

Instructor: Michael Pelsmajer ([pelsmajer@iit.edu](mailto:pelsmajer@iit.edu))

Contact me by email. I will also email you, so you need to check your [hawk.iit.edu](mailto:hawk.iit.edu) email frequently. (What you should really do is set up your emails so that they all go to one account.)

Office Hours: Tuesday 10:30am-12pm, Wednesday 11:30am-12:30pm, and by appointment. To arrange a meeting, talk to me before or after class, or send an e-mail with a list of convenient times.

Office: Engineering 1 Building, Room 206 (312.567.5344 but email is usually better)

Web page: <http://www.math.iit.edu/~pelsmaje/Math151-Fall2013.htm> (or Google “Pelsmajer”, etc.)

Class meetings: 8:35-9:25am MWF (Section 01) or 10:00-10:50am MWF (Section 02) in Perlstein Hall 109.

You should come to class *ready to learn*: Awake, alert, caught up on earlier material, and it’s also incredibly helpful to read material before the lecture. I’m not suggesting that you need to figure out everything on your own—this is not an independent study course. Rather...

How to read material before a lecture: You should attempt to understand each thing you read, persisting until you either succeed or until you get stuck in a confusing point. You may realize that you need to review something from an earlier class: if so, do that. Finally, think a bit about the big picture and try to decide what is most important.

Now you are ready for class.

Lab/Recitation: 1:50pm-3:05pm M (Section 01) or 3:15pm-4:30pm M (Section 02).

Labs are in Stuart Building 112E. Recitations are in Siegal Hall 203 (Section 01) and Stuart Building 113 (Section 02). See the class web page for the weekly schedule.

Most labs will have a Mathematica assignment. You can work on the assignment with a partner during the lab. Then finish it at home, print it out, and hand it in the following week.

At recitations, you will work in groups to solve problems, then present solutions at the board.

Homework: The heart of the course is working through problems. Homework problems will be assigned, collected, and graded via *WebAssign*. You will get a chance to redo incorrect problems. The expectation is that you get 100%.

**Do your work on paper**, then put the answers into WebAssign. Keep paper copies of your work; occasionally I will ask to see it. Make it neat and well-organized. (Suggestion: print the assignment, go away from the computer to do the assignment, then go back to the computer to enter in the answers.) Make any corrections on paper again, before re-entering them into the computer.

If you are still getting a problem wrong after two or three times, seek help. You only have a limited number of attempts; don’t waste them. Don’t just guess.

Multiple Attempts: Usually, you will have 3 chances to get it right. Then the problem will change a bit, and you will have 3 more chances to do it.

Automatic Extensions: Unless you are more than a few days late, you can take this extension. Feel free to use it, and you don’t even need to explain why. Late problems are penalized 20% per day late. (Problems which are already correct will not be penalized.)

Other Extensions: If the automatic extension is no longer available and/or if there is some special circumstance that the instructor should know about, you can ask for a “Manual Extension”. It may or may not be granted, and late problems may or may not be penalized. (Problems which are already correct will not be penalized.)

Solutions: After an assignment is due, you can find it in “Past Assignments” and then you choose to see the answer key (and sometimes detailed solutions as well). However, once you look at the answers, you can no longer take an extension on that assignment.

The Purpose of Homework: Working problems is how you learn mathematics. Homework is not supposed to test your knowledge; that's what the exams are for. You can work with classmates (or independently), get help from the TA, or whatever you need. Just don't forget that that the goal is to learn.

Writing Project: This will be explained after the first exam. The goals are clarity and precision in thinking and communicating mathematics. There will be three stages, roughly: math, writing, and revision.

Exams: There will be three exams held during regular class meetings on September 13, October 18, and November 22, and a final exam which is scheduled by the registrar. Make-up exams will be given only in case of a documented emergency.

The first exam is primarily on limits and limit-versions of the derivative. The second exam is mainly about derivative computation and applications. The third exam covers integration and its applications. The final exam is cumulative.

Tip: When I write exams, I think about what was covered during the lectures and on homeworks.

No calculators on exams! (Also no iPads, cell phones, etc. Also no notes, headphones, talking, etc.) You should mostly avoid using a calculator when doing your homework, since you need to develop calculator-free working habits, in order to be ready for quizzes and exams.

On the other hand, you will be learning Mathematica, a powerful tool for mathematical computation. It is related to Wolfram Alpha, which is another good tool.

Grading scheme: WebAssign 5–15%, Lectures 0–5%, Recitations 0–5%, Labs 0–5%, Writing Project 5–10%, Exams 60–90%. Total 100% (Each item is compared to the exam average, and the higher one counts more.)

A perfect score of 100/100 in “Lectures” can be achieved by missing at most 3 regular class meetings. 10 points are deducted for each additional class missed. Points can also be gained or loss for participation (e.g., snoozing or surfing the internet) and being late.

A perfect score in “Recitation” requires attendance, group participation, and presenting problems at the board.

The “Lab” score depends on attendance and written solutions.

The exam score is split evenly among the four exams.

The grading scale is A:90-100%, B:80-89%, C:70-79%, D:60-69%.

Homework #0, due in class on Wednesday, August 21:

Part I: You.

1. What's your major (official or intended)?
2. What else are you into (non-academic or academic)?
3. What do you prefer to be called (your name or a nickname)?
4. Anything else you'd like me to know?

Part II: Click links from the class web page and read some “Worthwhile Advice”. Based on that reading, describe

5. one piece of advice which you did not know before.
6. one piece of advice (or more) that you would like to follow this semester.
7. one piece of advice that you are skeptical about (and why).