MATH 132: Mathematical Analysis II
Spring 2004
Professor Alfonso Castro

Office: Olin 1260    Phone: x73171    email: castro@math.hmc.edu
Office hours: Tuesday and Thursday, 1:15–2:30pm, and by appointment.
Topics: Integration theories, sequences of functions, inverse and implicit function theorems.

It’s also useful to consult other books on real analysis. Sprague Library has many of these; look around the QA300 area.
Course meets: Monday–Wednesday, 2:45–4:00pm, TG 105.
Tutors/graders: To be announced
   Tutoring hours (to be confirmed): Sundays and Wednesdays 9–10pm, Baker Room, Linde Activities Center.
Web page: Homework assignments and other useful information are posted on the course page:  
http://www.math.hmc.edu/~castro/
Grading:
   • Homework: due in office (Olin 1260) by 5:00pm each Tuesday.
   • Midterm: take home test due Friday, October 7/05.
   • Essay paper: 5-7 pages, see below.
   • Final exam: three hour take home test.
Grade composition: Midterm 20%, homework 25%, essay 25%, and final exam 30%.

No late homework will be accepted. The lowest homework score of each student will be dropped. Please staple your HW, write your name and the assignment number on it, and turn it in in the appropriate folder.

Homework, with Rewrites: We will use a system of optional Rewrites for homework. On the due date, turn in the homework for that day by 5pm at office (Olin 1260). Homework will be graded and returned within a week, with written comments from the graders. If you are not satisfied with your grade on the assignment, you have the option of re-doing any questions you wish, and submitting the rewritten homework for grade, along with the previously graded version. *(Except: You can only rewrite a question if you made a serious attempt at it in your first version.)* If you choose to do a rewrite, it is due
at my office by 5pm, two weeks after the original due date of the assignment. (Except: No rewrites will be accepted for assignments due in the last two weeks of class.) Your rewritten assignment will be graded, with particular attention to whether you adopted the graders’ suggestions, and new grades will be assigned for rewritten questions. Your grade for a rewritten question will always go up (or stay the same); it will never go down.

An excellent source on good mathematical writing is the *Handbook of Writing for the Mathematical Sciences*, N. Higham, SIAM, 1998.

**Essay paper:** A list of possible topics will be handed out later.

- Week of 21 September, 2005: submit proposed title and a few sentences outlining plan.
- Friday, October 21, 2005: draft for peer review due.
- Wednesday, November 18, 2005: final paper due.

**Honor Code:** Though cooperation on homework assignments is encouraged, students are expected to write up their own solutions *individually*. That is, no copying. Comprehension is the goal, so even with cooperation, you should understand solutions well enough to write them up yourself. It is appropriate to acknowledge the assistance of others; if you work with others on a homework question, please write their names in the margin. *Tests* are to be done individually. You are encouraged to discuss your paper with other students. The HMC Honor Code applies in all matters of conduct concerning this course.

August 29, 2005