ECE2060

Introduction to Digital Logic

Spring 2022 Class Web Site

(all announcements, assignments, screencasts and lessons will be here, not on Carmen)

http://u.osu.edu/khanece2000and2100/

Instructor:

Furrukh Khan, khan.1@osu.edu Dreese Lab. 320 http://u.osu.edu/khan.1/

Lecture times:

MWF, 11:30 p.m.-12:25 p.m., 131 Hitchcock Hall

Lab supervisor

All Lab related questions should be directed to: Prof. Gregg Chapman, chapman.415@osu.edu:

TAs' Office Hours

To be announced

Note: You can go to any TA during their office hours to ask questions, not just the TA who grades your assignments

Furrukh Khan's Office Hours:

Office: Dreese Lab 320:

To be announced

Textbook:

Fundamentals of Logic Design, 7th ed. Or later, C. H. Roth, Jr. and L. L. Kinney, Cengage Learning, 2014.

Topics:

- Introduction
- Introduction to Number systems and Conversion
- Boolean Algebra
- Karnaugh Maps
- Multi-Level Gate Circuits
- Multiplexers, Decoders and PLDs
- Latches and Flip-Flops
- Registers and Counters
- Timing (delays, timing diagrams)

- Analysis of Clocked Sequential Circuits (general models for sequential circuits, timing charts, state tables, graphs)
- Design of Clocked Sequential Circuits

Assignments and Exams:

All assignments (HWs, MTs and the Final) will be take home. You will have one week to work on your assignments. The assignments can be done in a few hours; however you will be given a week so that you can work on them anytime during the week. There is no requirement to self-time yourselves.

- Lab reports: 20%
- HWs: 20%

All HWs are weighted equally (Not all HW problems may be graded, only a selection of HW problems may be graded)

• Midterm 1

(Posted Sunday – Feb. 20, due Sunday – Feb. 27) 15%

• Midterm 2

(Posted Sunday – March 27, due Sunday – April 3) 20%

• Final

(Posted Friday April 22, due Friday – April 29) 25%

!!Make-up Policies!!

• HWs cannot be made-up. Midterm and final examination may be made-up only due to illness **during the whole week** of the assignment (a doctor's note is required).

Academic Misconduct Statement:

Academic Misconduct will be handled seriously!

Any student found to have engaged in academic misconduct, as set forth in the Code of Student Conduct Section 3335-23-04, Prohibited Conduct, will be subject to disciplinary action by the university. Academic misconduct is any activity that tends to compromise the academic integrity of the university, or subvert the educational process.

Student Conduct:

Students are expected to abide by the provisions in the Code of Student Conduct. The University's Code of Student Conduct and Sexual Harassment Policy are available on the OSU Web page