Class Information for

Calculus I

Math 180, Fall 2006
MWF 1:00–1:50pm, Lecture Center B

Instructor: Matthias Aschenbrenner

E-mail: `maschenb@math.uic.edu`

Course webpage: `http://www.math.uic.edu/∼maschenb`
   (follow the link to Math 180)

Office: 417 SEO

Office phone: (312) 413-3150

Office hours: Monday 3–4pm, Wednesday 3–4pm, Friday 11am–12.

Teaching assistants: Michael Defranco (`mdefra4@uic.edu`) and Marcy Robertson (`mrober5@uic.edu`)

Discussion sections: TuTh
1:00–1:50pm	304 Taft Hall	(Defranco);
2:00–2:50pm	309 Taft Hall	(Defranco);
1:00–1:50pm	309 Taft Hall	(Robertson)

TA office hours: On TuTh 9:00am–3:50pm there will be someone in the Mathematical Sciences Learning Center (SEO 430) who can answer Math 180 questions.

Emerging Scholars Program (ESP): ESP participants spend an additional four hours per week (2-hour sessions) working in groups on challenging mathematics problems, and receive 1 Satisfactory/Unsatisfactory credit. Admissions to ESP depends on an adequate score on the university placement examination or a grade of C or better in the prerequisite for the math taken with the Emerging Scholars workshop. Further questions about ESP should be directed to Jeanne Ward.

ESP section instructor: Marcy Robertson

ESP sections: TuTh 10-11:50am, 208 Taft Hall (Robertson)

Prerequisites: An appropriate grade on the Department placement test or a grade of C or better in Math 121 or an approved equivalent course. Students who do not satisfy these prerequisites will be dropped.

Course text: *Calculus, Single Variable,* fourth edition, by D. Hughes-Hallett et al., Wiley, ISBN: 0-471-48482-2.

Calculator: Use of a graphing calculator will be an integral part of the course. Instructors will be using the TI 83 Plus. Any graphing calculator you now own should be adequate.

Syllabus: The purpose of this course is to introduce you to calculus through the study of problems, examples, and applications, the discussion of theoretical ideas, and the use of the calculator. You are expected to read material in advance of lectures, as well as do some relevant problems beforehand, in order to maximize what you get out of the lectures.

We will cover the following material:

Week	Sections	Brief description
1	1.1 – 1.6	Elementary functions
2	1.7 – 1.8	Continuity and limits
3	2.1 – 2.3	The derivative
4	2.4 – 2.6	Interpretations of the derivative
5		Hour Exam I
6	3.1 – 3.4	Basic differentiation techniques
7	3.5 – 3.8	Differentiation of elementary functions
8	3.9 – 3.10	Mean value theorem
9	4.1 – 4.2	Local extrema, families of functions
10	4.3, 4.5	Extrema, modeling
11		Hour Exam II
12	4.6 – 4.8	Applications
13	5.1 – 5.3	The definite integral
14	5.3 – 5.4	The Fundamental Theorem of Calculus
15		Review for Final Exam

Responsibilities—mine and yours: My responsibilities are to come to class prepared, respond to and encourage questions and other class participation, administer and grade (together with the TA) quizzes, homework sets and exams, be available to you during office hours and scheduled appointments, and stimulate enthusiasm for mathematics.

Your responsibilities are as follows: You are expected to complete the assigned reading in the text before each class. Homework problems will be collected at the beginning of each lecture; the homework will be returned in the discussion sections. Some of the assigned problems will be on material you have read, but not yet covered in class. Doing these problems beforehand will prepare you to get more out of my lectures.

Homework problems will be collected at the beginning of each lecture. No late homework will be accepted.

Put the following information in the upper right hand corner of the first page:

Your Name

Math 180, Homework for month/day

On each additional page, put your name in the upper right-hand corner. Work single-sided, that is, write on only one side of each sheet of paper. STAPLE any homework that is more than one page long. Remove all perforation before submitting. Write legibly.

No late homework will be accepted.

Homework that fails to meet the above requirements will be marked "Unacceptable" and returned unread.

I will assign both readings and homework each week, to be posted on my web page. The web page and the list of assignments on it will be updated continuously— be sure to check back frequently.

Quizzes: One quiz in the discussion session on Tuesday each week, starting September 5.

No makeup quizzes will be given.

Exams: Two hour exams, given in class, on September 29 and November 10. No quizzes during weeks of hour exams.

Final exam: Thursday, December 14, 1:00–3:00pm, at a place to be announced.

Except in the case of emergency, students must discuss absences from hour exams with me in advance of the exam. Students with final examinations which conflict with the Math 180 final examation are responsible for discussing a makeup examination with me no later than November 30.

Students are expected to be thoroughly familiar with the University's policy on academic integrity. The University has instituted serious penalties for academic dishonesty.

Copying work to be submitted for grade, or allowing your work to be submitted for grade to be copied, is considered academic dishonesty.

It is University policy that students with disabilities who require accommodations for access and participation in this course must be registered with the Office of Disability Services.

Grading policy: Hour Exams: 20% each; Final Exam: 40%; Homework and quizzes: 20%.

Letter grades: Roughly computed as follows: A = 85–100%, B = 75–84%, C = 65–74%, D = 50–64%, E = below 50%.