

SYLLABUS: MATH 788

Computational Number Theory

1:10 p.m.–2:00 p.m. on MWF in LeConte 115

Instructor: Michael Filaseta

Office: 317D LeConte

Email: filaseta@math.sc.edu (encouraged to use)

Office Phone Number: 777-7464

Office Half-Hours: MW 2:15–3:15 p.m., T 10:00–11:00 a.m. and by appointment

Cell Phone Policy: Please turn your cell phone off or on vibrate prior to class.

Text Book: None (see notes on web page)

Web Page for Course: <http://www.math.sc.edu/~filaseta/gradcourses/Math788M.html>

Grading: Homework (50%), 1 Test (20% each), Cumulative Final (30%)

Date and Time of Final Exam: Friday, December 14th, 12:30 p.m.–3:00 p.m.
(No exceptions can be made in this scheduled time.)

Attendance Policy: It is not intended that you take advantage of the fact that class notes are available and miss lectures. You are expected to attend each lecture. You will be considered absent if you miss more than ten minutes of a lecture. If you are absent for more than four lectures, your letter grade at the end of the course will be one-half of a letter grade lower than the grade determined from the homework, test, and final exam. If you are absent for more than eight lectures, you should withdraw from the course; if you do not, your letter grade at the end of the course will be one full letter grade lower than the grade determined from the homework, test, and final exam.

Homework Policy: Homework assignments must be turned in on time. Late homework will not be accepted. Although you are encouraged to work on homework together, you are to write up your homework solutions independently and without the aid of other people's written solutions to the problems.

Learning Outcomes: This course, like other courses at a serious university, will help students determine whether they are able or truly want to pursue a career that involves the topics covered. With this in mind, there are three possibilities: (i) Students will master concepts and be able to solve problems associated with computational methods for basic arithmetic, such as integer addition and multiplication, for primality testing and factorization of integers, and for factorization of polynomials. (ii) Students will discover that they cannot or do not want to master these concepts. (iii) Some combination of (i) and (ii).