

**Instructor:** Dragos Ghioca, Math Annex 1223, dghioca@math.ubc.ca.

**Lectures:** MWF 10:00 - 11:00, MATH 203.

**Course webpage:** <http://www.math.ubc.ca/~dghioca/courses/537.html>

**Office hours:** M 11:30 - 12:30, Tu 12:00 - 1:00, Th 10:30 - 11:30.

**Course outline:** Section numbers below refer to the textbook.

Chapter 1: Divisibility, primes.

Chapter 2: Congruences, Chinese Remainder Theorem, Number Theory from an Algebraic Viewpoint.

Chapter 3: Quadratic Residues, Quadratic Reciprocity, Sums of squares.

Chapter 4: Arithmetic functions.

Chapter 5: Diophantine equations.

Other topics: Polynomially recurrence sequences, Algebraic Numbers.

**Text:** Introduction to the Theory of Numbers, 5th edition, by Niven.

**Evaluation:** The final mark will be based on three in-class examinations on September 29th, October 20th and November 10th.

**Policies:** Missing a test will normally result in a mark of zero. Exceptions may be granted in two cases: **prior consent** of the instructor or a **medical emergency**. In the latter case, the instructor must be notified as soon as possible (preferably before the test), and presented with a doctor's note immediately upon the student's return to UBC. When an exception is granted for the missed examination, there is no make-up assignment, and the other examinations will be used for the final mark. When two examinations are missed with proper justification and documentation, then the student will have to write an exam to make up for the missed tests.

**The Instructor reserves the right to change the present course outline at any time during the semester.**