MATH104: Differential Calculus
with applications to commerce and social sciences

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Lectures:	Mon. 1-2pm, Tues. Wed. & Thurs. 1-3pm in LSK 200
Office hours:	Mon 2-2:30pm, Tues. & Wed. 3-3:30pm in LSK 200
TA office hours:	To be announced
Course website:	https://blogs.ubc.ca/idak/math104-921/
Textbook:	*Calculus: Early Transcendentals with student solutions manual, Vol 1. 4th custom edition for UBC, by Briggs, Cochran and Gillett*

Course description:

Exponential and trigonometric functions, limits, continuity, derivatives and rates of change, maxima and minima, graphing functions, optimization, Taylor polynomilas.

Academic misconduct:

UBC takes cheating incidents very seriously. After due investigation, students found guilty of cheating on tests and examinations are usually given a final grade of 0 in the course, along with other penalties such as suspension or cancellation of a scholarships. Please refer to the Academic Calendar for more information:

http://www.calendar.ubc.ca/vancouver/?tree=3,54,111,959

Grade breakdown:	WebWork:	10%, due Sun. 10pm every week,
	Quizzes:	40%, every Mon.
	Final:	50% , cumulative (covers the entire semester).

Tentative course schedule:

Week	Date	Topic	Sections
1	5/9 to 12	Review: Exponential functions, Logarithms and inverse functions, A standard business problem, Introduction to limits	1.3, 2.1, 2.3 and notes
2	5/16 to 19	Continuous functions, Intermediate value theorem, Average and instantaneous rates of change, the derivative, Derivative of trig functions, Rules of differentiation, Higher order derivatives	2.3, 2.6, 3.1, 3.4
3	5/23 to 26	Marginal cost, Velocity, Acceleration, Chain rule, Implicit differentiation, Derivatives of Logarithms and exponentials, Inverse trig functions	3.5, 3.7, 3.8, 3.9, 3.10
4	5/30 to 6/2	Elasticity of demand, Exponential growth, Compund interest, Related rates, Minima and maxima	3.9, 3.11, 4.1 and notes
5	6/6 to 6/9	Information in the first and second derivatives, Curve sketching and asymptotes, Optimization problems	4.2, 4.3, 2.4, 2.5, 4.4
6	06/13 to 16	Optimization problems, Linear approximation, Taylor polynomials	9.1