

SYLLABUS

Math 301, Fall 2013
Number Theory
Section 001, CRN 71796

Time:	MW 10:30 - 11:45
Place:	Exploratory Hall, Room 4106
Instructor:	Walter Morris
Office:	Exploratory Hall, Room 4207
Phone:	993-1481
Office Hours:	MW 9:30 - 10:20 AM, 3 - 4:10 PM
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Math 301 is a course in Number Theory. The students will learn about topics such as prime numbers, congruences, multiplicative functions, and a little bit of cryptography. The prerequisite for this course is 6 hours of mathematics.

The text for the course is *Elementary Number Theory*, sixth edition, by Kenneth H. Rosen, Pearson-Addison/Wesley, 2010. We will cover most of the first eight chapters of the book. I will not expect students to have had Math 290 or any other experience with mathematical proofs before this course. The course will teach the students what they need to know about writing proofs. Some of the exam questions will test the student's understanding of some classical proofs of theorems such as Fermat's little Theorem or Wilson's Theorem.

There will be two in-class tests, which we will tentatively schedule for September 25 and October 30. Each of the in-class tests determines 25% of the final grade. The final exam is cumulative. It will be given on December 11, at 10:30 AM. One third of the final grade is determined by the final exam. There will also be weekly homework assignments, which will determine one sixth of the grade.

There is no class on September 2 (Labor Day) and November 27 (the day before Thanksgiving). Our class will meet on Tuesday, October 15, but not on Monday, October 14.

The web page for the class is

<http://math.gmu.edu/~wmorris/301hwf13.html>

If you are a student with a disability and you need academic accommodations, please see me and contact the Office of Disability Services (ODS) at 993-2474. All academic accommodations must be arranged through the ODS.

Feel free to come to my office if you have any questions. I check my e-mail daily, so you can also ask questions that way. Be certain that you understand all of the homework assigned and all of the assigned reading, and that you ask questions in or out of class in order to clear up any problems you might have. Bear in mind that the questions that you ask in class help not only you, but also the professor and all of the others who had the same questions but were afraid to speak up.