

Mathematics 342
Algebra, Coding theory and Cryptography
Section 201
Term 2, 2019. TTh 9:30 - 10:50 in BUCH A202

- Instructor: Z. Reichstein
- Office: 1105 Math Annex
- Phone: 2-3929

Course description: Math 342 is an introduction to abstract algebra and error-correcting codes. Both proof and algorithmic techniques will be emphasized. Topics will include coding and decoding schemes, coding bounds, perfect codes, finite fields, linear codes, syndrome decoding, Hamming codes. If time permits, we will also discuss cyclic and/or BCH codes.

Textbook: Raymond Hill, A first course in coding theory, Oxford University Press.

Registration: Questions regarding registering for this class should be addressed to the Mathematics Department office staff, Rm. 121 Mathematics Building.

Course page: For more detailed and up to date information on this course go to <http://www.math.ubc.ca/~reichst/342S19syll.html>