Department of Mathematics
University of California
Berkeley, CA 94720-3840

Math H1B – Honors Second Semester Calculus – Spring 2017

This course is aimed at students with a strong ability and interest in mathematics.

We will cover the syllabus for regular second-semester calculus, Math 1B, but with greater rigor (real proofs), greater insight, and more interesting exercises. We will also go back to some of the key definitions and proofs from Math 1A and put them on a solid basis.

Math H1B will be a **small class** given at the same hour, M W F 9-10, as one of the two giant Math 1B lectures. It will use the same text as 1B, so if you start H1B, but find in a few weeks that it is not the course for you, you should be to transfer to regular 1B and not be at a disadvantage. I don't expect my grading scale to be either higher or lower than that of 1B, but you will have to do more thinking to get a good grade. Hopefully, you will enjoy this!

H1B also has a discussion section at M W F 2-3, which students must attend. (This is at the same hour as two of the discussion sections for regular Math 1B.)

A nonstandard feature of my teaching style is that each lecture will assume that you have done the assigned reading for that day. You will also be expected to submit a **question** on that reading by the start of class; preferably by e-mail by the preceding evening. (Details will be explained on the first-day course handout. In particular, if you understand the reading thoroughly and have no questions you need answered about it, you should submit a *pro forma* question – with the answer. Of course, for the first day of class, there is no assigned reading, hence no question is expected.)

Who might like to take H1B? The obvious group are those students who have had regular Math 1A and would like a more challenging, more proof-oriented second semester. On the other hand, if you entered Berkeley with AP scores that would allow you to skip 1B, and you have been wondering whether to start with Math 53 or 54, or to shore up your preparation by taking 1B anyway, you might look at H1B as a third alternative if you enjoy proofs and/or want more practice with them, and are curious about the logical underpinnings of the mathematics you have seen.

If you are uncertain whether to take H1B, contact me, gbergman@math.berkeley.edu, and we can either discuss this by e-mail, or arrange for you to come by my office and discuss it.

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