

# Digital Design Lab

## CSC 269 Syllabus Q141

Dr. BEN CHOI

### Description

Laboratory for digital design techniques, combinational and sequential logic design, registers and counters.

**Credits:** 1

**Prerequisites:** Coreq. CSC 265 (applicable for CS students)

**Classes:** T: 2pm –5pm; NH 218

**Office hours:** TBD;  
and by appointments.

**Office:** NH 119

### Objectives

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

### Text

*Reference: Digital Design from Zero to One, Laboratory Manual  
by Jerry D. Daniels*

### Representative Labs:

<b>Labs</b> <i>(some labs may be updated when needed)</i>	<b>Approximate No. of Weeks</b>
Laboratory Equipment and Procedures	1
Half-Adder	1
Digital Control Circuit for Light-Seeking Robot	1
Clock Generator (Oscillator)	1
BCD/HEX to 7-Segment LED Display Decoder/Driver	1
Cascaded Counters with HEX 7-Segment Display	1.5
Numeric Keypad to 7-Segment Decoder	1.5

## Grading Plan

Each Labs will be graded 10 points	Each lab will be weighted based on its difficulty
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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.