

# Syllabus: MA151.01, Applied Calculus, Spring 2014

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**Honor Code:** For the tests and quizzes in this class you must not give or receive any aid. For the homework and student examples you are encouraged to work with other students, but the work you turn in should be in your own words and should be understood by you.

**Classroom format:** We meet three times a week, M, W, F.

In general, most days will start with some time for questions on the homework. Then I’ll present some new material, we’ll discuss it a little bit, and then have you practice it.

**Class material:**

- The textbook is *Applied Calculus*, by Hughes-Hallett, Gleason, et al., fourth edition.
- You should also have a calculator (for most people this means a TI-8*n* where  $0 \leq n \leq 6$ ) and access to a computer.
- Three ring binder (or spiral with extra paper to hand in, and pockets to put handouts).
- $3 \times 5$  index cards.

**Classroom:** Please do not use your cell-phone (for talking or texting), PDA, iPad or laptop during class without talking to me ahead of time. If I see you using one of these I will stop and stare at you until you put it away.

**Grade Breakdown:** Your grade will be based on the following points.

	Student examples	Homework	Quizzes	Midterms exams	Final exam	Total
Points (approx)	1/day	10/HW	20/quiz	125, 185, 250	350	
Number (approx)	30 days	10 HW s	5 Q s	3 MTX s	1 FX	
Totals (approx)	30	100	100	560	350	1140

Your letter grade will be based on the total number of points you have at the end of the class. If the total comes out to 1140 (which could change), then the grades are as shown below:

$1140 \geq A \geq 1060$	$1059 \geq A- \geq 1026$	
$1025 \geq B+ \geq 991$	$990 \geq B \geq 946$	$945 \geq B \geq 912$
$911 \geq C+ \geq 877$	$876 \geq C \geq 832$	$831 \geq C- \geq 798$
$797 \geq D \geq 570$	$569 \geq F$	

**Student examples:** Each day I will have you work on a few examples, hopefully at least one of each kind of problem. I’ll have you turn this in, and when you do you get one point. These will not be graded, you can help each other out when you do them, and you can get help from me when you do them. The point of turning them in is to give you extra incentive to put good effort into doing them.

**Homework:** There’s a bunch of points to make about homework.

- Mathematics is very experiential. What this means is that you learn it most by doing, not by listening to me. My purpose is just to give you the basic material that you will work with, to point you at the next topic, and to help keep you from getting stuck.
- There’ll be two kinds of homework problems:
  1. Textbook problems. These will be collected and (mostly) just checked off.

2. WebWork problems. WebWork is a web-based homework grading system. It has pros and cons. Pros: every problem gets graded, instant feedback, etc. Cons: need to sign on, need to learn which buttons to press, the computer is unforgiving of small mistakes, etc.

Obviously I believe that the pros outweigh the cons, and I will do whatever I can to minimize problems.

- We'll have one homework assignment per week, due each Friday (except for when we have a midterm, and except HW 10, which will be due Thursday 4/17, not Friday 4/18 since that's Easter Break).
- Late homework: not accepted. Homework is due during class. I'll drop the lowest homework score so if you miss one, no big deal.

**Quizzes:** We will have (approximately) 5 quizzes, usually on Friday. These are meant to be easier than the midterms, and serve as a chance for me to find out how you're really doing, and for you to find out what sorts of problems I write and how I grade them.

**Tests:** We will have three midterms and one Final. The midterms will be every four weeks, almost certainly on the following days: 2/7, 3/14, 4/11.

**Note Sheets and Calculators:** Calculators will only be allowed on parts of the exams, and none of the quizzes. No calculators with symbolic capabilities (like the TI-89, TI-92, etc) will be allowed on the exams.

I will allow you to bring a hand written note card to the exams: one side of a  $3'' \times 5''$  card for each midterm, and both sides for the final. There will be no note cards for the quizzes.

**Office Hours:** Here are my officially scheduled office hours:

M	T	W	F
11:00–11:50	2:00–2:50	1:00–1:50	11:00–11:50

Outside of office hours you are welcome to try coming by at other times, but I may be busy our out of the office.

**Disabilities:** I will happily accommodate any needs you have based upon a disability that is registered with the office of Disability Support Services (DSS). You need to contact me ahead of time for this accommodation. You can contact DSS at 410-617-2062, or mwiedefeld "at" loyola.edu.

**Outline** We'll cover chapters 1–5, occasionally skipping a section. This includes standard material about limits, the definition of derivatives, various rules and formulas for the derivative, applications, and finally a little bit of integrals. We have roughly 37 days to cover the material, so on average, this is about 1 section a day.