Outline of Math 422

1 Introduction
   A Error Detection and Correction
   B Balanced Block Designs
   C The ISBN code

2 Linear Codes
   A Encoding and Decoding
   B Syndrome Decoding

3 Hamming Codes

4 Golay Codes

5 Cyclic Codes

6 BCH Codes

7 Cryptographic Codes
   A Symmetric-Key Cryptography
   B Public-Key Cryptography

A Finite Fields