

## Math 463 Number Theory Spring 2009

---

**Professor** Dr. Silvia Fernández  
**Office** Santa Susana Hall (SN) 406  
**Web Site** [www.csun.edu/~sf70713](http://www.csun.edu/~sf70713)  
**E-mail** [silvia.fernandez@csun.edu](mailto:silvia.fernandez@csun.edu)  
**Phone** (818) 677-6445 (email is better)  
**Office Hours** MW 4:20-5:20 pm, or by appointment  
**Schedule** MW 2:00-3:15 pm, Jerome Richfield (JR) 217

---

**Prerequisite.** MATH 320. Recommended corequisite MATH 360.

**Textbook.** *An Introduction to the Theory of Numbers* by I. Niven, H. S. Zuckerman, and H. L. Montgomery. John Wiley & Sons, 5th edition (1991). ISBN 0-471-62546-9.

**Other resources.** *Beginning Number Theory* by Neville Robbins. Jones and Bartlett Publishers, 2nd edition (2006) ISBN 0-7637-3768-2

This book was written more recently than the textbook. It includes traditional Number Theory topics as well as some Computational Number Theory with applications to Cryptology (which are considered modern Number Theory topics). I specifically recommend it because it includes plenty of solved problems, which may help you in case you are struggling with the course.

**Topics.** Euclidean algorithm and the unique factorization theorem, congruences, primitive roots and indices, quadratic residues and the law of reciprocity, distribution of primes.

**Grades.** The  $\pm$  will be used when assigning final grades. 90% guarantees an A, 80% a B, 70% a C, and 60% a D.

Your grade will be the combined result of four in-class tests, each counting 25% towards your final grade. The last of these exams will be scheduled as a final exam. Monday May 11, 3:00-5:00 pm.

Homework will be assigned regularly but will not be collected. It will help you prepare for the exams. Each exam will be announced in advance.

### Important Dates.

January 20	First day of classes
February 6	Last day to register late, add classes using permission numbers, drop a class, or change basis of grading.
March 31	Campus close – holiday, in observance of Cesar Chavez Day
April 6 – 11	Spring Break, no instruction
May 8	Last day of formal instruction
May 11	Final Examination