Course Information

Prof. Sooyong Choi, Ph.D.

School of Electrical and Electronic Engineering

YONSEI UNIVERSITY

Outline

- **Course Information**
  - Instructor
  - Teaching Assistant
  - Course material
  - Grading
- **Class Policies**
  - Exam policies
  - Homework policies
  - Project policies
- **Course Schedule**

Course Information

Course Title : EEE3430-01 – Communication Theory

Professor : Sooyong Choi

- Office : C412, Engineering Building 3
- E-mail : csyong@yonsei.ac.kr
- Tel : 02-2123-5870
- 면담시간 : 월요일 오후 1시~4시

Teaching Assistant

- 이형섭 : gudtjq8307@yonsei.ac.kr
- 김태환 : kimth1217@yonsei.ac.kr
- 연구실 : Advanced Communication Lab. C404호
- Tel: 02-2123-7847

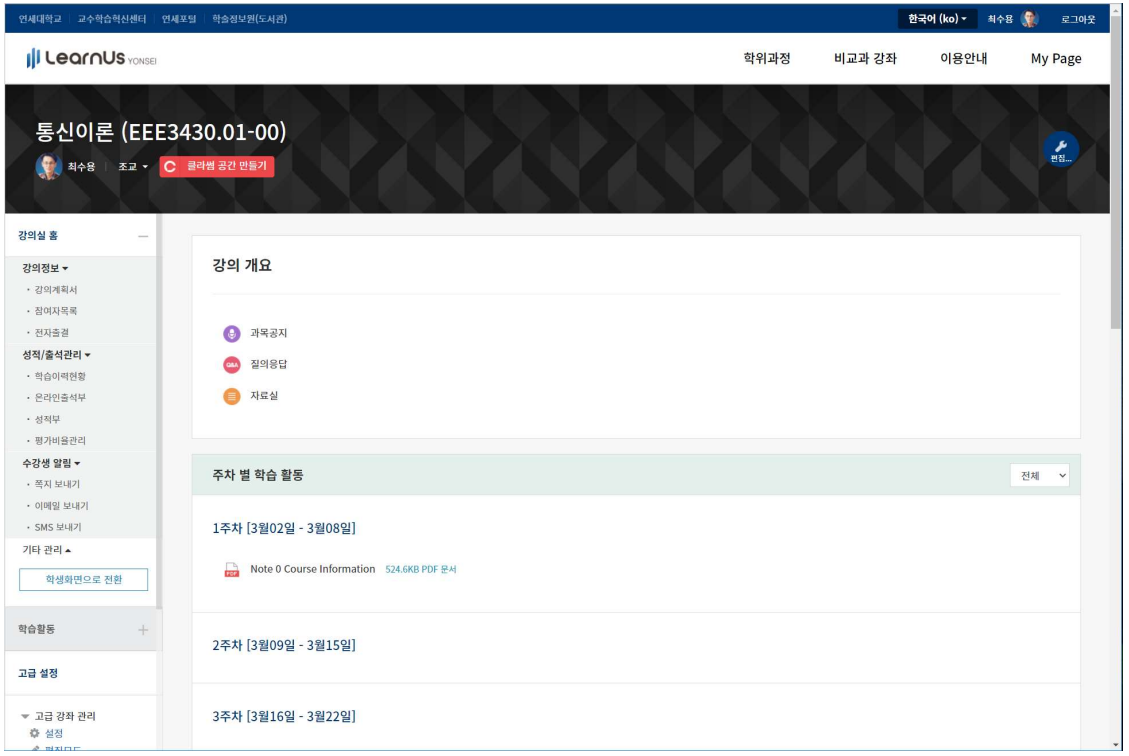
Course Information

Class hours

- Class : Monday 0 (동영상콘텐츠), Wednesday 6, 7 (PM 2:00-3:50)
- Classroom : 제4공학관 공D503
- Office hour : (Making an appointment!!!)
- Professor : Monday PM 4:00 – 6:00
- Teaching Assistant : 추후공지

