



COURSE SYLLABUS

Fall 2012

Course: Digital Electronics I Lab
EET K255

Location: Room B229

Day/Time: Thursday, 5:00-7:30 pm

Prerequisites: EET K134/135

Co requisites: EET K254

Instructor: John Forella
forella@earthlink.net

Office Hours: By appointment

Text: Digital Fundamentals,
Thomas L, Floyd

Course Description: Students will engage in a comprehensive study of binary logic gates. The circuits for certain TTL, ECL, MOS, and CMOS gates are analyzed. The course also includes the study of codes, encoding, decoding, number systems, and various sequential logic circuits such as flip-flops, counters, and shift registers

Laboratory experiments will include the following topics.

Lab Topics:

Logic Gate Characteristics
Signed and Unsigned Binary Math
Basic Logic Design
Binary Counter to BCD Converter
Adders and Comparators
Data Selector and Decoder Functions
Parallel and Serial Parity Circuits
Counters

Grading: Grading will be based on a combination of work performed in the laboratory and the lab reports with the following percentages:

50% Lab Preparation, Performance and Attendance

50% Lab Reports



Lab Reports: Lab reports are due on the week following the lab activity. Reports submitted after that time will be considered late and a reduction in grade will be applied. The grade reduction will increase as the number of late weeks increases.

Attendance/Timeliness: Attendance is mandatory at all class and lab sessions. Tardiness of attendance and/or assignments can have a significant negative impact on grading.

K255 Course Outcomes: The Course Outcomes are defined and assessed to determine the effectiveness of the course at meeting the course objectives.

1. Mastery of digital technology concepts as defined in this syllabus.
2. Knowledge of digital quantities, units and relationships.
3. Demonstrate an ability to build and test digital circuits and systems.
4. Demonstrate an ability to analyze and solve problems relating to digital systems.
5. Demonstrate oral and written communications skills.
6. Demonstrate an ability to engage in self-directed professional development.
7. Demonstrate proper professional and ethical behavior.
8. Demonstrate a commitment to quality, timeliness and continuous improvement

College Withdrawal Policy

Students may withdraw, in writing or verbally at the Registrar's Office for any reason until the end of the 10th week of classes. From the 11th week through the end of the 13th week, a student may withdraw with the instructor's written approval.

Disabilities Statement

If you are a student with a disability and believe you will need accommodations for this class, it is your responsibility to contact the Disabilities Counseling Services at 383-5240. To avoid any delay in the receipt of accommodations, you should contact the counselor as soon as possible. Please note that I cannot provide accommodations based upon disability until I have received an accommodation letter from the Disabilities Counselor.