

Introduction to Digital Design

CSC 265 Syllabus Q141

Dr. BEN CHOI

Description

Introduction to digital design techniques, Boolean algebra, combinational logic, minimization techniques, simple arithmetic circuits, programmable logic, sequential circuit design, registers and counters.

Credits: 2

Prerequisites: CSC 100, Coreq. CSC 269 (applicable for CS students)

Classes: TR: 12:00pm – 1:15pm; NH 120

Office hours: TBD
and by appointments.

Office: NH 119

Objectives

- To be able to **design** combinational logic and sequential circuits

Text

Digital Design from Zero to One by Jerry D. Daniels
(or *Digital Fundamentals* by Thomas L. Floyd)

Representative Topics

Topics (Some sections may be assigned as reading.)	Reading Chapter	Approximate No. of Weeks
From Numbers to Switches	1	1.5
Truth Tables and Boolean Algebra	2	1.5
Map and Table Methods for Min Boolean Expressions	3	1.5
Programmable Circuits for Combinational Design	4	1
Evolution of Flip-Flops	5	1.5
Synchronous Counters	6	1.5
Synchronous Finite State Machines	7	1.5

Grading Plan

Attendance & Class participation Quizzes & Assignments	10%
Midterm Exam	45%
Final Exam	45%

Final grade may be normalized or curved. For homework, quizzes, and exams, each student must work independently.

Attendance: Class attendance is governed by university regulations. Class attendance is regarded as an obligation and all students are expected to attend punctually all classes in which they are enrolled. Failure to do so may jeopardize a student's scholastic standing.

Misconduct: Academic misconduct is governed by university regulations. The penalty for cheating and other forms of misconduct may result in an "F" in the course.