Mathematics 1300 3.0 Section A
Differential Calculus with Applications
Fall 2017
Days: Mondays, Wednesdays and Fridays
Time: 8:30 a.m. – 9:20 a.m.
Place: Lassonde Building B

Course Coordinator: Professor M. W. Wong
Office: N530 Ross Building
Office Hours: Tuesdays and Thursdays, 11:30 a.m. - 1:00 p.m.
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Course Objectives: One overarching objective of this course is to use limits, continuity and the derivative to understand the behavior of functions of one variable. Another one is to define the definite integral of a function and show how it is related to its antiderivative or indefinite integral. The students are first expected to come to grips with the notion of a limit, which lies at the heart of the definitions of continuity, the derivative and the definite integral. Of particular importance in this course is that the students must understand the role played by the derivative of a function in the theory and applications of differential calculus. The theory includes sketching and hence understanding the graphs of functions and Newton's Fundamental Theorem of Calculus to the effect that differentiation and integration are inverse to each other. Applications of the derivatives such as Approximations, Related Rates and Opimization Problems are features of the course. Applications of indefinite integrals and definite integrals in distances and areas, respectively, are also given.

Textbook: James Stewart, Calculus: Early Transcendentals, Eighth Edition, Cengage Learning, 2016, and Enhanced WebAssign (EWA)
You may buy the standalone multi-term version of EWA that includes the online version of the textbook. You can buy it online at www.bookstore.yorku.ca or pick up a flyer and take it to the cashier at the bookstore.

Syllabus: The following sections of the textbook will be covered, but not necessarily in the order as indicated.
Sections 2.1-2.8, 3.1-3.6, 3.8-3.10, 4.1-4.5, 4.7, 4.9, 5.1-5.3

Grading Scheme:
Assignments (WebAssign): 15%
Two Class Tests: 20% each
Final Exam: 45%

Important Dates:
Test 1 on Friday, October 13, 2017
Test 2 on Friday, November 17, 2017
Final Exam: TBA

An Important Note about Tests and the Final Exam:
There will be no make-up tests. Students who have to miss a test for any good reasons with proof(s) may petition to have the weight of the test moved to the final exam. No calculators of any kind are permitted for the tests and the final exam.