

Tentative Course Calendar

18-349/14-642: Introduction to Embedded Systems
Fall 2019

A	Class Activity	Lab Activity
8/26	L1: Introduction – Course Overview	
8/28	L2: PCB Lecture (Design)	Lab 0 (PCB) Out
9/2	Labor Day; No Classes	
9/4	L3: PCB Lecture 2 (Manufacturing)	
9/9	L4: ARM Architecture	Lab 0 Due, Lab 1 (Boot+ASM) Released
9/11	L5: ARM ASM Overview	
9/16	L6: ARM Profiling and Optimization	
9/18	L7: Memory Mapped I/O and Buses	
9/23	L8: Serial Protocols	Lab 1 Due, Lab 2 Released (Interfacing)
9/25	L9: Sampling, ADCs, DACs	
9/30	L10: Sensors and Actuators	
10/2	L11: Timers, Interrupts	
10/7	L12: SVC, Syscalls	Lab 2 Due, Lab 3 Release (Syscalls)
10/9	L13: Processes and Memory Management	
10/14	L14: Mid-term Review	
10/16	MIDTERM EXAM	
10/21	L15: Scheduling and Concurrency	
10/23	L16: Real-Time Scheduling 1-2	Lab 3 Checkpoint Due
10/28	L17: Real-Time Scheduling 2-2	
10/30	L18: RTOS Design and Implementation	Lab 3 Due, Lab 4 (RTOS Kernel) Released
11/4	L19: Multi-Core and SoC	
11/6	L20: Embedded Power Management	
11/11	L21: Real-Time Communication	Lab 4 Checkpoint Due
11/13	L22: Embedded Wireless Communication	
11/18	L23: Embedded Control	
11/20	L24: RT-Linux + LKM	L 4 Due, Lab 5 (System Integration) Released
11/25	L25: Safety Critical	
11/27	Thanksgiving Holiday; No Classes	
12/2	L26: Advanced Topic (Security, time, ?)	
12/4	L27: Course Wrap-up	Lab 5 Due
	FINAL EXAM PERIOD	