

**EMCH 367: MICROCONTROLLERS FOR NON-EE STUDENTS FALL 2009**

	Date	Class Topics	Book section	Hmwk	Lab
AUG.	21 F	Assembly programming & THRSim11	12.3		
	24 M	Binary and hex numbers	12.3.1	Hw1	
	26 W	2's complement negative numbers	12.3.6		
	28 F	Logic operations (logic gates)	12.3.6		
	31 M	Boolean algebra	12.3.7	Hw2	Lab Orientation
SEPT.	2 W	Memory map & addressing mode; CCR	12.3.7		
	4 F	Decision & Branching; flowcharts	12.1—2		
	7 M	Labor Day Holiday - <b>no classes</b>			
	9 W	Parallel communication basics	12.3.5	Hw3-Ex10,Delay	
	11 F	Parallel communication programming	12.3.10--11		
	14 M	Parallel com applications	12.3.12--13		<b>Lab 1: Basics</b>
	16 W	Test review	12.4.1--2	Hw4a	
	<b>18 F</b>	<b>Test #1</b>	12.4.1--2		
	21 M	Serial communication basics	12.4.3--4		<b>Lab 2a Parallel com</b>
	23 W	Serial communication programming	12.1--4		
	25 F	Serial communication reception	12.1--4		
	28 M	Serial communication transmission	12.5.1--2		
	30 W	Timer functions (timer basics)	12.5.3--6	Hw4b	
OCT..	2 F	Timer functions (Input Capture)	12.5.7		
	5 M	Timer functions (Output Compare)	12.5.8		<b>Lab 2b Serial com</b>
	7 W	Timer functions examples	12.6.1—2		
	9 F	Fall break - <b>no classes</b>			
	12 M	DC motor basics	12.6.5	Hw5	
	14 W	Digital tachometer; RPM measurement	12.6.6		
	16 F	Stepper motors basics	12.6.7—8	Hw6	
	19 M	Stepper motors programming	12.8		<b>Lab 3 Timer functions</b>
	21 W	Advanced stepper motor control	12.9	Hw7	
	23 F	A/D conversion basics	12.10.3		
	26 M	A/D conversion programming	12.9.5.1-5		<b>Lab 4 DC motor</b>
	28 W	A/D conversion modes and examples	12.9.5.6-8		Start circuit practice
	30 F	Functional Modules	12.9.5.9	Hw8	Email proj. team
NOV	2 M	Functional Modules	12.7.1—4		<b>Lab 5 Stepper motor and A/D conversion</b>
	4 W	Test review	12.7.5—9		
	<b>6 F</b>	<b>Test #2</b>	12.7.10—11		
	9 M	Project	12.1-12.10		Email proj. proposal
	11 W	Project	12.1-12.10		
	13 F	Project	12.1-12.10		
	16 M	Project	12.1-12.10		
	18 W	Project	12.1-12.10		
	20 F	Project	12.1-12.10		
	23 M	Project progress check	12.1-12.10		
	25 W	Thanksgiving recess - <b>no classes</b>	12.1-12.10		
	27 F	Thanksgiving recess - <b>no classes</b>	12.1-12.10		
	30 M	Project	12.1-12.10		
DEC.	2 W	Project	12.1-12.10		
	4 F	Project	12.1-12.10		
	7 M	Project	12.1-12.10		
	9 W	Project	12.1-12.10		
	11 F	Project	12.1-12.10		
	<b>12 S</b>	<b>PROJECT presentation, whole day (Saturday) event, RM A237/235</b>			