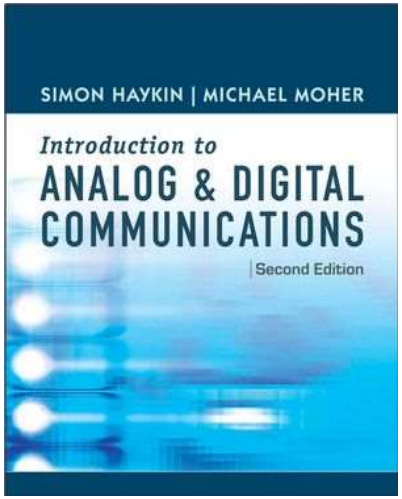
Course homepage

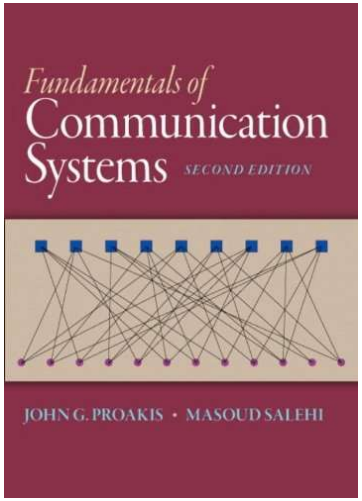
- https://ys.learnus.org/
- After login using personal ID,
- 학부/ EEE3430-01 통신이론
- Course material : Posted on the web

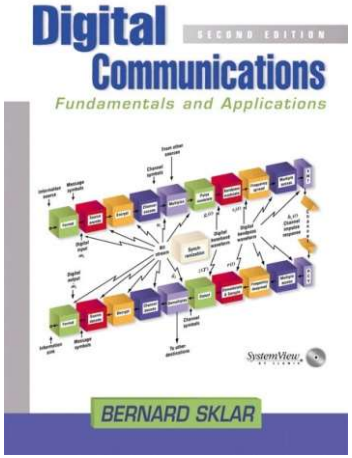


Course Material

- **Lecture notes**
- **Textbook**
  - "Introduction to Analog & Digital Communications," 2nd edition, Simon Haykin and Michael Moher, Wiley, 2007
  - "Fundamentals of Communication Systems,"2nd edition, John G. Proakis and Masoud Salehi, Prentice Hall, Inc., 2013
  - "Digital Communications Fundamental and Applications," 2nd edition, Bernard Sklar, Prentice-Hall, Inc., 2001







Grading

- **Total 100 Points**
  - Attendance, Homework and Project : 15%
  - Monthly Test : 30% ⇒ Two monthly test : 15% × 2 = 30%
    - 1st monthly test : 03/27 (Wednesday PM 2:00 – 3:50)
    - 2nd monthly test : 05/22 (Wednesday PM 2:00 – 3:50)
  - Midterm Test – 20% : 중간고사 기간
  - Final Test – 35% : 기말고사 기간
- **You can argue with me on your score only in a given period**
- **No negotiation on grade after it is given**
- **Under 40/100 → F!!!**
- **Re-taking**

Class Policies

- **Exam Policy**
  - Exams must be taken at their scheduled times
  - Exceptions only in very rare circumstances
- **Homework Policy**
  - Due : 1 week later
  - I will not accept after due date
- **Project Policy**
  - Assignment : End of the class
  - Due : 3 weeks later
  - I will not accept after due date
- **주의 사항**
  - **학교 LearnUs 및 포탈에 있는 연락처 등의 개인 정보 확인**

Course Schedule

Introduction	Communication Systems, Channels and Mathematical models	1 Week
(AM) Amplitude Modulation	Modulator, Demodulator, Multiplexing, AM Radio	1 Week
Angle Modulation (FM & PM)	Frequency/Phase Modulation	1 Week
Analysis of Analog Communications	Noise Effect, Comparison of Analog Modulations, Transmission Losses & Noise	1 Weeks
Analog-To-Digital Conversion	Sampling, Quantization, Waveform Coding, Pulse modulation	1 Week
Intro. to Digital Com.	Formatting and Baseband Modulation	1 Week
Baseband modulation	Vector signal representation & constellation, Antipodal & orthogonal pulse signaling	2 Weeks
Digital Modulation	ASK, PSK, FSK	3 Week
Optimum Receiver Design in AWGN	Correlator & Matched Filter, MAP/ML rule, Optimum receiver for antipodal & orthogonal pulse signaling	3 Weeks