

Syllabus

Instructor: O. Ozan Koyluoglu (ozan@email.arizona.edu).

Class Times and Office Hours: Class meets TTh 12:30am - 1:45pm in Saguaro Hall, Rm 101. Office hours are T 3:00pm - 5:00pm in ECE Bldg., Rm 456C. If you can not make it to the office hours, we can schedule a meeting via email.

Topics: This course helps the students to develop a solid understanding of the fundamental concepts in communications. Topics covered in this course include the followings.

Chapter 1. Introduction

Chapter 2. Signals and Signal Space

Chapter 3. Analysis and Transmission of Signals

Chapter 4. Amplitude Modulation

Chapter 5. Angle Modulation

Chapter 6. Sampling and Analog-to-Digital Conversion

Chapter 7. Principles of Digital Data Transmission

Prerequisite: ECE 320A.

Course textbook and references: The course textbook is [1].

[1] B. P. Lathi and Z. Ding, Modern Digital and Analog Communications Systems, 4th ed., Oxford, 2009.

[2] J. G. Proakis and M. Salehi, Communication Systems Engineering, 2nd ed., Prentice Hall, 2001.

[3] R. G. Gallager, Principles of Digital Communication, Cambridge University Press, 2008.

[4] S. Haykin and M. Moher, An Introduction to Analog and Digital Communications, Wiley, 2nd ed., 2006.

Grading policy: The course grade will be based on 100 points.

Quizzes 12% (7 online quizzes, each with 2%, lowest quiz score will be dropped)

Homeworks 18% (7 assignments, each with 3%, lowest homework score will be dropped)

Midterm I 20% (TBD, late February)

Midterm II 20% (TBD, early April)

Final 30% (May 13, 1:00pm - 3:00pm)

Exam policy: Midterm and final exams are closed book. Students are allowed to use their notes: One sheet of paper (i.e., two sides of standard letter size - 8.5×11 inches - paper) for the midterm exams, and two sheets for the final exam. Only one make-up exam will be administered during the semester and it will be for those students who have missed an exam with a valid excuse that is recognized by the university.

Late policy: No late material will be accepted unless prior arrangements have been made with the instructor. Arrangements must be made at least 24 hours in advance. Emergency situations will be handled on a case by case basis.

Homework policy: Students are encouraged to discuss homework problems with each other. Final submitted material must be students' own work. A subset of the homework problems will be graded. Solutions to the graded problems will be provided.

Email policy: Students need to use "ECE 340A" at the beginning of the subject line when emailing to the instructor.

Special needs and accommodations: Students who need special accommodation or services should contact the Disability Resources Center, 1224 East Lowell Street, Tucson, AZ 85721, (520) 621-3268, FAX (520) 621-9423, email: uadrc@email.arizona.edu, <http://drc.arizona.edu>. You must register and request that the Center or DRC send me official notification of your accommodations needs as soon as possible.

Student code of academic integrity: Students are encouraged to share intellectual views and discuss freely the principles and applications of course materials. However, graded work/exercises must be the product of independent effort unless otherwise instructed. Students are expected to adhere to the UA Code of Academic Integrity as described in the UA General Catalog. See: <http://deanofstudents.arizona.edu/codeofacademicintegrity/>.

Some of the course materials will be online. Please check D2L regularly. Information contained in the course syllabus may be subject to change with advance notice.