Math 1A03 Calculus for Science I Information Sheet
Term 1 Autumn 2010–2011

Instructors: Dr. L. Barto, HH 409A ext 27031, lbarto@math.mcmaster.ca
office hours: M 13:30–15:30, R 13:30–14:30
Dr. D. Haskell, HH 316 ext 27244, haskell@math.mcmaster.ca
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Teaching Assistant: Jizhan Hong, HH 401, hongj37@math.mcmaster.ca

Math Help Centre: HH104 M-R 2:30-8:30, F 2:30-6:30

Website: http://www.math.mcmaster.ca/∼haskell/math1a_10-11/webpage.html

Text:
1) *Calculus: early transcendentals, 6th edition*, James Stewart, Thomson Brooks/Cole. Students may use other editions, but this will not be supported by the instructors. That is, students are responsible for comparing the editions, and being aware of discrepancies. All references to the text, including recommended problems, will be to the sixth edition.
2) *WebAssign*, http://www.webassign.net Students must establish a WebAssign account to complete the online homework assignments and have access to other recommended problems. Access to WebAssign is included with the access code provided in a new textbook bought from Titles this year. If you are using a used textbook, or one bought elsewhere, you will have to pay to register for a WebAssign account. To register on WebAssign, you will need one of the following class keys: ∗∗ corrected 10 September 2010∗∗
Section C01 Class Key: mcmaster 4328 3369
Section C02 Class Key: mcmaster 8141 8071
Section C03 Class Key: mcmaster 6235 8091
Please use the key for the section in which you are registered.

Course objective: To learn about the differential and integral calculus for functions of one variable. We begin by introducing the integral from a theoretical point of view. To learn how to evaluate integrals, we will review differentiation, then study more sophisticated techniques of integration. We will finish with applications of both the differential and integral calculus. We will cover most of Chapters 3 through 7 in the text, with a bit of Chapter 8.

Weekly schedule: See the website for a more detailed outline of the course material.

Lectures and Tutorials: There will be three lectures and one tutorial per week. The lectures will be used to present new material. The tutorial is an opportunity for students to solidify their grasp of concepts, as well as working through examples and reviewing for midterms. You are required to attend all lectures and tutorials.

Assessment: Your grade will be based on the diagnostic test, ten WebAssign online homework sets (best of twelve), three written homework sets, two in-class midterms and the final exam. The distribution is as follows, although the instructors reserve the right to change the weight of any portion of this marking scheme.

Diagnostic Test — 2%
Online homework — 10%
Written homework — 3%
Midterm I — 20%
Midterm II — 20%
Final — 45%

The currently scheduled dates (provisional, but unlikely to change) for midterms are ∗ corrected 24 September 2010 ∗:
Midterm I: Thursday, 7 October
Midterm II: Thursday, 11 November

Web Assign: The course page on WebAssign has Homeworks, Recommended Problems, and Tutorials assigned by week or chapter, as well as the Diagnostic test. The diagnostic is for your benefit: it covers prerequisite material which you should know. Take it right away, and use it as a guide for what you need to review at the beginning of the semester. Doing this work at the beginning of the course will really help you through the semester, which is why we have made it worth 2% of the overall marks. The homeworks are required. These are fairly short assignments, based on the material covered in class that week. The due dates (on Tuesdays) are posted on the web, and indicated with each homework. The goal of the homework is to keep you up-to-date with the material. No excuses will be accepted for missed homework, but your lowest score will be dropped (so you can miss one homework without penalty).

Recommended problems: are an essential part of the course. Working through these problems will help you understand the material of the course. It cannot be stressed too much that to understand mathematics you must DO it. Recommended problems are given on the website and on WebAssign. When you submit solutions online, WebAssign will mark your solutions, and give hints. You can also submit solutions to the TA to look over, and discuss problems with the TAs in the Math Help Centre. The recommended problems are the minimum work you should be doing per week in order to keep up with the material of the course. Problems in the Tutorials will walk you through examples.

Written homework: Three tutorials during the semester will be dedicated to discussing what a complete homework (or exam) solution should look like. Based on the work of this tutorial, you will hand in some homework problems to be marked. Dates are posted on the website. These assignments can be done in groups of up to three people.

Exams: The exams will involve both theory and examples. You will be required to do problems that involve both proofs and calculations. At least one problem on each exam will be chosen from the list of recommended problems on the course website. The three-hour final exam will be administered by the registrar's office and will cover all course material.

All work submitted must be YOUR OWN. At the same time, you are encouraged to discuss problems and general ideas with each other. Mathematics need not be an isolating activity. What you may not do is to copy someone else's work.

To be explicit: You MAY print out a WebAssign assignment and ask your instructor, TA, or another student for help on how to do the problems. You MAY NOT have another student work the problem for you, and then input the solution.
You MAY discuss the solution to a homework assignment with other students. You MAY NOT copy another student's solution.

Important reminders:
Late assignments will not be marked.
Only excuses validated by the Dean's office will be accepted for missing any examinations.
You must bring your student ID to the midterms and the final exam.
Only the McMaster standard calculator Casio fx-991 will be allowed in the midterms and final exam.

Final Policy Notes:
(i) It seems unfortunate but necessary to reproduce the words of the dean on cheating:
Academic dishonesty consists of misrepresentation by deception or by other fraudulent means and can result in serious consequences, e.g. the grade of zero on an assignment, loss of credit with a notation on the transcript (notation reads: "Grade of F assigned for academic dishonesty"), and/or suspension or expulsion from the university.
It is your responsibility to understand what constitutes academic dishonesty. For information on the various kinds of academic dishonesty please refer to the Academic Integrity Policy located at
http://www.mcmaster.ca/univsec/policy/AcademicIntegrity.pdf
The following illustrates only three forms of academic dishonesty:
Plagiarism, e.g. the submission of work that is not one's own or for which other credit has been obtained.
Improper collaboration in group work.
Copying or using unauthorized aids tests and examinations.

(ii) The instructors reserve the right to change or revise information contained in this course outline.