MAS 4203 – SYLLABUS

Section	Period	Meeting Time	Room
4801	MTWRF 5th	2:00–3:15pm	LIT 127

Dr. F.G. Garvan

408 Little Hall

(352) 294-2305

fgarvan@ufl.edu

Office Hours

MWF 4 – 5pm.
Also by appointment.

Prerequisites

MAC 2312, MAC 2512 or MAC 3473 with a minimum grade of C;
MAS 3300 recommended.

Textbook

James K. Strayer, *Elementary Number Theory*, 2002 edition,
Waveland Press.

Course 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 hope to cover some material on cryptography.

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;

Website:

people.clas.ufl.edu/fgarvan/mas4203

Written Work and Participation

Homework problems will be assigned but not graded.

Quizzes

Quizzes are based on homework.

Quiz 1 – Tuesday, July 8
Quiz 2 – Tuesday, July 15
Quiz 3 – Tuesday, July 22
Quiz 4 – Tuesday, July 29
Quiz 5 – Tuesday, August 5
Makeup Quiz – Friday, August 8

EXAMS

Makeup Quiz – Friday, August 8

EXAMS

Midterm Exam – Thursday, July 17

Final Exam – Thursday, August 7

Grade:

Grade is based on Exams (35 + 35 = 70%) and Quizzes (30%)

Grading scale: A 90%; A- 87%; B+ 83%; B 80%; etc.

Attendance:

Except for the exams and quizzes, attendance, while recommended, is not required.

University of Florida Policies

The course will be conducted in accord with the

University honor code and Academic Honesty Guidelines   .

Students requesting classroom accommodation 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 the Instructor when requesting accommodation. See Disability Resources   .