

Math 370 – Senior Seminar
Fall 2015

Instructor – Dr. Michael Fraboni

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Office hours: Tue 10:30-11:30, Wed 1-2, and Thu 2:30-3:30

Course Goals – The goal of this course is to serve as a capstone for your mathematical work here at Moravian. The successful student will gain a perspective on several fields of mathematics and how they interact, and will learn how to read professional mathematical writing.

Course Materials – There are two required texts: *Proofs from THE BOOK* fifth edition by Martin Aigner and Günter Ziegler, and *Beyond Numeracy* by John Allen Paulos.

Evaluation and Grading – Below is the list of assignments with their weights in your final grade. More detailed descriptions will be given out as the semester progresses.

- Presentations from *Proofs from The Book* (15% each)
You will work in pairs to present sections from our text to the class. You will each present two times. The first round of presentations will start on September 15.
- Important Problems, week of Oct 6 (15%) You will have the opportunity to choose a problem of historical significance in mathematics from a list I will provide. You will then prepare a presentation and short paper discussing its history and significance.
- Mathematical Resume, Oct 29 (5%)
For this assignment you will prepare a resume and cover letter suitable for a mathematical career. In addition, you will need to create a LinkedIn account and connect to me on the site.
- Some Research Mathematics, last two weeks of class (25%)
Prepare a presentation and a short paper on either independent research or a summary of a research article. For this assignment you will choose articles from a math journal such as the American Mathematical Monthly, Mathematics Magazine, the College Math Journal, or the Pi Mu Epsilon journal. The research you do or paper you choose should require you to learn some new mathematics and represent significant effort on your part.
- Readings and Journal (15%)
Throughout the semester there will be readings assigned from Paulos' book. You will be asked to keep a journal with your thoughts on and reactions to these readings.
- Class Participation (10%) This course will rely heavily on presentations from your classmates. Class participation includes paying close attention during these presentation as well as asking questions when the talks are over. I will keep track of who asks appropriate questions during each presentation.

Attendance – Any absences will negatively impact your class participation score.

Disclaimers – This syllabus is subject to change through the semester. Any updates to the syllabus will be announced in class. The instructor reserves the right to apply qualitative judgment in determining final grades for the course.

Learning Disability Accommodations – Students who wish to request accommodations in this class for a disability must contact Ms. Elaine Mara, Assistant Director of Academic & Disability Support, at the lower level of Monocacy Hall, or by calling 610-861-1401. Accommodations cannot be provided until authorization is received from the Academic Support Center.