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.


Evaluation: The final mark will be based on three in-class examinations on September 27th, October 18th and November 8th and one homework set which will be due on last day of class. Each in-class examination is worth 25%; also, the homework set due November 29th is worth 25%.

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 homework due November 29th is mandatory and failure to complete it by the given deadline will result in a score of 0 points for the assignment.

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