

ICS 232 Computer Organization and Architecture Section 02 - Fall 2024  
Class Schedule

	Week	Date	Topic	Homework	Projects
intel overview	1	8/28	Chapter 1 - Introduction - In class - SEC 115		
		8/30	Last day to drop with a refund		
	2	9/4	Chapter 2 - Data Representation	Homework 1 Due	
			Introduction to C - general syntax		
	3	9/11	Chapter 3 - Boolean Algebra & Digital Logic	Homework 2 Due	
			Introduction to C - Arrays	Homework 2 - Group Project Choices Due	
	4	9/18	Chapter 4 - CPU basics (through slide 56)	Homework 3 Due	Project 1 Assigned
			Introduction to C - Functions		Group Project Assigned
	5	9/25	Chapter 4 - CPU basics (start slide 57)	Homework 4 Due	
			Introduction to C - Loops		
	6	10/2	Chapter 5 - Instruction Set Architecture	Homework 5 Due	
			Review for Mid-term Exam		
	7	10/9	Intel Instruction Set - Irvine Chapter 2 (Slides 15 - 21, 26 - 27) - In class - SEC 115	Homework 6 Due	
			Intel Instruction Set - Irvine Chapter 4		
			Mid-term Exam		
overview	8	10/16	Intel Instruction Set - Irvine Chapter 5 (Slides 1 - 28, 61 - 62)	Homework 7 Due	Project 1 Due
			Intel Instruction Set - Irvine Chapter 6 (Slides 1 - 59)		
	9	10/23	Intel Instruction Set - Irvine Chapter 7 (Slides 1 - 58)	Homework 8 Due	Project 2 Assigned
			Intel Instruction Set - Irvine Chapter 8 (Slides 1 - 26, 35 - 36)		
			Introduction to C - C compiler stack usage		
			Introduction to C - Memory Allocation and Lists + gdb introduction		
	10	10/30	Chapter 6 - Memory	Homework 9 Due	Project 3 (Bonus) Assigned
	11	11/6	Chapter 7 - I/O Systems	Homework 10 Due	
			Group Project 6 - Networking Presentation		
			Group Project 7 - Compilers Presentation		
	12	11/13	Chapter 11 - System Software - On-line	Homework 11 Due	
			Group Project 8 - Quantum Computing Presentation		
			Group Project 9 - Cloud Presentation		
	13	11/20	Chapter 8 - Alternative Architectures	Homework 12 Due	
			Group Project 1 - Intel 64 Presentation		
overview			Group Project 2 - ARM 64 Presentation		
		11/25	Last day to withdraw		
		11/27	Thanksgiving Holiday - No class		
	14	12/4	Review for Final Exam	Homework 13 Due	Project 2 Due
			Group Project 3 - RISC-V Presentation		
			Group Project 4 - JVM Presentation		
	15	12/11	Final Exam - In class - SEC 115		Project 3 (Bonus) Due

Textbooks

The Essentials Of Computer Organization And Architecture by Linda Null - Sixth edition  
On-line access: [www.jblearning.com](http://www.jblearning.com), Course ID: 4AE6C2  
Assembly Language for Intel-Based Computers by Kip Irvine - Eighth Edition (optional)  
C Programming Language, 2nd Edition by Kernighan and Ritchie (optional)

Grading

Points	Percentage	Description
130	13%	Homework - 13 assignments - 10 points per assignment
200	19%	Projects - 2 projects - 100 points per project
		Project 3 - Bonus - Up to 20 points
200	19%	Group Project Presentation
200	19%	Mid-Term Exam
300	29%	Final Exam
1030	100%	

Class Location and Times

5:00 pm - 6:00 pm Office Hours: SEC 115 or On-line via Zoom: <https://minnstate.zoom.us/j/95444318410>.  
6:00 pm - 9:20 pm Class: SEC 115 or On-line via Zoom: <https://minnstate.zoom.us/j/95444318410>

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