

Week	Date	Lecture Topic	RAT	SW	Peripheral
1	1/8	HW/SW Intro, I/O & Arithmetic instructions, Flowcharts	Assembly (RAT 1)	Introduction	
	1/10	Prog_ROM, Vivado test benches with for loops			
2	1/15	Program Counter, Speaker	Program Counter (RAT 2)	Conditional	Speaker (due 1/29)
	1/17	Implementing conditionals in assembly			
3	1/22	Memory (Register File & Scratch RAM)	Memory (RAT 3)	Loops	
	1/24	Implementing loops in assembly			
4	1/29	ALU, Flags, & PWM	ALU (RAT 4)	Division	PWM (due 2/12)
	1/31	Tracing instruction on the RAT architecture			
5	2/5	Control Unit / Timing Diagram	Control Unit (RAT 5)	Arrays	
	2/7	Assembly Arrays			
6	2/12	RAT Wrapper, Stack, LD, ST	RAT Wrapper (RAT 6)	Stack	
	2/14	MIDTERM			
7	2/19	NO CLASS	Stack Pointer (RAT 7)	Subroutine	Keypad (due 3/5)
	2/21	Subroutines / Keypad			
8	2/26	Interrupts / Shadow Flags	Interrupts (RAT 8)	Interrupts	
	2/28	Debouncer, Final Project Description			
9	3/5	Overview of Peripherals	Final Project (RAT 9)		
	3/7	OPEN LAB			
10	3/12	OPEN LAB			
	3/14	Final Project Demos			
11	3/19	FINAL EXAM			