Catalog Description: This laboratory course introduces students to various techniques for analyzing real signals and designing various linear time-invariant systems. The lab will be conducted on high-end workstations using MATLAB and will give students additional experience using Web authoring tools for the production of multimedia lab reports. Prerequisites: CSE 1341. Corequisite: EE 2370.

Location: Junkins 202

Instructor: Carlos E. Davila

Topics: I. Introduction to Web Design Tools
II. Basic Signal Operations
III. An Introduction to Simulink
IV. Complex Form of the Fourier Series
V. Matlab Implementation of Fourier Series
VI. Matlab Implementation of Complex Form of the Fourier Series
VII. Matlab and the Fourier Transform
VIII. Double Sideband (DSB) Modulation/Demodulation
IX. Design of a 10-Band Graphic Equalizer
X. Sampling Continuous-Time Signals
**Grading Policy:** Laboratory Assignments 100%

The lab writeup is due one week after the lab is assigned, at the beginning of the next lab session. The writeup should be posted on the student’s web page by this deadline. Late writeups will receive a 50% penalty. Half the grade for each laboratory will be based on a short demo to be given to the lab TA once the lab has been completed. The other half will come from the lab writeup.

**Electrical Engineering Program Objectives**

**SMU Incomplete Grades Policy**

An Incomplete (I) may be given if the majority of the course requirements have been completed with passing grades but for some justifiable reason, acceptable to the instructor, the student has been unable to complete the full requirements of the course. Before an (I) is given, the instructor should stipulate, in writing, to the student the requirements and completion date that are to be met and the grade that will be given if the requirements are not met by the completion date. The maximum period of time allowed to clear the Incomplete grade is 12 months (except for graduate thesis and dissertation courses). If the Incomplete grade is not cleared by the date set by the instructor or by the end of the 12-month deadline, the (I) may be changed to an F or to another grade specified by the instructor. The grade of (I) is not given in lieu of an F, WP, or other grade, each of which is prescribed for other specific circumstances. If the student’s work is incomplete and the quality has not been passing, an F will be given. The grade of (I) does not authorize the student to attend the course during a later semester. Graduation candidates must clear all Incompletes prior to the deadline in the official University Calendar, which may allow less time than 12 months. Failure to do so can result in removal from the degree candidacy list and/or conversion of the (I) to the grade indicated by the instructor at the time the (I) was given.

**Statement Regarding Disability**

Disability Accommodations: If you need academic accommodations for a disability, you must first contact Ms. Rebecca Marin, Coordinator, Services for Students with Disabilities (214-768-4563), to verify the disability and to establish eligibility for accommodations. Then you should schedule an appointment with the professor to make appropriate arrangements.