

**ELC 4350 PRINCIPLES OF COMMUNICATION
SPRING 2015**

Lectures: TR 12:30-1:45, Rogers 106

Instructor: Dr. Charles Baylis

Office: Rogers 300C

Office Hours (subject to change): TR 11:00 – 12:00, TR 2:30 – 3:30, or by appointment

E-mail: Charles_Baylis@baylor.edu

Course Website: <http://web.ecs.baylor.edu/faculty/baylis>. Students are responsible to check this site frequently as it will be the primary out-of-class communication method. Handouts and assignments will be posted on this site. Students should also have a Baylor e-mail account and are responsible for checking this account at least once per day for class-related updates.

Textbook: B.P. Lathi, *Modern Digital and Analog Communication Systems*, Fourth Edition, ISBN 9780195331455

Prerequisites: ELC 3335 – Signals and Systems, STA 3381 – Probability and Statistics

Objectives: The planned topics for coverage include signal analysis, modulation techniques, random signals and noise, digital transmission, information theory, and coding.

Grading: The following is tentative and subject to change: Two examinations will be given. The format of these tests and specific dates will be announced in advance of the tests. Homework will be assigned for each lecture but will not be collected. A quiz will be given each Tuesday covering the material from the previous week. The lowest quiz score will be dropped. Projects will be assigned that consist of software assignments, laboratory measurements, and/or circuit design and construction. The following breakdown of grade percentages is tentative and is subject to change at any time.

Tentative Grading Breakdown (subject to change):

Midterm Exam	25%
Final Exam	25%
Projects	25%
Quizzes	25%

A typical grading scale will be used:

90-100	A
88-90	B+
80-88	B
78-80	C+
70-78	C
60-70	D
Below 60	F

No minus grades will be assigned.

Attendance: Students are expected to attend all class meetings.

Missed Assignments: If no arrangement is made in advance with the instructor, students missing a test, quiz, or assignment may be given, at the option of the instructor, a zero for that assignment. Students anticipating the need to take a test or quiz at a time other than that scheduled or to turn in an assignment late must make arrangements with the instructor in advance. In an emergency where advance notification is impossible, appropriate documentation supporting the excuse should be provided.

Appeal of Assignment Grades: Any student wishing to appeal a grade on an individual assignment must appeal that grade to the instructor, in writing, within one week following the return of the graded assignment to the student. Any appeals for grade changes outside of this one-week window will be disregarded.

Registration: Assignments of students not on the official class roll will be discarded without grading.

Academic Dishonesty: Rules for academic honesty in this course are as follows:

- Tests and Quizzes: No collaboration whatsoever is allowed on any of the tests or quizzes.
- Projects: All projects are to be completed individually unless specifically noted by the instructor. Discussion of ideas and implementation methods is acceptable and encouraged; however, all programming, development of simulation schematics, circuit designs, problem solving, circuit construction, and measurements related to the projects should ultimately be completed individually.

Any student found in violation of this policy may be given an “F” for the course at the option of the instructor and at minimum will be given a zero for the assignment. It is the responsibility of each student to understand and follow this policy.

Computer Requirements: All students should have access to a computer running MATLAB and Simulink, Keysight Advanced Design System (ADS), and circuit simulation tools commonly used in the undergraduate electronics laboratories. These software packages will be used to assist in completion of the projects. This software is available for use in the open access computer laboratories in the Rogers Engineering & Computer Science Building.