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 *Number Theory: A Lively Introduction with Proofs, Applications, and Stories*, by Pommersheim, Marks, and Flapan, published by Wiley, 2010. We will cover most of Chapters 1 - 10 and Chapter 12 if there is time. 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.

There will be three in-class tests, which we will tentatively schedule for February 14, March 21 and April 18. Each of the in-class tests determines 20% of the final grade. The final exam is cumulative. It will be given on May 14, at 1:30 PM. Thirty per cent of the final grade is determined by the final exam. There will also be weekly homework assignments, which will determine one tenth of the grade.

Spring break is the week of March 12.

There is a web page for the class on Blackboard.

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.