Homework Instructions

- 1. No late homework accepted. Homework is due at the beginning of class.
- 2. To avoid homework on topics not yet covered in lecture, homework is not known until class's end. So homework is announced at the end of class or after class (via email or course homework page). On the rare occassions you miss class, contact a fellow student or Prof. Girardi for the homework. On occassions, but not always, problem and due dates are posted on the course homepage.
- Work neatly. Scratched out work is not acceptable. Thus (earseable) pencil is highly suggested. If your homework paper has scratched out work, rewrite your homework.
- Write every other line to leave enough space for feedback. (For LaTex use \baselineskip 22 pt.)
 Write on only one side of a piece of a 8.5"x11" white paper that is either lined or blank.
 Do not run a problem from one page to the next.
 Write legible (neat and large enough).
- 5. Always begin a problem by writing the statement of the problem.Label problems as: Exercise Chapter.Section.Exercise. For example, ER 1.2.3. (ER=exercise).Do the problems in the order given on the web (or in class).
- 6. If more than 1 sheet of paper is used, then staple your pages (stapler is in top drawer of LC 345 filing cabinet). Put your PIN, name, and due date in upper right hand cornor of back of the last sheet of paper. (Your PIN will be assigned shortly after the last day to drop without a W. Before then, just print your name legibly.)
 Fold your page(s) in half (to form a ^{8.5}/₂"x11" size) with you PIN/Name showing on the outside.
- 7. You will be grades not only on correctness but also your explanation of how you arrived at the answer. So clearly explain your answer.
- 8. You are strongly encouraged to work together, sharing ideas (but not solutions). The homework that you submit must be your own work (i.e., no copying from each other or the web). Remember, you must take your exams alone. Cheating, of any form, is grounds for an F in this course.

Proofs

9. <u>A proof's first paragraph</u>. Start with "Proof.". If not using direct proof, state your proof method. Next clearly write your hypotheses; in doing so, you natuarally will be setting your notation. <u>The remainder of a proof</u> is the meat of the proof. Justify each step.

E.g., a proof showing differentiability implies continuity by contrapositive:

Proof. We will show ER 1.2.3 by contrapositive. Let $f \colon \mathbb{R} \to \mathbb{R}$ be discontinuous. We will show f is not differentiable.

By the definition of continuous, there exists $\langle \text{ finish } \dots \text{ the rest is the meat of the proof} \rangle$.

- 10. Follow the Writing Guidelines given in class (and posed on the course homepage). E.g.: use complete sentences, proper grammar, correct notation. Do not use the \implies symbol.
- 11. You may use (without proving as long as you give the reference) any result occurring previously to the problem in the: lectures, book, book's exercises.
- 12. You may include your Thinking Land (i.e., notes to yourself to help you study for exams) but if you do so, clearly label your Thinking Land (TL is fine). If you want to add a comment to yourself within a proof, you may so by using (comment to yourself), at which I will not look.