

MATH 3040: PROVE IT! (SPRING 2020)

COURSE DESCRIPTION: We study the methods of mathematical proof, and learn how to “think like a mathematician.” Emphasis will be placed on the clear, concise exposition and presentation in both written and verbal form. This course will be taught in an interactive format, incorporating some ideas from inquiry-based learning (IBL).

MEETING TIME/SPACE:

Mondays, Wednesdays, and Fridays, 1:25pm–2:15pm, Rockefeller Hall 122

INSTRUCTOR: Brian Hwang (bwh59)

OFFICE HOURS: Wednesdays, 2:30pm–3:30pm in Malott 581, after classes, or by appointment.

TA: Abigail Turner (alt86)

TA OFFICE HOURS: Thursdays, 9:00–11:00am in Malott 218.

TEXTBOOK: As a reference, we use *The Art of Proof* by Matthias Beck and Ross Geoghegan. An electronic copy of the book is free for Cornell students, via the Cornell library.

COURSE WEBSITE: <http://www.math.cornell.edu/~bhwang/3040/>

PREREQUISITES: Math 2210, 2230, or 2940. However, if you do not officially satisfy these prerequisites and still feel as if you would like to take the class, please speak with me.

GRADE BREAKDOWN:

- 40% Homework/Participation
- 15% Exam 1 (March 6)
- 15% Exam 2 (April 17)
- 30% Final (May 13)

Homework will be assigned regularly and required to be submitted online through Gradescope (details to come), due at 11am on Wednesdays. *You will be allowed to and expected to revise solutions to your homeworks (details to come).*

You are encouraged to work 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*. Each student is expected to abide by the Cornell University Code of Academic Integrity.

POLICIES: 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.