

Instructor: Michael Pelsmajer (pelsmajer@iit.edu)

Contact me by email. I will also email you, so you need to check your **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: 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-Fall12014.htm>

(Or Google “Pelsmajer” to find my web page, then scroll down to “Teaching”, then “Fall 2014”, etc.)

Class meetings: 8:35-9:50am MWF (Section 01) or 10:00-11:15am 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: 8:35pm-9:50am Thursdays (Section 01) or 3:15pm-4:30pm Mondays (Section 02).

Labs are in Stuart Building (SB) rooms 112E/112F. Recitations are Technology Park - South (TS) room 3A2-1. To find out what is happening each week, see the class web page and/or Google Calendar.

Labs will have a Mathematica assignment. You can work on the assignment with a partner during the lab, and you finish it at home (if needed). Part of these assignments will be “writing projects”.

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 5 chances to get it right. You usually get full credit for doing a problem correctly, even if it takes you multiple attempts. However, for multiple choice questions, each wrong answer costs you partial credit.

Late work: If you do not finish an assignment on time, you can take an “Automatic Extension”, which gives you two extra days to work on problems. You can do this as often as you want, and you don’t need to provide any reason for doing so. However, late problems are penalized 20% each time their due date is extended. (Problems which are already correct will not be penalized.) One week after the original due date, no more extensions are allowed.

Special 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.) You must give a good reason for the request.

Solutions: After an assignment is due, you can find it in “Past Assignments”. From there you can request extensions and see the answer key (and sometimes detailed solutions, too). However, once you look at the answer key, you can no longer take an extension on that assignment.

Practice Another Version: After an assignment is due, you will usually be able to go back to the assignment and click “Practice Another Version” to work on similar problems.

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 the goal is to learn.

Exams: There will be three exams held during regular class meetings on September 19, October 29, and December 3, and a final exam which is 8:00-10:00am December 9 for Section 01 and it is 8:00-10:00am December 11 for Section 02. 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 to use Mathematica, a powerful tool for mathematical computation. It is related to Wolfram Alpha, which is another good tool.

Grading scheme: 70% of your final grades is fixed: Exams 60%, WebAssign 5%, Labs/Writing 5%. The remaining 30% is flexible, depending on what your strengths are: 10% each for $\max(\text{Exams}, \text{WebAssign})$, $\max(\text{Exams}, \text{Labs/Writing})$, and $\max(\text{Exams}, \text{Participation})$. Total: 100%.

This gives you multiple ways to succeed. For example, if you have a 95/100 exam average and weaker scores for everything else, exams will be worth 90% of your grade. On the other hand, if you have a 75/100 exam average and higher scores for everything else, your grade will be 60% Exams, 15% WebAssign, 15% Labs/Writing, and 10% Participation.

“Participation” means lectures and recitations. You can get 100/100 in this category if you miss at most three of those class meetings (10 points deducted for each additional class missed) and give at least two successful presentations in recitations (30 points deducted if you present just once or not at all). Points can also be gained or lost for participation (e.g., snoozing or surfing the internet) and being late.

The WebAssign score is the average of all the WebAssign homework scores. The Exam score is split evenly among the four exams. Lab/Writing: each lab there will be some exercises to do, but there will usually also be a mathematical writing component.

The grading scale is A: 90–100%, B: 80–89%, C: 70–79%, D: 60–69%, E: 0–59%.

Textbook/WebAssign: You will need to purchase a textbook and a WebAssign access code.

The required textbook is *Calculus, Hybrid edition (7th edition)* by James Stewart. However, if you will only be taking MATH 151 and 152, but not MATH 251 (Multivariable Calculus), then you can instead get the (smaller, less expensive) book *Single-Variable Calculus*. If you buy a brand-new “Hybrid” book, it should come packaged together with a WebAssign access code. If you buy a used book, you will probably have to buy an access code separately. Also, if you get a used book, then you don’t really need the hybrid version (which has no exercises, so it’s lighter) nor the 7th edition (which has the sections in a slightly different order).

You can buy a WebAssign access code on-line, once you log into WebAssign, or you can buy an access code in the IIT bookstore. There are two types of access codes, for one semester, or for multiple semesters. WebAssign access codes comes with access to an eBook, so you may not need a physical book at all. (Personally I can’t live without a physical book, since staring at the computer screen all day makes me very tired, but some people feel otherwise.)

ADA Syllabus Statement: Reasonable accommodations will be made for students with documented disabilities. In order to receive accommodations, students must obtain a letter of accommodation from the Center for Disability Resources and make an appointment to speak with me [the instructor] as soon as possible. The Center for Disability Resources (CDR) is located in 3424 S. State St., room 1C3-2 (on the first floor), telephone 312-567-5744 or disabilities@iit.edu.

Homework 00, due by next class:

Part I: You.

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

Part II: Find the "Worthwhile Advice" on the class web page. Follow the links, and based on your 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).

Send me an e-mail with your answers.

You should also read this document (Course Information) carefully, highlight important bits (like dates), and ask if you have any questions. Finally, you should begin the regular homework assignments, which are available via WebAssign.