Math 4310. Fall 2018. Information about the first midterm.

The first midterm will be given on Thursday, October 4th, in class. It will cover the material from Lectures 3-10 (up to and including Sep 27 lecture), Homeworks 2-4 and the following sections in Pugh: 1.4, 2.1-2.4 and 2.7. The corresponding sections in Rudin are 2.1-2.3, 3.1-3.3 and 4.2. I will not be asking difficult questions on the material from Lecture 10, but you should still know all the definitions and theorems discussed in that lecture. You will not be specifically tested on material from homework 1, but some topics which were covered on that homework, namely limits and suprema and infima, may naturally appear on the exam in connection with other topics. You do not need to worry about topics which were not discussed in class or homework.

As part of preparation for the midterm, you should go over class notes and homework assignments (make sure to read solutions to the problems that you missed and ask me questions if the argument is not clear) in conjunction with reading the book(s) again. It will be very helpful to know all the definitions and theorems from class off the top of your head by the time of the exam – if you do, you will have much more time to think about the actual problems. I do not expect that you will remember all the proofs from class, but you should know and understand the main techniques from those proofs as it is likely that similar techniques will be needed to solve midterm problems.

The first midterms from Fall 2014 and Fall 2015 have been posted. Solutions will be added at a later point. I will also post a list of additional practice problems by Saturday evening.