Math 181, Honors Calculus I, Fall 2007

<u>Instructor</u>: Joseph Lipman, Math 750, 494-1994, jlipman AT purdue DOT edu, www.math.purdue.edu/~lipman.

Office hours: Mon. 4:30–5:30 and Fri. 4–5. Other times by appointment.

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Office hours: Tues. 10:30-11:30, Thurs. 9:30-10:30.

Grading: Homework and quizzes 40%;

Two midterm exams: 30%;

Final exam (comprehensive): 30%.

<u>Text</u>: Weir, Hass & Giordano, *Thomas' Calculus*, 11th edn., Early Transcendentals (with or without Media Upgrade).

This course will cover Chapters 5–10, more or less.

<u>Course page</u>: www.math.purdue.edu/MA181—for basic information, and supplementary reading. Announcements will appear at < www.coursecompass.com > (see below), where you will also be able to use a discussion board to communicate with co-students about any course-related topic.

<u>Homework</u>: At My CourseCompass, < www.coursecompass.com >, assignments will be posted with due dates. You will do the problems and submit answers right there.

Assignments will be due several times a week. It is the student's responsibility to look for these assignments in time.

The program won't allow homework to be done after the due date. Exceptions can be arranged only under extraordinary circumstances clearly beyond your control.

Cooperation with others on the homework is fine, but solutions should be understood by the person who submits them. Problems are individually generated for each registered student, so don't even think about copying someone else's work.

<u>Email policy</u>: In general, I will respond to email only if I can do so in three lines or so. I do not consider email a suitable vehicle for discussion of nontrivial matters. I am glad to do that in person during office hours.

(OVER)

How hard will it be to succeed in this course?

That depends on the individual. You aren't required to take an honors course, so if you do, you should like math and look forward to being challenged. If that's truly how you feel, you should find the work more rewarding than onerous.

I am very willing to help people with the course material in any way I reasonably can. But in the end grades will reflect, as best and impartially as I can judge, nothing else but the degree of mastery of the material which is indicated by performance on homework and exams.

To assess your attitude, you might find it useful to score yourself on the following scale, between 50 and 100. (50 represents a minimal pass for a standard course. If you think you rate 75 or less, you might be better off in MA 173.)

(50). I go to lectures to find out how to do the homework and exams, so that I can get a good enough grade to advance toward the degree which will be my passport to the workplace. Math is a good way to achieve my goals, because all you have to do is follow the rules. I will work steadily 6–7 hours a week outside of class, to learn what I have to. The main job of Professors is to help me get through.

(100). I might keep it to myself, but I enjoy doing math for its own sake. I get a kick out of learning—or better still, discovering—unexpected connections and unifying patterns. I like being challenged to stretch my mind by new ideas and problems (no pain, no gain). I think of homework as a means for this, not an end in itself. I regard lectures as an introduction to a few of the best concepts and methods that people have developed over centuries. These mental constructs won't be all that easy, or they would have been thought of 10,000 years ago. So I realize that I need to spend time soon after each lecture to think about what was presented, to read about it, slowly and carefully, in the textbook (or other sources I might find by browsing in the library or on the web, if I think an alternate point of view or some other enhancement would be helpful and/or interesting), until I get some kind of gut feeling for what's going on. The Professor's job is to guide me to places where there are pleasurable mathematical experiences to be had. But the responsibility for actually having such experiences is mine.

Sure I need good grades, but I'm pretty confident that my outlook toward learning ensures they'll be there.