

UCLA COM SCI M51A / EL ENGR M16: Logic Design of Digital Systems, Winter 2023 (Lec 1)

Syllabus

Instructor: Professor Miodrag Potkonjak miodrag@cs.ucla.edu
Office Hours: Zoom <https://ucla.zoom.us/j/4097029656>, TR 1:00-2:00 PM

Teaching Assistants:

Stheya Julakanti jstheya00@g.ucla.edu
Parth Shettiwar parthshettiwar@g.ucla.edu

Lecture: TR 2:00-3:50 PM, Engineering VI Mong Learning Center

Course website: <http://web.cs.ucla.edu/~miodrag/CS51a/>

Course Description

CS m51A is a 4-unit course with four hours of lecture and two hours of discussion per week. Topics covered include: introduction to digital systems, specification and implementation of combinational and sequential systems, standard logic modules and programmable logic arrays, specification and implementation of algorithmic systems: data and control sections, number systems and arithmetic algorithms.

Text

M.D. Ercegovac, T. Lang and J. Moreno, *Introduction to Digital Systems*, John Wiley & Sons, 1999.

Supplemental Reading:

- R. H. Katz, *Contemporary Logic Design*, Addison Wesley Publishing Company, 1993.
- M. M. Mano, C.R. Kime, *Logic and computer design fundamentals*, Prentice-Hall, Inc., 1997.
- S. Brown, Z. Vranesic, *EBOOK: Fundamentals of Digital Logic*, McGraw Hill, 2008.
- J. Wakerly, *Digital Design: Principles and Practices*, 4/E. Pearson Education India, 2008.

Grading

- Quizzes: 10%
- Midterm 1: 20% -- TBA
- Midterm 2: 30% -- TBA
- Final Exam: 40% -- Wednesday, March 22, 2023 3:00 PM - 6:00 PM

Exams

The midterm exams will be held in lecture. The final exam will be held during the time and date set by the registrar. No makeup exams will be given. If you miss **ONE** midterm, your grade for that exam will be extrapolated from the other two exams. However, missing the final for any reason will result in a failing course grade.

Quizzes

Quizzes will take place at the beginning of class. Each quiz will consist of one problem chosen at random from the corresponding homework. The lowest quiz grade will be dropped from the course average, in an effort to accommodate any unforeseen circumstances. Homework assignments will not be collected.

Academic Honesty

Students must follow the UCLA [Student Conduct Code](#), which prohibits [cheating](#), [fabrication](#), [multiple submissions](#), and [facilitating academic dishonesty](#). A summary of the [Student Conduct Code](#) can be found in the [Student Guide to Academic Integrity](#), and the [Office of the Dean of Students](#) has summarized some of the dos and don'ts in [Before You Begin That Paper](#) and How to [Get the Better of an Exam](#).