# SUGGESTIONS FOR C&M - MATH 241 X8 FALL 2013

#### 1. Scheduling

Here is a sample schedule for Unit 3. When you have finished and submitted the homework for Unit 2 (no later than Thursday Sept. 12), begin working on the Basics and Tutorials for Unit 3. This gives you part of Thursday and the entire weekend. You might also take some time to continue working on Unit 2 Literacy. On Monday Sept. 16, you meet with your group, discuss what you read, and start working on the Unit 3 homework. On Tuesday Sept. 17, we meet as a class to quiz over Unit 2 and to discuss Unit 3 material. On Wednesday Sept. 18, now that we've hopefully filled in any gaps in your understanding, you are able to complete or nearly complete the homework in your group. On Thursday Sept. 19 you finish off any homework you need to, look at the Unit 3 Literacy, and start on Unit 4.

### 2. Reading

In all math classes, "reading" from a textbook is not like reading a newspaper. You should be active in your reading, thinking about what definitions actually mean, what a theorem really tells you, how you might attack that example before reading the solution. Mathematics is something to be wrestled with and defeated.

In this class in particular, you have the benefit of an interactive textbook. Don't get lazy about it! When it asks a question, think about whether you know something that will answer the question. When a block of code comes up, glance through it to see what it's doing before you run. Does the answer come out as something you had expected? Maybe go back and tweak some commands to see what happens.

## 3. WITH AND WITHOUT THE COMPUTER

While the homeworks are mostly electronic, the exams are not. Having the computer around saves you from doing the same tedious computations over and over, and helps a lot in visualization. This should allow you to focus on the mathematical ideas underlying a problem. But every now and then, pause and think "how would I do this by hand? How hard would it be?". Use the Literacy files to further check/practice your hand skills.

#### 4. Note taking

Some people learn well by writing things down, and we don't get much of that in this course. If you are such a learner, take handwritten notes as you work in the Basics and Tutorials. It is also possible to take notes in Making Math. You should probably take light notes during our discussions, but focus on understanding what I'm saying; fill in more detailed notes later.

## 5. Mathematica code

You shouldn't need to learn Mathematica code much for this class. By a few weeks in you should understand a few basics (that builtins have capital letters, the difference between = and ==, etc.), and you should understand how to adapt previous code to new purposes. We will never test you on Mathematica coding.

## 6. When you have trouble

Make sure you're following the suggestions above, or let me know why you think they're not helping you. Talk to me and the CAs, and come to office hours. I'll do what I can to help, but I need to know what the problem is first.