MATH 437/537　　　Number Theory　　　Sep. 2018

Instructor: Dragos Ghioca, Math Annex 1223, dghioca@math.ubc.ca.
Lectures: MWF 10:00 - 11:00, MATH 202.
Course webpage: http://www.math.ubc.ca/~dghioca/courses/537.html
Office hours: Tu 13:30 - 14:30, W 11:30 - 12:30, Th 10:30 - 11:30.

Course outline: Section numbers below refer to the (optional) 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 (optional): Introduction to the Theory of Numbers, 5th edition, by Niven.

Evaluation: The final mark will be based on three in-class examinations on September 28th, October 19th and November 9th and a final exam. Each in-class examination is worth 20%, while the final is worth 40% towards the grade.

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.

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