Mathematics 312, Introduction to number theory, Section 101
Fall 2015, LSK 460, MWF 11:00-11:50

Instructor: Zinovy Reichstein

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Textbook: K. Rosen, *Elementary Number Theory*, 6th edition.

Course description: This course is intended as an introduction to the basic concepts of number theory, such as prime numbers, factorization, and congruences, as well as some of their applications, particularly to cryptography. This material is covered in Chapters 1-8 in the text. If time permits, I will also go over some additional topics from Chapters 9-11, such as primitive roots and quadratic reciprocity. Proofs are integral to the subject, they will be given in class and problems involving proofs will appear on the homework and on the tests. Regular reading and working through problems from the text are an essential part of the course.

Homework: Homework will be collected in class, usually on a weekly schedule. A portion of each assignment will be graded by the course marker. Late homework will not be accepted.

Evaluation: Course mark will be based on the homework (10%), two midterms (20% each) and the final exam (50%). Midterm exams will be given in class during regularly scheduled class hours.

Course page: For detailed up to date information, please see
http://www.math.ubc.ca/~reichst/312index.html