

CISP1020 - Computer Science II - Introduction to Data Structures - Supplemental Syllabus

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Spring 2020

1 Grading

- Midterm and Final Exams 40%
- Laboratory Projects 40%
- Homework and Quizzes 20%

2 Tentative Schedule

January 2020

Su	Mo	Tu	We	Th	Fr	Sa
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

- **Tue January 21** – C++: I/O, Functions, Arrays, C++ String Objects and C-String, Structures, Pointers – Chapter 1 and Chapter 3.1
- **Thu January 23** – C++: I/O, Functions, Arrays, C++ String Objects and C-String, Structures, Pointers – Chapter 1
- **Tue January 28** – Typedef, Structures, Program structure (header files, source files, Makefiles) Pointer arithmetic and double-indirection – Chapter 1
- **Thu January 30** – Typedef, Structures, Program structure (header files, source files, Makefiles) Pointer arithmetic and double-indirection – Chapter 1

February 2020

Su	Mo	Tu	We	Th	Fr	Sa
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29

- **Tue February 4** – Command line arguments. Binary search, Recursion, Stacks as Array – Chapter 3.1, 3.5, and 5.1
- **Thu February 6** – Command line arguments. Binary search, Recursion, Stacks as Array – Chapter 5.1
- **Tue February 11** – Elementary File I/O, Queues, Circular Queueus. Enumerated Types – Chapter 5.2
- **Thu February 13** – Elementary File I/O, Queues, Circular Queueus. Enumerated Types – Chapter 5.2
- **Tue February 18** – Dynamic Memory Allocation, Dynamic Linked Lists, Doubly-Linked Lists – Chapter 3.2, 3.3, 3.4
- **Thu February 20** – Dynamic Memory Allocation, Dynamic Linked Lists, Doubly-Linked Lists – Chapter 3.2, 3.3, 3.4
- **Tue February 25** – C++ Custom Classes – Chapter 2.1
- **Thu February 27** – C++ Custom Classes – Chapter 2.2

March 2020

Su	Mo	Tu	We	Th	Fr	Sa
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

- **Tue March 3** – C++ Custom Classes – Chapter 2.2, 2.3
- **Thu March 5** – C++ Custom Classes – Chapter 2.4
- **Tue March 10** – Review
- **Thu March 12** – Midterm Exam
- **Tue March 17** – Spring Break
- **Thu March 19** – Spring Break
- **Tue March 24** – C++ Standard Template Library (STL)
- **Thu March 26** – C++ Standard Template Library (STL)
- **Tue March 31** – Custom classes, Binary Trees, Algorithm Complexity – Chapter 4, 7

April 2020

Su	Mo	Tu	We	Th	Fr	Sa
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

- **Thu April 2** – Custom classes, Binary Trees, Algorithm Complexity – Chapter 7
- **Tue April 7** – Custom classes, Hashing, Binary Heaps, Priority Queues, and Algorithm Complexity – Chapter 4, 9
- **Thu April 9** – Custom classes, Hashing, Binary Heaps, Priority Queues, and Algorithm Complexity – Chapter 9
- **Tue April 14** – Sorting (including recursive quick sort) and Algorithm Complexity – Chapter 11
- **Thu April 16** – Sorting (including recursive quick sort) and Algorithm Complexity – Chapter 11
- **Tue April 21** – Custom classes and AVL Trees – Chapter 10.1, 10.2
- **Thu April 23** – Custom classes and AVL Trees – Chapter 10.1, 10.2
- **Tue April 28** – Review
- **Thu April 30** – Review

May 2020

Su	Mo	Tu	We	Th	Fr	Sa
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

- **Tue May 5 6:30PM – 8:20PM** Final Exam