Math 376 – Honors Multivariable Calculus (Spring 2018)

- Lecture times and location: TR 9:30 – 10:45AM, 2317 Engineering
- Textbook: Apostol, *Calculus Volume II, second edition*
- Course website: http://math.wisc.edu/~svs/376/
- Instructor: Steven Sam steven.sam@wisc.edu; office: 321 Van Vleck
- Instructor and TA office hours: see website

Course description

This is a continuation of Math 375, and you will be expected to know the material from that class. The plan for the course will be roughly:

1. §9.6: Implicit differentiation, §9.9-12: min/max/saddle points, §9.14: Lagrange multipliers
2. §10: Line integrals
3. §11: Multiple integrals
4. §12: Surface integrals
5. §6: Linear differential equations

This is a 5 unit course. Outside of classroom time, you are expected to read the textbook ahead of lecture and work on homework on a regular basis.

Important dates

- Jan 23: First lecture
- Mar 1: Midterm 1, in class (covering §§9, 10)
- Mar 23: Deadline to drop classes
- Apr 12: Midterm 2, in class (covering §§11, 12)
- May 3: Last lecture
- May 8: Final exam, 5:05PM – 7:05PM (cumulative)

Grading

- Homework: 10%
- Quizzes: 10%
- Midterm 1: 20%
- Midterm 2: 25%
- Final exam: 35%

The numerical cutoffs for letter grades will be decided at the end of the course, but will be done in such a way that benefits the students. For example, if one exam is more difficult than expected, the cutoffs will be adjusted to reflect this.

There will be weekly quizzes in discussion every Wednesday (on the previous week's material) except on weeks of midterms and the first week. Homework is also due on Wednesday and will be graded mostly on completeness with 1 or 2 problems graded for correctness.

If you know ahead of time that you cannot attend one of the exam dates, let me know as soon as possible and provide valid documentation. In case of emergencies, please also provide valid documentation.

Exams

No calculators are allowed for exams. A formula sheet might be provided for the midterms and final, but the exact contents will be decided later. No other notes will be allowed.

Expectations

My role is to teach you the material, and I hope that you enjoy it and learn it well! You are expected to read the textbook, and it will be infinitely more useful for you if you read ahead of the lectures and prepare questions. You are encouraged to work on homework with others, but solutions must be written up individually. You should acknowledgement on your assignments any sources that you use (including other students, but not including the textbook or help from me or the TA).

If you have questions about the material, you are encouraged to come to office hours. Also, there is a Piazza page for the course: http://piazza.com/wisc/spring2018/math376/. You are encouraged to discuss the course and its material with one another there. If you have a question about the course, chances are that others have the same question, so it will be beneficial for all to have it posted to Piazza. However, please refrain from posting solutions to homework.

If there are issues that cannot be discussed on Piazza, please email me.

Academic integrity

http://www.students.wisc.edu/doso/academic-integrity/

Additional logistics

Students that need special accommodations should talk to me as soon as possible.