UF | Alexander Berkovich
Department *of* Mathematics

- Home
- Courses
  - → MAS 4203
    - ○ MAP 2302
- Number Theory Seminar
- Path to Partitions
- Recent Preprints
- Service

Related Links

- › Department of Mathematics
- › MathSciNet

MAS 4203: Elementary Number Theory

Section

8430

Time and Location

M W F Period 4 (10:40 am – 11:30 am), in **LIT 219**

Textbook

James K. Strayer, Elementary Number Theory. Reissued edition (2001), Waveland Press.

Prerequisites

MAC 2312 or MAC 2512 or MAC 3473; MAS 3300 recommended.

Brief Description

This course is designed as an introduction to elementary number theory and its applications for Mathematics and Computer Science majors. This course is theoretical in nature. Emphasis is placed on theory and proofs. We hope to cover most of Chapters 1-5 of Strayer. As well we hope to cover some additional topics. The basic topics include the greatest common divisor, the fundamental theorem of arithmetic, arithmetic functions, multiplicative functions, congruences, the Chinese remainder theorem, quadratic residues, quadratic reciprocity and primitive roots. We will cover some material on cryptography if time permits.

Course Goals

By the end of the semester, you should know:

1. how to communicate mathematical ideas effectively;
2. how to write a mathematical proof;
3. the basic theory and applications of elementary number theory.

Homework

Homework will be assigned regularly but not collected. However, doing all the homework is essential for success in this class as the exams test your conceptual understanding of the homework assignments. Many homework problems involve doing proofs. Students are encouraged to check their proofs with their instructor.

Grading System

The course grade will be determined by three in-class exams (equally weighted), the first two of which will be announced a week in advance and the third one will be on the last day of classes. **No electronic devices (including calculators) are permitted during the exams.** The resulting score determines the letter grade according to the following table.

Letter Grade	A	A-	B+	B	B-	C+	C	C–	D+	D
Score	100 – 93	92 – 88	87 – 83	82 – 74	73 – 69	68 – 64	63 – 59	58 – 54	53 – 49	48 – 40

Attendance

Attendance is mandatory. Also, please arrive to class before it starts; it is very disruptive when someone walks in late.

Make–ups

Make-up exams will not be administered unless they are supported by valid documentation.

Student Honor Code

Students are expected to abide by the Honor Code.

Accommodations

Students requesting classroom accommodations must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to their instructor when requesting accommodations.

Disclaimer

I reserve the right to change the above policies if situations warrant.

UF | UNIVERSITY *of* FLORIDA
The Foundation for The Gator Nation