EE/CE 3320: Digital Circuits
Spring 2017

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Text Book Digital Design with RTL Design, VHDL, and Verilog, Frank Vahid, Second Edition, ISBN 978-0-470-53108-2

Goals
The primary goal of this course is to understand basic digital circuits. Digital circuits form the basis for most of the electronic devices ranging from small electronic toys to large scale computers. The material covered in this course will deal with fundamental concepts that are used to design and implement digital circuits. All digital circuits operate based on fundamental circuits covered in this class. After completing this course, students will be able to design digital circuits of low complexity.

Course Requirements:

Prerequisites: EE 2310 **Co-requisite**: EE 3120

Course Learning Objectives

- Ability to design, analyze, and optimize combinational logic circuits
- Ability to design, analyze, and optimize synchronous sequential logic circuits
- Ability to conduct timing analysis on combinational and sequential logic circuits
- Ability to understand and apply practical aspects of digital design including datapath components
- Ability to understand basic logic gate implementations and their electrical properties

Assignments & Examination Policy
There will be several homework assignments. It is student's responsibility to download and solve homework in time. Homework must be turned in on time. Assignments will be announced in class but no printed copies will be distributed. Homework provides practice to solve difficult problems. Students are welcome to discuss homework with instructor and teaching assistants. First examination will cover material covered from first day to the class before the examination. Second examination will cover material from the end of first examination to whatever is covered before second examination. Final examination will be comprehensive. Each exam will be closed book, closed notes, open mind, and closed neighbor.

Grading Policy
Final grades in this course will be based on several homework assignments and two examinations given throughout the semester and a final examination. No makeup examinations will be offered in this course. Any graded work can be disputed in writing *within one week* of the return of that work. Complete work will be re-graded.

The grading policy is:

Assignments:	10%
First Examination:	25%
Second Examination:	30%
Final Examination:	35%

Important Dates

There will be no make up examination.

First Class:	Monday, Jan. 9, 2017 (as per UTD published calendar)
Last Class:	Wednesday, Apr. 26, 2017 (as per UTD published calendar)
Spring Break:	Mar. 13 to Mar. 18, 2017
1st Exam:	Wednesday, Feb. 22, 2017
2nd Exam:	Wednesday, Apr. 5, 2017
Final Exam:	TBD

UT Dallas Syllabus Policies and Procedures

The information contained in the following link constitutes the University's policies and procedures segment of the course syllabus.

Please go to http://go.utdallas.edu/syllabus-policies for these policies.

Comet Creed

This creed was voted on by the UT Dallas student body in 2014. It is a standard that Comets choose to live by and encourage others to do the same:

"As a Comet, I pledge honesty, integrity, and service in all that I do."

The descriptions and timelines contained in this syllabus are subject to change at the discretion of the Professor.