Instructor: Bo Yang  Email: boyang@math.cornell.edu
Lectures: MWF 11:15am- 12:05pm in 253 Malott Hall.
TA: Zach Clawson  Email: zc227@cornell.edu
Discussion Sections: in 224 Malott Hall.
DIS 201: 1:25pm - 2:15pm, DIS 202:2:30pm - 3:20pm, DIS 203: 3:35pm - 4:25pm

Course Website:

1. The main website: http://www.math.cornell.edu/~boyang/math2220%20f2016%20yang.html
2. Math 2220 Blackboard site

Textbooks: Lax and Terrell, Multivariable Calculus with Applications, Book, 2016. This book is available in print form through the Cornell Store.

A Remark: The textbook we are using is the multivariable calculus sequel to Peter Lax and Maria Terrell’s single variable calculus text “Calculus with Applications, second edition, Springer 2014”. That text is free and available at publisher’s website. Note that you will need a Cornell IP address to download it. It is also available on reserve in the Math Library. It is not a necessary prerequisite, but contains the proofs of some key theorems about numbers and about real valued functions of a single variable.

Blackboard site of Math 2220: The site is maintained to record grades, post supplementary course materials.

General information on Math 2220: Math 2220 is a multivariable calculus course intended for students who may be considering majoring in mathematics or a major that requires a strong background in mathematics. The prerequisites are Math 1110 and 1120 or their equivalent (for example a 4 or 5 on the BC advanced placement calculus exam) and a course in linear algebra (Math 2210 for example). In Chapter 1 we briefly review some of the key concepts about vectors and linear maps. Math 2220 includes all of the topics discussed in Math 1920 and Math 2130 but 2220 is designed to prepare students for more advanced courses in mathematics. We do this by providing you with opportunities to read and write proofs, and to become more familiar with how mathematics is expressed and communicated. Forbidden Overlap: Due to an overlap in content, students will receive credit for only one course in the following group: MATH 1920, 2130, 2220, 2240.

Important Dates:

First day of lecture: ............. Aug 24, in Malott 253
Last day to add classes: .................. Sep 06
Prelim 1: at 7:30 PM in Mecgraw Hall 165, Sep 27, 2016
Fall break: .................. Oct 08 to Oct 10
Last day to drop classes: .................. Oct 18
Prelim 2: at 7:30 PM in Mecgraw Hall 165, Nov 01, 2016
Thanksgiving break: .............. Nov 23 to Nov 27
Final Exam: ....... 9:00 AM to 11:30 AM, Dec 8;, 2016

Course calendar, HW assignments, and some occasional quizzes: will be updated regularly on on Math 2220 main website. Weekly homework assignments are due at the beginning of the lecture each Friday (except if there is no class on a Friday then HW is due on the following Monday). Solutions to the
HW will be posted after it is collected. Late homework will not be accepted, however we will drop your lowest HW grades when determining your final grade. There might be 4 quizzes in total, most likely it will take place in discussion sections. We will announce the dates for quizzes soon.

**Writing ups of the HW:** Normally HW is assigned from textbooks, but sometimes we assign additional problems, please check on Math 2220 main website. It is most important that you improve your ability to do proofs and to write clear mathematical arguments. These additional problems are designed to help you develop these skills. You may discuss with others about your solutions but the work must be your own. Refer to the academic integrity at Cornell in below for more details.

Your homework is a document that our grades have to read. They are not obliged to read unreasonably messy or unstapled papers! So please be clear and neat with your homework. Though not required, we encourage you to practice writing up HW solutions in Latex and turn in printed out papers. Regarding the theTeX source. Here is a helpful resource for learning LaTeX [http://www.artofproblemsolving.com/wiki/index.php/LaTeX](http://www.artofproblemsolving.com/wiki/index.php/LaTeX) and a book [Math into LATEX](http://www.artofproblemsolving.com/wiki/index.php/LaTeX).

**Final grades:** Your final grades will be based on Homework and Quizzes (20%), Prelim 1 (20%), Prelim 2 (20%), and Final (40%). Active participation in class may be taken into account when determining your final grade.

**Missed Exams or Exam Conflicts:** If you have a serious emergency (a proof from a doctor needed), or are unable to make exams due to athletic purposes in the university level (a proof needed), contact the instructor immediately. and you will be excused from the prelim or given a make-up prelim. We will assess your mastery of the material tested on that prelim either based on how well you do on the corresponding part of the final exam or the actual grades from make up prelims. Students who miss the final examination in cases of illness or serious emergency will be granted an INC if they have passing level work on their prelims and homework. Make ups for the final are given on the first day of the following term.

**Academic Integrity:** Cornell’s code of academic integrity applies to this and all other courses. In particular, academic misconduct of any kind may result in a grade penalty or the assignment of a failing grade. You may collaborate with other students on homework, indeed you are encouraged to do so. However, for maximum benefit, you should try hard to do all the problems yourself before consulting others. What you turn in should be your own account expressed in your own words. Verbatim copying someone else’s homework and presenting it as your own will be treated as a violation of Cornell’s Academic Integrity Code, as will copying solutions that you might find on the internet or elsewhere.