Date	Lecture Number	Topic
8 September	0	Introduction, build first computer
13 September	1	MIPS ISA - I
15 September	2	Digital Circuits I - Gates, Decoder, Mux, Adder
20 September	3	MIPS ISA - II
22 September	4	Performance Benchmarking and Amdhl's Law (Video)
27 September	5	Processor (Datapath)
29 September	6	Processor (Controlpath)
4 October		**Midsem Exam (In Class) 8%**
6 October	7	Processor (Pipelining-I)
11 October	8	Processor (Pipelining-II)
13 October	9	Processor (Pipeline Hazards)
18 October	10	Processor(Pipeline Hazards)
20 October	11	Processor (Superscalar-I)
10/25/22	12	Processor (Superscalar-II)
10/27/22	13	SIMD and Vector Instructions
1 November	14	Midterm-II Review
3 November		**Midsem Exam (In Class) 10%**
8 November	15	Cache Concepts
10 November	16	Cache Design
15 November	17	Cache Design (Project)
17 November	18	Main Memory
22 November	19	Virtual Memory
24 November		**Thanksgiving -- No Class**
11/29/22	20	ECC and RAID
1 December	21	I/O (Video)
6 December	22	Energy efficient architectures (Video, in class disscusion led by Tanmay)
8 December	23	Multi-Threading, Multi-Core, GPUs (Video, in class disscusion led by Ian)
13 December	24	Review Lecture
20 December		**Final Exam (Online) 10%**