & \text{Last Day of Winter Term} \\ \text{April } 6^{\text{th}} \text{-} 19^{\text{th}} & \text{Examination Period} \\ \text{April } 20^{\text{th}} & \text{Exam Contingency Date} \end{array}$