

Introduction to Communication

Object: This course gives an introduction to the communication systems. We will begin the lectures from the conventional analog modulation techniques, following by the modern digital modulation schemes.

Year/Semester: 2010/Spring

Time: Wed 2, 3, and 4

Place: 1F21, Social Science Building

Instructor: Dr. Chun-Yi WEI

Office: 5F10, Social Science Building

Office Hours: Tue. 3 and 4

E-mail: cywei@mail.ntpu.edu.tw

Home Page: <http://web.ntpu.edu.tw/cywei/>

Textbook:

- **Electronic Communications: Principles and Systems by William D. Stanley, John M Jeffords, Delmar Cengage Learning, 2005.**
- Communication Systems 4th Edition by Simon Haykin, Wiley, 2000.

Grading: Quiz 20%, midterm 30%, final exam 40%, Lab 10%.

Lectures:

Week	Date	Topic	
1	2/24/10	Induction	
2	3/3/10	Chap1: Introduction	
3	3/10/10	Chap2: Fourier Series and Fourier Transforms	
4	3/17/10	Chap4: Filter and Signal Transmission	HW release
5	3/24/10	Chap7: Amplitude Modulation, Double Side Band, Single Side Band	Quiz 1
6	3/31/10	Chap7: AM demodulation, coherent detection	
7	4/7/10	Chap7:Angle Modulation: FM,PM	HW release
8	4/14/10	Chap7:FM Demodulation, Phase lock loop	Quiz 2
9	4/21/10	Lab: 1, 2.	
10	4/28/10	Midterm	
11	5/5/10	Chap8:Sampling Theory, Pulse Modulation	
12	5/12/10	Chap9:Pulse Code-Modulation, Quantization	HW release
13	5/19/10	Chap9:ASK, FSK	Quiz 3
14	5/26/10	Chap9:BPSK, DPSK	HW release
15	6/2/10	Chap10:QPSK, QAM	Quiz 4
16	6/9/10	Lab: 3, 4.	
17	6/16/10	no class	
18	6/23/10	Final	