

EE 2369 – Digital Systems Design I
Schedule

Class meets MW 7:30AM -8:50AM

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

Week #	Lecture #	Date	Topic
1	1	August 26, 2019	Course Information, Syllabus, Introduction to Digital Design
	2	August 28, 2019	Logic Gates, Basic Boolean Operators , Number Systems
2	3	September 2, 2019	<i>LABOR DAY – University Closed</i>
	4	September 4, 2019	Arithmetic and Two's Complement
3	5	September 9, 2019	Basic Boolean Algebra, Equations
	6	September 11, 2019	Logic Diagrams, Design of Circuits, Timing Diagrams
4	7	September 16, 2019	Canonical Equations, Reduced Equations via Boolean Algebra
	8	September 18, 2019	K-Maps & Reduced Equations
5	9	September 23, 2019	Design of Combinational Systems
	10	September 25, 2019	Quine-McCluskey method of reduction
6	11	September 30, 2019	More design considerations
	12	October 2, 2019	Analysis, reverse engineering
7	13	October 7, 2019	Adder design, other gates, implementation guidelines
	14	October 9, 2019	MSI Devices: MUXes and Decoders, Adders
8	15	October 14, 2019	Flip-Flops and timing diagrams
	16	October 16, 2019	Counter design, Registers
9	17	October 21, 2019	Sequential Machines
	18	October 23, 2019	Mealy and Moore Machines
10	19	October 28, 2019	Capturing behavior with FSM
	20	October 30, 2019	Sequential design considerations
11	21	November 4, 2019	State Encodings
	22	November 6, 2019	Reducing States
12	23	November 11, 2019	Algorithmic State Machines methodology
	24	November 13, 2019	Basic ASM Design
13	25	November 18, 2019	ASM Design with MSI
	26	November 20, 2019	Design Examples
14	27	November 25, 2019	ASM Design with LSI
	28	November 27, 2019	Design Examples
15	29	December 2, 2019	Controller Clock Frequency
	30	December 4, 2019	Other design considerations (e.g. max. frequency, critical paths, etc.)
16	---	Finals Week	This is an optional exam for those that need to replace a partial exam score (see syllabus for details and requirements). You must have taken all 3 partial exams for this option. Comprehensive exam covers all chapters, no sheet of notes allowed.