Robert Gross
MATH4430.01: Introduction to Number Theory
MWF 2PM
203 Gasson Hall
Spring, 2018

Office: 515 Maloney Hall, 617-552-3758
Office Hours: Monday, Wednesday, and Friday 12–1; Wednesday and Friday, 3–5; and by appointment.
E-mail: gross@bc.edu
Class home page: http://fmwww.bc.edu/gross/MATH4430
Text: The Higher Arithmetic, by Harold Davenport

The aim of the course is to cover some of the fundamental theorems of number theory. In particular, we will learn about quadratic reciprocity and continued fractions. I hope to cover most of the textbook.

The prerequisite for MATH4430 is MATH2216, Introduction to Abstract Mathematics. The course will rely heavily on the methods of proof that you learned in that class, as well as the notions of modular arithmetic and the Euclidean algorithm.

Homework: Homework will be assigned weekly, and is due at the start of class. Late homework will generally not be accepted, because solutions will typically be made available the day that the assignment is due. Homework answers must be typeset. You may use Microsoft Word, \LaTeX, or any other word processor that you are comfortable with. Answers which are longer than a single page must be attached using a stapler. If you do not follow these standards, your work will not receive credit.

Examinations: There will be three in-class examinations, tentatively scheduled for Friday, February 15; Monday, March 18; and Monday, April 29. The final examination for MATH4430.01 is scheduled for Thursday, May 9, at 9AM. The final examination time is chosen by the Registrar and will not change.

Your final grade will be a weighted average of three in-class examinations (weighted 18%, 20%, and 22%, respectively), written homework and class participation (10%), and the comprehensive final examination (30%).

Academic Integrity: You may discuss ideas when working on homework assignments, but you should write up your solutions individually. Sharing inspiration is good; copying someone else’s work is plagiarism. Any violations of the College’s policy on academic integrity will be dealt with severely. For more information, see http://www.bc.edu/offices/stserv/academic/integrity.html

Note: If you are a student with a documented disability seeking reasonable accommodations in this course, please contact Kathy Duggan (617-552-8093, duggankan@bc.edu) at the Connors Family Learning Center regarding learning disabilities and ADHD, or the Disability Services Office, (617-552-3470, disabsrv@bc.edu) regarding other types of disabilities, including temporary disabilities. Advance notice and appropriate documentation are required for accommodations.