MAS 4203: Introduction to Number Theory **Spring 2024**

Instructor: Kevin Keating
Office: Little 482
Telephone: 352–294–2311
E-mail: keating@ufl.edu
Office hours: 3rd and 7th periods Mondays, 3rd period Wednesdays, or by appointment.

Meeting Times

MWF 10:40–11:30 in Little 221

Textbook

Elementary Number Theory by James Strayer
I don't recommend the Kindle version, which may render some symbols incorrectly.

Syllabus

This course is an introduction to number theory. Precise statements and careful proofs will be emphasized. The topics we will cover (Euclidean algorithm, fundamental theorem of arithmetic, congruences, Fermat's little theorem, arithmetic functions, Möbius inversion, quadratic reciprocity, and the primitive root theorem) are contained in the first five chapters of the textbook.

Homework

I will assign homework problems each week to be collected and graded. Solutions to these problems will be distributed after the homework has been collected. Late homework will not be accepted. I will also assign some homework problems which will not be collected or graded. You should certainly do these problems as well, since exam questions may be based on them.

Exams

Friday, February 9 (in class)
Friday, March 22 (in class)
Thursday, May 2, 7:30–9:30 AM (final)

Grading

The homework will count 25%, each in-class exam will count 20%, and the final will count 35%. Your class average x will be converted into a letter grade as follows:

$90 \le x \le 100$: A	$85 \le x < 90$: A−	$80 \le x < 85$: B+
$75 \le x < 80$: B	$70 \le x < 75$: B−	$65 \le x < 70$: C+
$60 \le x < 65$: C	$55 \le x < 60$: C−	$50 \le x < 55$: D+
$45 \le x < 50$: D	$40 \le x < 45$: D−	$0 \le x < 40$: E