

MATH 3110: INTRODUCTION TO ANALYSIS (FALL 2016)

COURSE DESCRIPTION: This course is meant to be a transition from calculus to real analysis. We will give a rigorous treatment of concepts like limits, convergence of sequences and series, and compact sets. We will study properties such as the continuity, uniform continuity, and differentiability of functions. Emphasis will be placed on understanding and constructing mathematical proofs.

MEETING TIME/SPACE:

Section 1, Tuesdays and Thursdays, 08:40–09:55am, Morrill Hall 107

Section 2, Tuesdays and Thursdays, 10:10–11:25am, Morrill Hall 107

INSTRUCTOR: Brian Hwang (bwh59)

OFFICE HOURS: Tuesday 2:55pm–04:15pm, Thursday 11:30am–12:30pm in Malott 580.

TAs: Ziyi Chen (zc286), Yujia Zhai (yz733)

TA OFFICE HOURS: TBA.

TEXTBOOK: *Introduction to Analysis* by Arthur Mattuck. If you do not have the book yet, please consult the book's webpage

<http://math.mit.edu/~apm/book.html>

which has the first couple of chapters available in PDF form.

COURSE WEBSITE: <http://www.math.cornell.edu/~bhwang/3110/>

PREREQUISITES: You are expected to be familiar with linear algebra (MATH 2210/2230/2940) and multivariable calculus (MATH 2220/2240/1920).

GRADE BREAKDOWN:

40% Homework Assignments

15% Prelim 1 (October 4)

15% Prelim 2 (November 15)

30% Final Exam (Scheduled by University, date will be announced by late September)

Homework will be assigned weekly and collected each Tuesday in class. You are encouraged to collaborate with others on assignments, but each student *must write up solutions on their own, in their own words* and list their collaborators on the first page of their submitted homework.

No electronic devices or study aids or notes of any kind are allowed on the exams. In particular, calculators are *not* allowed.

POLICIES: No late homework will be accepted without a note from the Health Center or the Dean's Office. However, in calculating final grades, we will drop the lowest homework score.

There are no make-up exams. If exceptional circumstances arise, let me know as soon as possible so that we can make the proper arrangements. You will need to provide a letter from the dean.