

Syllabus

Two 2-hour evening exams will be scheduled. The first is tentatively planned for Thursday, October 9. The second is tentatively planned for Tuesday, November 4. Details will be announced.

Week starting	Lesson	Topics ¹	Reading	Due
09/01	Thu/Fr	Course Overview	Ch. 1 (skim)	
09/08	Mo/Tu	Introduction to the Project		
	Tu/We	Intro to MIPS, SPIM *	§3.1-3, §A.9-10	Teams, Proposed Meeting Times ²
	Th/Fr	Conditional Statements *	§3.5	
09/15	Mo/Tu	Procedures *	§3.6	
	Tu/We	Representing Instructions *	§3.4,7	
	Th/Fr	Addressing Modes *	§3.8	
09/22	Mo/Tu	Exceptions	§5.6, A.7	
	Tu/We	Register Transfer Language, Intro to Performance	§5.7-10 (skim)	
	Th/Fr	Single cycle implementation	§5.3	Assembly Language and Machine Language Specifications
09/29	Mo/Tu	Multicycle implementation	§5.4	
	Tu/We	Group Meetings & Project Time	§3.9-15 (skim)	
	Th/Fr	Group Meetings & Project Time	§5.6-10 (skim)	
10/6	Mo/Tu	Xilinx Installation*		RTL Specification
	Tu/We	Sec. 1 and 3: Class cancelled Sec. 2: Addition, subtraction, and logical operations *	§4.1-4	
	Th/Fr	Sec. 1 and 3: Addition, subtraction, and logical operations * Sec. 2: Class cancelled	§4.1-4	
10/13	Mo/Tu	Constructing an ALU *	§4.5	Datapath and Control Specifications
	Tu/We	Performance	Ch. 2	
	Th/Fr	Fall Break – No class		
10/20	Mo/Tu	Performance, Amdahl's Law		
	Tu/We	Recursion, Stacks *	§3.6	Component Specification
	Th/Fr	Microprogramming	§5.5	
10/27	Mo/Tu	Group Meetings & Project Time		Initial Xilinx Model
	Tu/We	Group Meetings & Project Time		
	Th/Fr	Xilinx Exercise *		
11/3	Mo/Tu	Sec. 1 and 3: Review, Xilinx Exercise * Sec. 2: Class cancelled		
	Tu/We	Sec. 1 and 3: Class cancelled Sec.2: Review, Xilinx Exercise *		
	Th/Fr	Xilinx Exercise * ³	§4.6-12 (skim)	
11/10	Mo/Tu	Xilinx Exercise * ³		
	Tu/We	Group Meetings & Project Time		
	Th/Fr	Group Meetings & Project Time		
Finals week		Project Presentations		Term Project

¹ Lessons marked with an asterisk (*) include laptop-based in-class exercises.

² See the CS 232 (03-04 Fall) Term Project Requirements document for details about term project turn-ins.

³ You may use this time to meet with your group regarding the project, or attend class and work out some more Xilinx Exercises.