

EE 313 – Introduction to Communication Systems

Fall 2022

- Course Objectives:** This is a class to introduce the students with the world of communications. Specific topics are use of Fourier techniques in communication systems design and analysis, amplitude modulation (AM), frequency modulation (FM), random signals and noise in communication systems
- Instructor:** Özgür Gürbüz, Room #1109
ogurbuz@sabanciuniv.edu
- Teaching Assistant:** Suat Utku İnal, uinal@sabanciuniv.edu
- Class Hours:** Tuesdays, 13:40-15:30
Thursdays, 12:40-13:30
- Course Text:** *Modern Digital and Analog Communication Systems*, by B. P. Lathi, 4th Edition, Oxford Press, NY, 2010.
- Additional Reading:** *Introduction to Analog and Digital Communications*, by S. Haykin and M. Moher, 2nd Edition, John Wiley& Sons, 2007.
Communication Systems Engineering, by J. G. Proakis and M. Salehi, 2nd Edition, Prentice-Hall, 2002.
Communication Systems, by S. Haykin, 4th Edition, John Wiley& Sons, 2001.
- Course Contents**
- Introduction to Analog and Digital Communication Systems
 - Review of Signals and Systems
 - Amplitude (Linear) Modulation
 - Angle (Exponential) Modulation
 - Probability, Random Signals and Noise
 - Behavior of Analog Communications in Noise
- Grading:**
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|-------------|------------|----------|
| (Tentative) | 2 Midterms | 25% each |
| | Final | 30% |
| | Quizzes | 15% |
| | Homeworks | 5% |
- Notes:** There will be *only one make up test* for students who have missed a test (a midterm or the final). The make up grade will replace the grade of the missed test. The make up will take place after the final examination and it will cover the entire the course.