Math 326 Syllabus, Fall 2012

Mark Steinberger

Office: ES 136C
Hours: MWF 1:40-2:35 and by arrangement
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Please include Math 326 in the subject line.
My home page: http://math.albany.edu/~mark
Course page: http://math.albany.edu/~mark/classes/326/
Final Exam: Thursday, December 20, 10:30am-12:30pm

There will be three in-class exams and a cumulative final exam. Your grade will be based entirely on these exams. The final exam is worth twice as much as each in-class exam. Consideration will be given for improvement on the final.

Each in-class exam is worth 20% of your grade and the final is worth 40%. It really matters how much you retain from the test material. Since much of the underlying mathematics depends on the earlier material, it is important to study your exams and master the material on them even after they are returned to you.

Dates for the first two exams will be announced in class. Exam 3 is Monday, December 3.

There is no textbook. Some of the material can be found in A Concrete Introduction to Higher Algebra by Lindsay Childs, Springer, 2010, but some is not. Childs’ book is quite good and would make a good addition to anyone’s math library. In any case, you will not need to buy a book for this course. The material will be conveyed in the class notes and in supplements posted on the course web.

For this reason, class attendance is absolutely essential. If for some reason you need to miss class, it is imperative that you get notes from someone. And finding someone who takes good notes isn’t always easy. :-) Also, it is usually easier to digest the material if you see and hear it presented.

This course is heavy on problem solving. There are good exercises in the supplements and many old exams posted on the course web, full of problems to work. Being able to master the problems in, say, the exams from the last iteration of this course (and to work them all in the allotted time) will be very helpful in preparing for the exams this time around. In particular, there is quite a bit of material to practice on, and solutions are posted on the web.

We will spend significant time talking about theory, because the theory is essential in developing problem solving skills. Some of the exam questions
test theory in the form of true-false questions where you must prove whether
the statement is true or false. These questions require a solid understanding
of the underlying theory.

You are strongly encouraged to discuss this material with each other and
with me, both in office hours and in class. Verbalizing mathematical ques-
tions is a very useful step toward understanding them. Classroom discussion
is strongly encouraged. Please ask questions! If there is something you don’t
understand or can’t follow, there will be a number of other people in the
class in the same boat. So a number of people will benefit if you ask.

It is very important to stay current with the material. If you fall behind,
it will be hard to catch up. And if you are having trouble, please do come
to office hours early on. If you leave it until the last minute, you probably
won’t be able to learn it in time.

But office hours are not only for those who have fallen behind. Office
hours are extremely helpful for learning and I seriously enjoy discussing the
material with students and helping them learn. It is especially useful to
work with a group of students. The synergy really helps everyone learn.
If there is a small group, we will work in my office, ES136C. With larger
groups we will work in ES135 (close by).