

This is a **tentative** course schedule. While changes to the schedule are not likely to occur, the instructor has the right to make necessary changes. **Class meets MW 7:30AM - 8:50AM**

Week #	Lecture	Date	Topic
1	1	January 20, 2020	Dr. Martin Luther King, Jr. Holiday – University Closed
	2	January 22, 2020	Course Information, Syllabus, Introduction to Digital Design
2	3	January 27, 2020	Logic Gates, Basic Boolean Operators, timing diagrams (gates)
	4	January 29, 2020	Number Systems, Arithmetic operations in binary
3	5	February 3, 2020	Two's Complement, overflow, other codes,
	6	February 5, 2020	Basic Boolean Algebra, Equations , Logic Diagrams (CKT), Function tables, Timing Diagrams
4	7	February 10, 2020	Reduced Equations via Boolean Algebra, SOP, POS
	8	February 12, 2020	Canonical Equations
5	9	February 17, 2020	Design steps for Combinational Systems, K-Maps & Reduced Equations (2 & 3 Variables , SOP & POS)
	10	February 19, 2020	Kmaps (4 variables), Don't care conditions. → Exam 1 (Feb 21)
6	11	February 24, 2020	Quine-McCluskey method of reduction ,More design considerations
	12	February 26, 2020	Other gates: XOR, XNOR, NAND, NOR
7	13	March 2, 2020	Other implementation guidelines, Binary Adder design
	14	March 4, 2020	Analysis (reverse engineering) vs Design of Digital Systems. Binary adder design
8	15	March 9, 2020	MSI Devices, Multiplexers and Decoders
	16	March 11, 2020	Subtractor, other MSI examples. // Sequential Digital Systems Intro
		March 16, 2020	Spring Break
		March 18, 2020	Spring Break
9	17	March 23, 2020	Flip-Flops and timing diagrams. Registers.
	18	March 25, 2020	Counter design, Registers Design.
10	19	March 30, 2020	Sequential Machines. Capturing behavior with FSM
	20	April 1, 2020	Mealy and Moore Machines → Exam 2 (April 3)
11	21	April 6, 2020	Other sequential design considerations. State Encodings
	22	April 8, 2020	Continue with other Sequential Design vs Sequential Analysis examples
12	23	April 13, 2020	Algorithmic State Machines (ASM) methodology
	24	April 15, 2020	Basic ASM Design
13	25	April 20, 2020	ASM Design with MSI
	26	April 22, 2020	Design Examples – Different Hardware versions
14	27	April 27, 2020	ASM Design with LSI
	28	April 29, 2020	Other design considerations (e.g. timing issues, max. frequency, critical paths, etc.)
15	29	May 4, 2020	ASM Design with LSI
	30	May 6, 2020	Other design considerations (e.g. timing issues, max. frequency, critical paths, etc.). → Exam 3 (May 8)
16	---	Finals Week (May 11- 15)	Comprehensive exam for those that need to replace a partial exam score (see syllabus for details and requirements).