McGill University Department of Mathematics and Statistics

MATH 140 (Calculus I) Course Outline — Summer 2008

Caveat: (1) Classroom attendance and taking notes in class are important. The lectures will not follow exactly what is written in the textbook. Your classroom notes will be of essential help for the preparation of the midterm and final examinations.

(2) In writing Midterm and Final examinations, it's not sufficient if you get the right answer — we would want you to be able to write a full solution to the problems in a style comparable to that of the Student Solutions Manual to the textbook.

Course Outline:

The syllabus will **include** all of Chapters 1, 2, 3, 4 of the textbook, with **omissions**¹, as listed below.

(1) Functions and Models. Some parts of $\S1.2$ may not be discussed in the lectures, but you should read the whole section — in particular the definitions of various kinds of functions — as this terminology may be used from time to time. Omit $\S1.4$.

(2) Limits and Derivatives. §2.4 will be discussed at the lectures, but is not examination material. Omit pp. 138-140.

(3) Differentiation Rules. Omit §3.7, with the exception of text and exercises concerned with moving particles (pp. 221-223, 230-231). Omit §3.8. You are encouraged to read the parts of §§3.7-3.8 that pertain to your own fields of interest.

(4) Applications of Differentiation. Omit "slant asymptotes" (§4.5, pp. 312-313,) and Exercises ##57-69 on p. 315. Omit §4.6, §4.8.

¹Do not assume that a topic is omitted from the syllabus if it has not been tested in a WeBWorK assignment or if it has not appeared on any of the old examinations in the course! Some topics do not lend themselves to this type of testing; others may have been omitted simply because of lack of space, or oversight. By the same token, you need not expect every topic discussed in the course to be examined on the final examination.