

MATH 1004 B Fall 2020

Calculus for Engineering or Physics

Instructor: Dr. Mohammad R. Sadeghi
Email: msadeghi@math.carleton.ca

Textbook: The ABC's of Calculus, Volume 1, by Angelo Mingarelli, Nolan Company, July 2019 edition will be available in the Carleton University Bookstore at www.carleton.ca/bookstore 613-520-3832 thebookstore@carleton.ca in either digital or softcover format. Please contact the bookstore for orders and pricing.

Solution manual for the ABC text book:
<https://people.math.carleton.ca/~angelo/calculus/ABC1-Solutions-sep20-2019.pdf#ABC1-Solutions-sep20-2019.pdf>

Additional References:

The Tutorial Compendium for First Year Calculus, 2nd Edition by Mark Blenkinsop, Prometheus Press, available through Haven Books.

Private Tutor: tutorMath1004@gmail.com (contact her directly)

Prerequisite: Ontario Grade 12 Mathematics: Advanced Functions and Introductory Calculus; or an OAC in Calculus, or MATH 0007, or equivalent.

Lectures: It is intended lecture notes and, pre-recorded lectures be uploaded weekly on CUearn cuLearn. You will be updated via announcements on CUlearn and emails.

Classes start on Thur. Sep 10, and classes end at Thur. Dec 10.

Office Hours: Weekly Sessions will be held to summarize and wrap up key ideas of the week via BigBlueButton(BBB)/Zoom, check CuLearn for more details.

Any questions related to course operation should be emailed to the Professor.

Any questions regarding tutorial or homework should be emailed to your TA

Tutorial: **Thur. 2:35 - 3:35 starting Sept 24. They run by TAs online via BBB/zoom**
Tutorials will be devoted to problem solving.

Tutorial groups:

	Student's Last name	TAs name	TA's email		Room
B1	A -- Brow	Michael Sloan	michaeljsloan@cmail.carleton.ca	Thur. 14:35 - 15:25	BBB1
B2	Byu. -- Had	Xiayi Zhao	xiayizhao@cmail.carleton.ca	Thur 14:35 - 15:25	BBB2
B3	Haz. -- Myi.	Mengyao Wu	mengyaowu@cmail.carleton.ca	Thur 14:35 - 15:25	BBB3
B4	Nas. --Shar	Sihao Shen	alanshen@cmail.carleton.ca	Thur 14:35 - 15:25	BBB4
B5	She. -- Z.	Boyan Zhou	boyanzhou@cmail.carleton.ca	Thur 14:35 - 15:25	BBB5

Grading policy:

Tutorial attendance: expected but not graded

30% 2 tests of 50 minutes during tutorials: 15%+15%

45% 3 assignments 3 x 15 = 45%

25% Final exam,

As for **missed tests** we pass that test on to the final exam grade. For example, if you miss a test worth 15%, your final will count as 25+15=%40 of your final grade.

There is NO make-up test.

Term Tests

There will be two 50-minute online tests held in the tutorial hours on:

Oct 15 , Nov 19

The material covered on each test will be announced one week before the test.

Assignments due dates:

Oct 1, Nov 5, Dec 3

Late submissions may be subject to penalty, at the discretion of the instructor. While unforeseen circumstances may arise, once solutions to the assignment are posted, no further amendments will be considered.

Assignments must be submitted electronically in pdf format (please familiarize yourself with scanning apps, such as CamScanner). Late submissions may be subject to penalty, at the discretion of the Professor. While unforeseen circumstances may arise, once solutions to the assignment are posted, no further amendments will be considered. Please note all submission details as they are announced.

MS-LAP Math & Stats Learning Assistance Program supports 1st year mathematics courses. It helps students achieve their goals by providing learning support and solutions to homework questions through assistance videos, available on cuLearn.

Announcements:

You are responsible for keeping up with information announced in class or sent to your connect email account. The following **course schedule** is approximate, and may change subject to the progress of the class.

		Topics
1	Chapter 1, Appendices A, B, C, D	Functions, Review of Chapter 1, Trigonometry
2	2.1-6 , 3.1-3.2	Limits and Continuity, Evaluating Limits at Infinity, Derivatives,
3	3.3 , 3.4, 3.5	The Chain Rule , Implicit differentiation,
4	3.7, 3.8	Derivatives of trigonometric functions, Inverse functions
5	3.9, 3.10, 3.12	Inverse trigonometric functions and their derivatives, L'Hospital's Rule
6	4.1-4.6	Exponentials and Logarithms and their derivatives,
7	6.1, 6.2	Anti-derivatives, The Indefinite Integral, Definite Integrals
8	Oct 26 – Oct 30	FALL BREAK
9	6.3, 6.4, 7.1, 7.2	Area, Integration by substitution (change of variable)
10	7.3	Integration by Parts
11	7.4 , 7.5.1, 7.6	Partial Fractions, Powers of Sines and Cosines, Trigonometric substitutions
12	7.7 , 8.2	Improper Integrals, Area between Two Curves
13	8.3	Volumes of Solids of Revolution

Final Examination:

There will be a 3-hour exam scheduled during the usual exam period. It is the responsibility of each student to be available at the time of the final examination. In particular, no travel plans for the examination period in December should be made until the examination schedule is published.

Calculators: This is the year of the great pandemic, so all classes will be online and pretty much anything is permitted.

Math Tutorial Centre: NA

Students with disabilities: Students with disabilities requiring academic accommodations in this course are encouraged to contact the Paul Menton Center for Students with Disabilities (500 University Center) to complete the necessary forms. After registering with the Center, make an appointment to meet with me in order to discuss your needs at least two weeks before the first in-class test or CUTV midterm exam. This will allow for sufficient time to process your request. Please note the following deadlines for submitting completed forms to the PMC for formally scheduled exam accommodations: TBA for fall and fall/winter term courses, and TBA for winter term courses."