Pre-Med Calculus
Course Outline
Semester II 2014

Kwantlen University
12666 72nd Avenue
Surrey, BC, V3W 2M8

Instructor	Prof. Suminder Singh
Class Times	Wednesday & Friday, 4PM – 6PM
Room	Fir Building - #142
Textbook	*Single Variable Calculus: Early Transcendentals*, by Jon Rogawski
Website	www.tamathawis.weebly.com
Email	singh_suminder@surreyschools.ca
Phone	604-517-5502 (*6PM – 8PM during weekdays*)

Course Expectations

Attendance Regular attendance is mandatory! Unit tests and the Final Exam will be based on many of the concepts and examples discussed in class. If you need to miss a class, you must inform me by email or phone and if the excuse is reasonable, the class notes will be posted on the website.

Participation During class, you are expected to actively participate in the learning process. You are expected to ask questions aimed at improving your understanding, to answer the basic questions that are proposed to you, to complete the learning activities that are offered, and to identify any issues that you may need to discuss with me outside of class.

Assignments You will receive five Assignments during the course. Success in a Calculus course is highly dependent on regular practice of the concepts. The assigned and due dates for each assignment are given below. **LATE ASSIGNMENTS WILL NOT BE ACCEPTED.**

Attitude Since you are students in a Pre-Med program, you are expected to exhibit the following characteristics required of a future Medical Practitioner: punctuality, professionalism, integrity, honesty, a desire to learn and to persevere when faced with challenges.

Important Dates

Assignment #1 *(1.1 – 1.6)*	Due: January 29th
Assignment #2 *(2.1 – 2.5)*	Due: February 7th
Assignment #3 *(2.6 – 2.11)*	Due: February 19th
Assignment #4 *(3.1 – 3.5)*	Due: March 19th
Assignment #5 *(4.1 – 4.5)*	Due: April 2nd
Unit Test 1	January 29th
Unit Test 2	February 21st
Unit Test 3	March 19th
Unit Test 4	April 2nd
Final Exam	**April 16th (*Subject to change*)**

Course Schedule *(class times and order of topics are subject to change with prior notice from the instructor)*

Week	Date	Topics
1	Jan. 15th	1.1 – Introduction to Calculus 1.2 – Finding Limits Graphically & Numerically
	Jan. 17th	1.3 – Continuity I 1.4 – Continuity II + **Tutorial**
2	Jan. 22nd	1.5 – Finding Limits Algebraically, Limits TO Infinity 1.6 – Finding Limits AT Infinity + **Tutorial**
	Jan. 24th	2.1 – The Definition of the Derivative 2.2 – The Derivative of Polynomial Functions & The Power Rule
3	Jan. 29th	2.3 – Higher Order Derivatives + **Tutorial** **Unit 1 Test ***** **Assignment 1 Due**
	Jan. 31st	2.4 – The Product & Quotient Rules 2.5 – The Derivatives of Trigonometric Functions
4	Feb. 5th	2.6 – The Composition of Functions & The Chain Rule I 2.7 – The Chain Rule II
	Feb. 7th	2.8 – Implicit Differentiation I 2.9 – Implicit Differentiation II **Assignment 2 Due**
5	Feb. 12th	2.10 – Extra Practice – Differentiation Techniques 2.11 – Intermediate Value Theorem & Mean Value Theorem
	Feb. 14th	3.1 – Local & Absolute Extrema
6	Feb. 19th	3.2 – Monotonicity of Functions, Local Max/Min & 1st Derivative Test **Tutorial** **Assignment 3 Due**
	Feb. 21st	3.3A – What is Concavity of a Function? **Unit 2 Test *****

7	Feb. 26th	**Reading Week**
	Feb. 28th	**Reading Week**
8	Mar. 5th	3.3B - Finding Intervals of Concavity, POI & 2nd Derivative Test
	Mar. 7th	3.4 – Related Rates
9	Mar. 12th	3.5 – Linear Approximation of $f(x)$ Review for Test
	Mar. 14th	4.1 – Antiderivatives
10	Mar. 19th	4.2 – Using RAMs to approximate area under a curve **Unit 3 Test*** ** **Assignment 4 Due**
	Mar. 21st	4.3A – The Definite Integral – FTC 4.3B – The Definite Integral as Area Under Curve
11	Mar. 26th	4.4 – Applications of the Derivative and the Integral
	Mar. 28th	4.5 – Extra Practice - Applications of Derivative and Integral
12	Apr. 2nd	**Unit 4 Test *** ** **Assignment 5 Due**
	Apr. 4th	**Tutorial – Review for Final Exam**
13	Apr. 9th	**Tutorial – Review for Final Exam**
	Apr. 11th	**Reading Break**