Instructor: Dr. Ammar Abu-Hudrouss, Room: B 226

Office hours: 11 AM to 1 PM, Monday and Wednesday, other times by appointment via e-mail (ahdrouss@iugaza.edu.ps).

Class meeting: Tuesday 15:00-18:00.

Required Text Book,
Peter Sweeney, "Error Control Coding: From theory to Practice", John Wiley and Sons Ltd, 2002.

References:

Grading
- Homework and quizzes (20%)
- Project (15%)
- Midterm (25%)
- Final Exam (40%)

Course Outline
1. Introduction to the principle of coding in digital communication system.
2. Hamming code
3. Block Codes
4. Cyclic Codes
5. Finite Field mathematics (linear algebra)
6. BCH and Reed-Solomon Codes,
7. Convolution Codes
8. LDPC and Turbo-codes
9. Introduction to space-time codes