Math 422: Coding Theory  
Winter 2011

Instructor: Hongjia Chen  
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Course web page: [http://www.math.ualberta.ca/~hongchen/math422](http://www.math.ualberta.ca/~hongchen/math422)

Office hours: Tue, Thu: 13:00-14:30, or by appointment.

Lectures: Tue, Thu: 9:30-10:50, CAB 357, beginning January 11th, 2011.

Grading policy: midterm 30%, final 45%, homework and others 25%.

Assignments:  
There will be assignment problems roughly once every 10-15 days. Assignments are posted online on the course web page and are due by the date indicated on them during class.

Exams:  
There will be two examinations: midterm and final. The midterm will be held in class in February. The time and location of final exam will be be posted on [BearTracks](http://www.ualberta.ca/secretariat/appeals.htm) later.

Course description: (from Calendar)  
Elements of group theory, cosets, Lagrange’s theorem, binary group codes, polynomials, finite field theory, error correcting cords.

Prerequisite: MATH 228 (or 223 or 128), any 300-level Math course.

Textbook and references: There is no required textbook. The following references cover most of the contents:
- J. C. Bowman. [Math 422: Coding Theory & Cryptography](http://www.math.ualberta.ca/~hongchen/math422), online lecture notes.

Academic integrity:  
Policy about course outlines can be found in [section 23.4(2)](http://www.ualberta.ca/secretariat/appeals.htm) of the University Calendar.

The University of Alberta is committed to the highest standards of academic integrity and honesty. Students are expected to be familiar with these standards regarding academic honesty and to uphold the policies of the University in this respect. Students are particularly urged to familiarize themselves with the provisions of the Code of Student Behaviour (online at [www.ualberta.ca/secretariat/appeals.htm](http://www.ualberta.ca/secretariat/appeals.htm)) and avoid any behaviour which could potentially result in suspicions of cheating, plagiarism, misrepresentation of facts and/or participation in an offence. Academic dishonesty is a serious offence and can result in suspension or expulsion from the University.