

Faculty of Science Course Syllabus

Department of Mathematics and Statistics

Math 1000

Differential & Integral Calculus I

Summer, 2020

WELCOME

Welcome to **Math 1000!** I'm **ALAN SUROVELL**, your instructor. This course will likely be different for you, as it will be for me, than other math courses you've had before. The unusual and unique circumstances we all find ourselves in force us to experience the course entirely online. I've tried to craft it in such a way as to maximize your opportunities to learn and be evaluated. And it's my hope that you will enjoy your time with me (electronically, that is!) If, at times, it doesn't quite meet our expectations, I hope you'll be forgiving and understand the mistakes as the result of first-time efforts in the entirely online environment that I haven't explored before to this extent. As we move along I look forward to your suggestions that will help me improve my future online course delivery. You can contact me any time at alan.surovell@dal.ca. Please read and utilize the following information; it's your road map for the course.

COURSE GOALS

This course offers a self-contained introduction to differential and integral calculus. The topics include functions, limits, differentiation of polynomial, trigonometric, exponential and logarithmic functions, product, quotient and chain rules, applications of differentiation, antiderivatives and definite integrals, and integration by substitution. Nova Scotia Mathematics advanced 11 and 12 or pre-calculus are pre-requisites. Pre-calculus is highly recommended. A sequel to this course is MATH 1010.03.

COURSE ASSESSMENT (GRADES!)

Your **Final Grade** will be computed according to the following scheme:

Component	Weight (% of Final Grade)	Date
Online Homework Assignments (29 in all)	16	All assignments will be available on June 1 at 11:30 a.m. See Due Dates
Online Tests (Total of Seven One Hour Duration Each)	12 each for a total % of 84	Each Sunday at 8:30 A.M. Halifax Time, except the last one, on Monday, July 20, at 8:30 A.M.

Conversion of numerical grades to Final Letter Grades follows the

Dalhousie Common Grade Scale:

A+: (90% -100%)	A: (85% - 89%)	A-: (80% - 84%)
B+: (77% - 79%)	B: (73% - 76%)	B-: (70% - 72%)
C+: (65% - 69%)	C: (60% - 64%)	C-: (55% - 59%)
D: (50% - 54%)	F: (< 50%)	

BRIGHTSPACE – YOUR SOURCE OF EVERYTHING MATH 1000!

Virtually everything you do in this course will originate in **Brightspace**. There you will find links to everything you need for learning and studying, course schedule, homework, tests, grades, and course announcements. Most of these links can be found in **CONTENT**.

At the outset of the course, you should make sure to familiarize yourself with the location of all the links you'll need to access.

****** COURSE OUTLINE ********

What you're reading now is the course outline. It's important for you to **READ THIS THOROUGHLY** so you'll be well-versed in everything you need to know and do to be successful in the course. This can be accessed in Brightspace through **CONTENT -> COURSE OUTLINE.**

******* TESTS! **********

Access your tests through the links_CONTENT -> WEEKLY TESTS.. Remember, the tests are <u>time sensitive</u> and only available each Sunday from 8:30 A.M. for one hour.

Students who require accommodation for the writing of tests should make their request to the Advising and Access Services Centre (AASC) prio to or at the outset of the course. More information and the Request for Accommodation form are available at www.dal.ca/access.

******* HOMEWORK ASSIGNMENTS! ********

Access your homework assignments through the links_CONTENT -> HOMEWORK ASSIGNMENTS.. I will open all the homework assignments on June 1. PLEASE PAY CLOSE ATTENTION TO THE DUE DATES.. When you click on the homework link, you will be taken to a WeBWorK page with the problem. Should you have a question about the problem after you've made your best try, you can click the button EMAIL INSTRUCTOR and send a clear description of your difficulty. When I reply, it may only be with a HINT at how to solve it.

COURSE SCHEDULE

This is a day-by-day calendar of all course activities.
In Brightspace, CONTENT -> COURSE SCHEDULE -> FULL SCHEDULE

LEARNING AND STUDYING RESOURCES:

• **LIVE LECTURES**: Every Monday (except on July 20 when there will be a test(and Thursday, between 8:30 A.M. and 11:30 A.M, I will present a live discussion of a topic in the syllabus using Collaborate Ultra. The lecture will be recorded for you to view anytime after the live presentation. You can expect the homework and test questions to be based on my lectures.

In Brightspace, CONTENT -> WATCH MY LIVE LECTURE VIDEOS -> COLLABORATE ULTRA.

ONLINE TEXTBOOK:

In Brightspace, CONTENT -> Reading Material -> Textbook

• **COURSE NOTES:** a well-written set of notes that explain the material in the book Calculus: Early Transcententals, by James Stewart.

In Brightspace, CONTENT -> Reading Material -> Course Notes

• YOUTUBE CALCULUS VIDEOS: a collection of videos selected from Youtube to help you understand the material.

In Brightspace, CONTENT -> Youtube Calculus Videos

• ADDITIONAL CALCULUS VIDEOS: a collection of helpful calculus videos prepared by one of our Ph.D. graduates.

In Brightspace, CONTENT -> Additional Calculus Videos

• **TEACHING ASSISTANT HELP**: We have two mathematics graduate students dedicated to our course to help you. They will be standing by with Collaborate Ultra sessions from 4 - 6 P.M. Monday through Friday to help you with your questions.

In Brightspace, CONTENT -> Live Help Desk (4+6 P.M. Atlantic Time, Monday-Friday)

.ACADEMIC INTEGRITY

Academic integrity, with its embodied values, is seen as a foundation of Dalhousie University. It is the responsibility of all students to be familiar with behaviours and practices associated with academic integrity. Instructors are required to forward any suspected case of plagiarism or other forms of academic cheating to the Academic Integrity Officer for their Faculty. The Academic Integrity website

(academicintegrity.dal.ca) provides students and faculty with information on plagiarism and other forms of academic dishonesty, and has resources to help students succeed honestly. The full text of Dalhousie's Policy on Intellectual Honesty and Faculty Discipline Procedures is available here www.dal.ca/dept/university_secretariat/academic-integrity/academic-policies.htm.

STUDENT CODE OF CONDUCT

Dalhousie University has a student code of conduct, and it is expected that students will adhere to the code during their participation in lectures and other activities associated with this course. In general:

"The University treats students as adults free to organize their own personal lives, behaviour and associations subject only to the law, and to University regulations that are necessary to protect

- (a) the integrity and proper functioning of the academic and non academic programs and activities of the University or its faculties, schools or departments;
- (b) the peaceful and safe enjoyment of University facilities by other members of the University and the public
- (c) the freedom of members of the University to participate reasonably in the programs of the University and in activities on the University's premises
- (d) the property of the University or its members."

The full text of the code can be found here:

www.dal.ca/dept/university_secretariat/policies/student-life/code-of-student-conduct.huml