

# Math 4153/5053 - Advanced Calculus II

<http://math.okstate.edu/people/lebl/osu4153-s16/>

**Lecture:** MWF 10:30-11:20AM, MSCS 422.

## Lecturer:

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## Text:

We will start with my book, *Basic Analysis: Introduction to Real Analysis*, finishing what was unfinished from last time.

You can download it as PDF,  
or you can get a printed copy on amazon.

Then we will use lecture notes for the rest of the material. I will be posting these lecture notes here as they get finished.

## Grading:

The grading scheme is given below:

$$\text{Grade} = 0.2 \times (\text{Homework}) + 0.2 \times (\text{Exam 1}) + 0.2 \times (\text{Exam 2}) + 0.4 \times (\text{Final Exam})$$

To account for bad exam day, etc., an alternative grade will be computed as follows

$$\text{Grade} = 0.2 \times (\text{Homework}) + 0.1 \times (\text{Exam 1}) + 0.1 \times (\text{Exam 2}) + 0.58 \times (\text{Final Exam})$$

A second alternative (to account for bad final day) will be follows

$$\text{Grade} = 0.2 \times (\text{Homework}) + 0.3 \times (\text{Exam 1}) + 0.3 \times (\text{Exam 2}) + 0.18 \times (\text{Final Exam})$$

The highest of the three will be used for your grade. Notice that in the alternative schemes, the score does not sum to 100 percent. That is on purpose! You should count on the first scheme, the second/third schemes are only to account for things going terribly terribly wrong on one of your exams.

## Exams:

**Exam 1: (tentative) Monday, February 15th, (evening, when/where to be figured out), 20% of your grade.**

**Exam 2: (tentative) Monday, March 28th, (evening, when/where to be figured**

**out**), 20% of your grade.

**Final Exam: ??? (same room as the class)**, 40% of your grade. (Comprehensive, think of the final exam as half exam 3 and half comprehensive final)

**Exam Policies:** No books, calculators or computers allowed on the exams or the final.  
**One page (one sided) of handwritten notes allowed on the exams.**

### Homework:

Assigned weekly (some weeks may be skipped).

Homework page ([hw.html](#))

Worth 20%, spot checked (*spot checked* means: some spot(s) of each homework checked, and all will be collected). Part of the grade will be simply for turning the homework in. Lowest 2 homework grades dropped (so no late homeworks).

### Missed Work:

No makeup or late homework (two lowest are dropped anyhow), but feel free to turn homework in **early** if you cannot for whatever reason turn it in on time. For exams, there will be reasonable accommodation if you have a valid and **documented** reason, and the documentation is provided **in advance** unless absolutely impossible. If you have a university approved (see the syllabus attachment) final conflict exam, you must tell me at least two weeks before the final exam week, so so that we can figure out what to do.

### Syllabus attachment:

See the official syllabus attachment, for some more information.

### Interesting links:

Wolfram Alpha (<http://www.wolframalpha.com>). It's like Google for math.

Speaking of Google: try typing something like  $x^2-y^2$ .

Although no, Google will not likely solve your homework problems for you. Even if it did, it would not be a good idea. The reason for doing the homework is to learn how to do it. If you simply try to find solutions online, and do manage to find them, you will not learn anything and you will see the result of this on the exams. Also it is *considered cheating (and plagiarism)* to find solutions online and claim them as yours. Don't do it!

It never hurts to learn how to use LaTeX if you want to type up stuff with lots of math. It not only increases legibility of your work, it also increases your nerd factor by an order of magnitude (that's a good thing). For easy to use LaTeX frontends try TeXworks (Linux, Windows, Mac) or TeXShop (Mac). Or perhaps give LyX (Linux, Windows, Mac) a go. Lyx might be the easiest of the bunch, though it is not as flexible.