

CSIS 3740 - Computer Organization

Fall 2026 Syllabus, Section 01, CRN 40799,

Credit hours: 4

Instructor

Hailong Jiang

Email: hjiang@ysu.edu

Public Instructor Information

Professor: Hailong Jiang

Professional Qualifications:

Ph. D., Computer Science, Kent State University, Kent, OH, 2025.

Office: Meshel Hall, Room 320

Phone: 937-789-3969 (Cell)

Email: hjiang@ysu.edu

Course Description

3740. Computer Organization. Basic hardware components, structure, and implementation of computer systems. Assembly language and instruction set architecture. Combinational and sequential digital logic. CPU and control unit design. Prereq.: CSIS 2605 or CSIS 2610. 4 s.h.

Course Readings

Group	Title	Author	ISBN
	Essentials of Computer Organization and Architecture	Linda Null	978-1284259438

The course readings are subject to change in the event of extenuating circumstances, research developments, current events, and/or to ensure better learning.

Schedule of Topics and Assignments

Week of	Reading(s)	Proposed Topic	Due/To Prepare for Class
8/24	Chapter 1	Introduction	
8/31	Chapter 2	Data representation I	Project 1 assigned
9/7	Chapter 2 Labor Day 09/07 Monday No class	Data representation II	
9/14	Chapter 3	Boolean Algebra Digital Circuits	Project 2 (Boolean Algebra & Digital Circuits) Assigned
9/21	Chapter 4	Basic Machine Organization	
9/28	Chapter 4	MARIE Architecture Assembly Language	Project 3 (Basic Machine Organization) Assigned
10/5	Chapter 5	Instruction Set Architecture, Part I	
10/12	Recap on Monday and Mid-term Exam on Wednesday	Covers Chapter 1, 2, 3, and 4	Project 4 (Assembly Language Programming) Assigned
10/19	Chapter 5	Instruction Set Architecture, Part II	
10/26	Chapter 6	Memory Hierarchy and Organization, Part I	Project 5 (Instruction Set Architecture) Assigned
11/2	Chapter 6	Memory Hierarchy and Organization, Part II	



11/9	Chapter 7 Nov 11, Veterans Day, Wednesday, No Class.	Input and Ouptut	Project 6 (Memory) Assigned
11/16	Chapter 9	Alternative Architectures	
11/23	Conference Travel and Thanksgiving Break	No class this week	Project 7 (Alternative Architectures) Assigned
11/30	Recap		
12/7	Final exam covers chapter 5, 6, 7, and 9 Dec 9th, Wednesday 10:30 am - 12:30 pm		

The course schedule, policies, procedures, and assignments in this course are subject to change in the event of extenuating circumstances, by mutual agreement, and/or to ensure better learning.