

# EE313 SYLLABUS

Wk	Day	Lesson	Topic	Reading Due (section #)	HW		Lab
<i>Week of 5 Jan</i>							
1	M						
	W	1 & 2	<b>Interfacing w/ the Analog World &amp; Numbering</b>	<b>1-1 to 1-6</b>	PS 1/2/3		
	Th	3	<b>Numbering &amp; Codes</b>	<b>1-7 to 1-13 &amp; Course Policy</b>			
	F	4	<b>Waveforms</b>	<b>2-1 to 2-4</b>	PS 4/5		
<i>Week of 12 Jan</i>							
2	M	5	<b>Quiz #1</b>				
	W	6	<b>Logic Gates I</b>	<b>3-1 to 3-11</b>	PS 6		
	Th		L1: Intro to Workstation				LAB #1
	F	7	<b>Logic Gates II</b>	<b>3-1 to 3-11</b>	PS 7		
<i>Week of 19 Jan</i>							
3	M		<b>Martin Luther King Day</b>	<b>No Classes</b>			
	Tu	<b>Monday Schedule</b>	<b>Quiz #2</b>				
	W	8	<b>Boolean Algebra I</b>	<b>5-1, 5-2, 5-5</b>	PS 8		
	Th		<b>L2: Combinational Logic</b>	<b>4-4</b>			LAB #2
	F	9	<b>Boolean Algebra II</b>	<b>5-3 to 5-7</b>	PS 9		
<i>Week of 26 Jan</i>							
4	M	10	<b>Combinational Logic</b>	<b>5-7, 5-8</b>	PS 10		
	W	11	<b>K-Map Design I</b>	<b>5-9</b>	PS 11		
	Th		<b>L3: Combinational Logic Design</b>				LAB #3
	F	12	<b>K-Map Design II</b>	<b>5-9, 5-10</b>	PS 12		
<i>Week of 2 Feb</i>							
5	M	13	<b>XOR/XNOR, Parity Circuits</b>	<b>6-1 to 6-4</b>	PS 13		
	W	14	<b>Digital Arithmetic</b>	<b>7-1 to 7-5</b>	PS 14		
	Th		<b>Quiz #3 Extra Lab Period</b>				
	F	15	<b>Arithmetic Circuits</b>	<b>7-6 to 7-9</b>	PS 15		
<i>Week of 9 Feb</i>							
6	M		<b>Review for Exam #1</b>				
	W		<b>Review for Exam #1</b>				
	Th		<b>EXAM #1</b>				
	F	16	<b>Comparators/Decoders/Encoders</b>	<b>8-1 to 8-9</b>	PS 16		

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<i>Week of 16 Feb</i>							
8	M		<b>Presidents Day</b>	<b>No Classes</b>			
	W	17	<b>Flip-Flops I</b>	<b>10-1 to 10-5</b>	PS 17		
	Th		<b>L4: FLIP-FLOP</b>				LAB #4
	F	18	<b>Flip-Flops II</b>	<b>10-6 to 10-8</b>	PS 18		
<i>Week of 23 Feb</i>							
8	M	19	<b>Analyzing Sequential Circuits</b>	<b>12-1</b>	PS 19		
	W	20	<b>Flip Flop Applications</b>	<b>12-2 to 12-9 &amp; 13-1 to 13-9</b>	PS 20		
	Th		<b>Extra Lab Period</b>				
	F		<b>Flip Flop Applications</b>	<b>12-2 to 12-9 &amp; 13-1 to 13-9</b>			
<i>Week of 2 Mar</i>							
9	M	21	<b>Asynchronous Counters</b>	<b>12-2 to 12-10</b>	PS 21		
	W	22	<b>Asynchronous Counters Design I</b>	<b>12-2 to 12-10</b>	PS 22		
	Th		<b>L5:</b>				LAB #5
	F	23	<b>Asynchronous Counters Design II</b>	<b>12-2 to 12-10</b>			
<i>Week of 9 Mar</i>							
10	M	24	<b>State Machine Design</b>	<b>12-2 to 12-10</b>	PS 23		
	W	25	<b>State Machine Design</b>				
	Th		<b>Extra Lab Period</b>				
	F						
<i>Week of 16 Mar - SPRING BREAK - NO CLASS</i>							
<i>Week of 23 Mar</i>							
11	M	26	<b>Registers: P-S, S-P, Shift &amp; Recirculating</b>	<b>13-1 to 13-8</b>			
	W		<b>Registers: P-S, S-P, Shift &amp; Recirculating</b>	<b>12-2 to 13-10</b>			
	Th		<b>Extra Lab Period</b>				
	F	27	<b>ADC/DAC</b>	<b>15-1 to 15-11</b>	PS 24		
<i>Week of 30 Mar</i>							
12	M		<b>Review for Exam 2</b>				
	W		<b>Review for Exam 2</b>				
	Th		<b>Exam #2</b>				
	F		<b>ADC/DAC</b>	<b>15-1 to 15-11</b>			

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<i>Week of 6 Apr</i>							
13	M	28/29	<b>Memory I/II</b>	<b>16-1 to 16-6</b>	PS 25/26		
	W	31	<u>Microprocessor Organization &amp; Fundamentals (power point)</u>	<b>17-1 to 17-3</b>	PS 27		
	Th		<b>L6:</b>				Lab #6
	F	32	<u>Instruction Execution w/in a Microprocessor (power point)</u>	<b>17-4 to 17-7</b>	PS 28		
<i>Week of 13 Apr</i>							
14	M	33/34	<u>Microcontroller Organization (power point)</u>	<b>18-1 to 18-6</b>	PS 34		
	W	35	<b>ASICs, CPLDs, &amp; FPGAs</b>	<b>4-1 to 4-3, 4-5 &amp; Handout</b>	PS 35		
	Th		<b>LAB 6</b>				
	F		<b>LAB 6</b>				
<i>Week of 20 Apr</i>							
15	M		<b>LAB 6</b>				
	W		<b>LAB 6</b>				
	Th		<b>Review for Final</b>				
	F		<b>Review for Final</b>				
<i>Week of 27 Apr</i>							
16	M		<b>Close out</b>				

- Readings to be completed prior to the lesson.
- Homeworks are based on the lesson that day and reading from the previous night

**Text:** All readings are from **Digital Electronics with VHDL, Quartus II Version** by William Kletz