## ELC 3335 SIGNALS AND SYSTEMS SPRING 2019

Lectures: TR 9:30 – 10:45, Rogers 204
Instructor: Dr. Charles Baylis
Office: Rogers 300C
Office Hours (subject to change): TR 11:30 – 12:30, TR 2:00 – 3:00 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.
Textbook: B.P. Lathi, *Signal Processing and Linear Systems*, Berkeley Cambridge Press, ISBN 0-941413-35-7

**Prerequisites:** ELC 2430: Electrical Circuit Theory, MTH 2311: Linear Algebra, MTH 3325: Ordinary Differential Equations

- **Objective:** The course provides an introduction to the analysis of signals and systems in the time domain using differential equations and convolution with the impulse response, and in the frequency domain using Fourier series, Fourier transforms, and Laplace transforms with transfer functions.
- **Grading:** Two tests and a cumulative final exam 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. In addition, projects involving MATLAB or other software tools may be given from time to time.

Tentative Grading Breakdown:

Test 1	25%
Test 2	25%
Final Exam	30%
Quizzes/Projects	20%

A typical grading scale will be used:	
90-100	Α
88-90	B+
80-88	В
78-80	C+
70-78	С
60-70	D
Below 60	F

No minus grades will be given.

- Attendance: Students are expected to attend all class meetings. Any student who has attended less than 75 percent of the class meetings will receive a grade of "F" in the course. Both excused and unexcused absences are used in this calculation.
- **Missed Assignments:** If no arrangement is made in advance with the instructor, students missing a test or quiz may be given, at the option of the instructor, a zero on the test or 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 oneweek 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. Discussion of ideas and implementation methods is acceptable and encouraged; however, all programming, circuit design, and problem solving 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. This software is available in the Rogers open-access computer laboratories. Use of software programs may be required to complete projects throughout the semester.
- Sexual and Gender-Based Harassment and Interpersonal Violence Policy: Baylor University does not discriminate on the basis of sex or gender in any of its education or employment programs and activities, and it does not tolerate discrimination or harassment on the basis of sex or gender. This policy prohibits sexual and gender-based harassment, sexual assault, sexual exploitation, stalking, intimate partner violence, and retaliation (collectively referred to as prohibited conduct). For more information on how to report, or to learn more about our policy and process, please visit <u>www.baylor.edu/titleix</u>. You may also contact the Title IX office directly by phone, (254) 710-8454, or email, <u>TitleIX\_Coordinator@baylor.edu</u>.