Syllabus: Math 580, Number Theory, Fall 2019

2:20 p.m.-3:35 p.m. on MW in LeConte 310

Instructor: Michael Filaseta

Office: 317D LeConte

Email: filaseta@mailbox.sc.edu (best way to communicate with your professor)

Departmental Number: 777-7464 (avoid using if possible)

Office Hours: MW 1:00 p.m.–1:45 p.m., R 11:00 a.m.–12:30 noon. and by appt
(avoid coming by my office the half-hour before class)

Cell Phone Policy: Please remember to silence your cell phone prior to class.

Text Book: No textbook required

Suggested Books:

Fundamentals of Number Theory by William J. LeVeque
Elementary Number Theory by David M. Burton
An Introduction to the Theory of Numbers by Ivan Niven, Herbert S. Zuckerman and Hugh L. Montgomery

Course Web Page: http://www.math.sc.edu/~filaseta/courses/Math580/Math580.html

Grading: A portion of your total grade will be quizzes based on the following. The quizzes are unannounced. Each quiz will count for 2% of your grade. Initially, only the quizzes you receive an A on will count toward your total grade. It will remain like that throughout the course unless there are attendance problems in the class. If there are attendance problems, at the instructors discretion, quizzes will start to count whether a student receives an A or not. Note that lack of attendance will also be used against a student for borderline decisions in grades at the end of the course. The remainder of your grade is determined as follows.*

2 Tests (each is 30% of your non-quiz grade)
Cumulative Final (40% of your non-quiz grade)

*Graduate students are required also to complete and turn in 5 Challenge Problems, chosen from a collection of such problems given throughout the semester.

Date and Time of Final Exam: Wednesday, December 11, 12:30 p.m.−3:00 p.m.
(No exceptions can be made to this scheduled time.)

Notes:

- The last day to drop a course without a "W" being recorded is Wed. August 28.
- The last day to drop a course without a "WF" being recorded is Wed., November 6.

Grading Scale:

Percentage	Letter Grade
≥ 90	**A**
≥ 87 and < 90	**B**$^+$
≥ 80 and < 87	**B**
≥ 77 and < 80	**C**$^+$

Percentage	Letter Grade
≥ 70 and < 77	**C**
≥ 67 and < 70	**D**$^+$
≥ 60 and < 67	**D**
< 60	**F**

Additional Remarks:

- There will be no make-up grades for this course.
- Calculators are not permitted on quizzes, tests, and the final exam.
- There are no exemptions for the final exam.
- The quizzes will be based on homework that we have already gone over in class. They will be unannounced.

Learning Outcomes:

Whether you are taking this course because of a genuine interest in learning the material or to help your career goals or for some other reason, the following three outcomes are possible: (i) Students will be able to solve problems and give short proofs associated with prime numbers, divisors, modulo arithmetic, primitive roots and quadratic residues. (ii) Students will discover that they cannot or do not want to master these concepts - that their strengths and/or interests are different. (iii) Some combination of (i) and (ii).