

## Course Syllabus

We will follow two textbooks: *Principles of Computer Architecture*, by Murdocca and Heuring, and *Linux Assembly Language Programming*, by Neveln. The following schedule outlines the material to be covered during the semester and specifies the corresponding sections in each textbook.

Date	Topic	M&H	Neveln	Assign	Due
Th 09/02	Introduction & Overview	1.1-1.8	1.1-1.6		
Tu 09/07	Data Representation I	2.1-2.2, 3.1-3.3	2.4-2.7, 3.6-3.8	HW1	
Th 09/09	Data Representation II				
Tu 09/14	i386 Assembly Language I		3.10-3.13, 4.1-4.8	HW2	HW1
Th 09/16	i386 Assembly Language II		6.1-6.5	Proj1	
Tu 09/21	i386 Assembly Language III				HW2
Th 09/23	i386 Assembly Language IV			Proj2	Proj1
Tu 09/28	Examples				
Th 09/30	Machine Language		5.1-5.7	Proj3	Proj2
Tu 10/05	Compiling, Assembling & Linking	5.1-5.3			
Th 10/07	Subroutines		7.1-7.4		
Tu 10/12	The Stack & C Functions				
Th 10/14	Linux Memory Model	7.7	8.1-8.8	Proj4	Proj3
Tu 10/19	Interrupts & System Calls		9.1-9.8		
Th 10/21	Cache Memory	7.6			Proj4
Tu 10/26	<b>Midterm Exam</b>				
Th 10/28	Introduction to Digital Logic	A.1-A.3	3.1-3.3	DigSim1	
Tu 11/02	Transistors & Logic Gates	A.4-A.7			
Th 11/04	Circuits for Addition	3.5		HW3	DigSim1
Tu 11/09	Combinational Logic Components	A.10			
Th 11/11	Circuit Simplification I	B.1-B.2		HW4	HW3
Tu 11/16	Flip Flops I	A.11			
Th 11/18	Flip Flops II			DigSim2	HW4
Tu 11/23	Finite State Machines	A.12-A.13			
Th 11/25	<i>Thanksgiving break</i>				
Tu 11/30	Circuit Simplification II	B.3		HW5	DigSim2
Th 12/02	Finite State Machine Design				
Tu 12/07	Registers & Memory	A.14-15, 7.1-7.5		DigSim3	HW5
Th 12/09	I/O	8.1-8.3			
Tu 12/14	TBA				DigSim3
Tu 12/21	<b>Final Exam 10:30am-12:30pm</b>				