Math 1000 Fall 2014 Course Information

- Textbook: Single Variable Calculus – Early Transcendentals, Seventh Edition, by James Stewart. This textbook will also be used in Math 1010.
- BbLearn: This course has a major presence on BbLearn. To access your Math 1000 course on BbLearn you may login to: https://dalhousie.blackboard.com. Alternatively, you can select the OWL link that appears on the Dalhousie homepage (http://www.dal.ca). It is important that you familiarize yourself with the systems requirement for proper access to BbLearn. At present, the course content for Math 1000 on BbLearn includes the following:
  1. Course outline.
  2. Diagnostic test – You must write the Diagnostic Test in the first week of classes. The Diagnostic Test does not count towards your grade, but you must complete the test in order to access the online course assignments.
  3. Course resource companion.
  4. Course Folder.
  5. Your Grade Book – All of your assignment, quiz and test marks will appear here.
- Grading Scheme: Your final grade will be determined as the maximum of the scores obtained using the following two schemes:

  Scheme 1:

  – Online Assignments: 10%
  – Tutorial Quizzes: 15%
  – Midterm: 25%
  – Final Examination: 50%

  Scheme 2:

  – Final Examination: 100%

  Warning: It is fairly uncommon that the final exam score will exceed the score based on Scheme 1, so it is strongly recommended that you prepare yourself to be graded on the first scheme; the second scheme is included in order to accommodate students who fail to perform up to their ability on the midterm and the quizzes due to circumstances beyond their control.

  Calculators will NOT be allowed during tutorial quizzes, the midterm or the final examination. In fact, only writing utensils (pencils, lead, erasers, pens, white-out, etc.) will be allowed.

Marks will be converted, after rounding up, from percentage to letter grade as follows:

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:	0% - 49%		

- Math & Stats Student Resource Centre: [Room 119, first floor of the Chase Building] A calculus tutor will normally be available Monday – Thursday 9 AM – 7 PM as well as Friday 9 AM – 5 PM on a first come, first served basis, free of charge. There are large tables where you can work together (on Math or Stats only, please).

- Tutorials: Attendance is mandatory. These are problem solving sessions run by graduate students. They are an opportunity for you to ask questions and review material from the previous week's classes. There will be a short quiz at the end of each tutorial drawn from the practice problems listed in the course outline.

- The Diagnostic Test & Preparatory Classes: The Diagnostic Test on BbLearn gives you the opportunity to identify weak topics in a non-threatening way. A mark over 27 out of 32 on this multiple-choice pre-calculus test is very good, and less than 14 is quite worrisome. If you obtain a grade of less than 14, or are otherwise concerned about your preparation for Math 1000, please contact your instructor to discuss alternative options.

- The Department of Mathematics and Statistics is offering 4 Saturday Workshop Sessions covering some of the key prerequisites for Math 1000. This should help to make the terminology and concepts clearer in each of the subsequent weeks. The sessions will take place on September 13, 20, 27 and October 4 from 9 AM – 12 PM, location to be determined. These fast paced sessions are intended for students who have already studied the material but just need a refresher. Students requiring more than the Saturday Sessions are encouraged to consider the full year Math 1000 X/Y course, or the one term Pre-Calculus course which can be followed by Math 1000 in the Winter term.

- Students with disabilities are encouraged to register as quickly as possible at the Student Accessibility Services if they wish to receive academic accommodations. To do so please phone 494-2836, e-mail access@dal.ca, drop in at the new Mark A. Hill Accessibility Centre Killam G28, or visit their website at http://www.studentaccessibility.dal.ca. Students are also reminded that all forms are now available on their website.

- Intellectual Honesty and Plagiarism: Please read the section on academic honesty in the student calendar, Page 23.

- Homework Assignments: A number of online assignments (typically one per lecture or three per week) will be assigned throughout the course.

- Suggested Practice Problems: (see below). We do not attempt to cover every detail of the sections of the text given here. The practice problems indicate the general emphasis for each

section and the general level of difficulty you will be expected to handle on the midterm and final examinations. Review exercises give a good broad overview of the important material from each chapter.

FALL 2014 Math 1000 – Suggested Practice Problems

Section	Suggested Problems
2.1	5
2.2	1–9 (odds), 13, 29, 37
2.3	11–31 (odds)
2.5	1, 3, 17, 21, 39, 51, 53, 55(a)
2.6	1, 5, 15–23 (odds), 29, 31
2.7	1, 5, 7
2.8	3–11 (odds), 23, 27, 37, 39, 43, 45
1.5	1, 3, 19, 29
1.6	35–41 (odds), 51, 63–67 (odds)
3.1	3–35 (odds), 47, 53, 55
3.2	1–35 (odds), 51
3.3	1–23 (odds), 39–45 (odds)
3.4	1–41 (odds), 77, 79
3.5	1–13 (odds), 25, 27, 35, 39
3.6	1–13 (odds), 33, 39–49 (odds)
3.7	1–9 (odds), 15
3.8	1, 3, 9
3.9	1–17 (odds), 23, 27
3.10	1, 3, 11–17 (odds), 23–27 (odds)
4.1	1–43 (odds), 47–61 (odds), 75
4.2	1–5 (odds), 15–19 (odds)
4.3	25–29 (odds)
4.4	7–21 (odds), 25, 29, 31, 43–53 (odds), 61
4.5	1–51 (odds)
4.7	1–17 (odds), 19, 33–37 (odds)
4.8	13–21 (odds)
4.9	1–17 (odds), 21, 31–43 (odds), 45, 47, 61–65 (odds), 69
5.1	5(a), 19, 21
5.2	11, 17–21 (odds), 23, 35, 41, 47, 55
5.3	7–37 (odds), 39, 41, 57–61 (odds)
5.4	5–11 (odds), 21–37 (odds), 59, 61
5.5	1–35 (odds), 39–47 (odds), 53–61 (odds)

FALL 2014 Math 1000 – Schedule of Classes

Date	Topic
September 5	Introduction
September 8 – 12	Tangents, Velocity, Limits (§2.1 – 2.3)
September 15 – 19	Continuity, Limits at Infinity, Rates of Change, Derivatives (§2.5 – 2.7)
September 22 – 26	The Derivative as a Function, Exponential and Logarithmic Functions, Differentiation Rules (§2.8, 1.5/1.6, 3.1)
September 29 – October 3	Differentiation Rules (cont'd) (§3.2 – 3.4)
October 3	**Last day to drop without a "W"**
October 6 – 10	Implicit Differentiation, Derivatives of Log Functions, Logarithmic Differentiation (§3.5, 3.6)
October 13	**Thanksgiving (No class)**
October 15, 17	Rates of Change in Science, Related Rates, Linear Approximations (§3.7 – 3.10)
October 20 – 24	Max/Min Problems, Mean Value Theorem (§4.1, 4.2),
October 27	Midterm Review
October 28	**Midterm 7:30 PM - 9:30 PM (Up to and including §3.10)**
October 29, 31	Graphing, L'Hospital's Rule (§4.3, 4.4)
November 3	**Last day to drop with a "W"**
November 3 – 7	Graphing (cont'd), Optimization Problems, Newton's Method, (§4.5, 4.7, 4.8)
November 10	**Study Day (No class)**
November 12, 14	Antiderivatives, Area Under a Curve (§4.9, 5.1)
November 17 – 21	Definite Integrals, Fundamental Theorem of Calculus (§5.2, 5.3)
November 24 – 28	Indefinite Integrals and the Net Change Theorem, Substitution Rule (§5.4, 5.5)
December 1	Review