

## Math 4143/5043 - Advanced Calculus I

<http://math.okstate.edu/people/lebl/osu4143-f17/>

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

### Lecturer:

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**Office hours:** 3:30-4:30pm Tu Th, 11:30-12:30pm We, and by appointment at other times.

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### Text:

We will be using my book, *Basic Analysis: Introduction to Real Analysis*. You can download it as PDF, or you can get a printed copy on amazon.

### 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 higher 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 scheme is only to account for things going terribly wrong on one of your exams.

### Exams:

**Exam 1: (tentative) Monday, September 25**

**Exam 2: (tentative) Wednesday, November 1**

**Final Exam: TBA (same room as the class)**, 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 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.