

EEC 180A Lecture #1: Number Systems and Binary Arithmetic

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Outline

- **Administrative Details**
- **Digital Systems and Switching Circuits**
- **Number Systems and Conversion**
- **Binary Arithmetic and Negative Numbers**
- **Binary Codes**
- **Next Time: Boolean Algebra**

Personnel

- **Prof. Raj Amirtharajah (Instructor)**
Office: 3173 Kemper Hall
Email: ramirtha@ece.ucdavis.edu
Please put EEC 180A2 in email subject line.
Office Hours: Th 1-3 PM or by appointment.
- **Bart Zeydel (Section B02 W 8AM-12PM)**
Email: brzeydel@ece.ucdavis.edu
Office Hours: Th 10-12 PM, Location TBD
- **Liping Guo (Section B03 F 8AM-12PM)**
Email: lguo@ece.ucdavis.edu

Meeting Times

- **Lectures MW 5 - 6:30 PM**

202 Wellman

- **Labs**

2110 Kemper (formerly Engineering II)

Section B02 W 8AM - 12PM

Section B03 F 8AM - 12PM

Open Section S 10AM - 6 PM

If you need a TA to be in lab on Saturday, send an email request to Bart Zeydel

Course Materials

- **Textbook**

Fundamentals of Logic Design (5th ed.)

By C.H. Roth

- **Suggested Reference**

Contemporary Logic Design

Randy H. Katz, Benjamin Cummings, 1994

- **Handouts**

Labs, lab report cover sheets, slides, and lecture notes available on course web page in PDF format.

- **Web Page**

<http://www.ece.ucdavis.edu/courses/F04/EEC180A2>

Grading

- **Letter**
 - **A: 100 - 90%**
 - **B: 90 - 80%**
 - **C: 80 - 70%**
 - **D: 70 - 60%**
 - **F: below 60%**
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- **Expect class average to be around B- / C+**
 - **Curving will only help you**

Weighting

- **Labs 25%**
- **Weekly Homework 10%**
Scale for each problem: 0 = poor effort, 1 = close, but fundamental problem, 2 = correct
- **Quizzes 10%**
Unannounced, 4 throughout the quarter, lowest score dropped
- **Midterm 20%**
Wednesday, Nov. 3
- **Final 35%**
Cumulative, but emphasizes material after midterm

This Week's Assignments

- **Lab 1 (Software Tutorial)**

No prelab, report due beginning of next week's lab

- **Homework 1**

Roth, Unit 1: 1, 3, 4, 5 (subtract using addition of 2's complement; see problem 27), 7, 8, 27

Roth, Unit 2: 1, 2, 4, 9

- **HW 1 due next Friday 10/15 at 4 PM, 2131 Kemper (box)**