

# University of Nevada, Las Vegas Computer Science 477/677 Fall 2022

## Schedule of Homework and Tests Fall 2022

**Tuesday August 30.** First day of class, 8:30 – 9:45, Room TBE B176.

**Thursday September 1.** Class.

**Tuesday September 6.** Class.

**Thursday September 8.** Class. Assignment 1 due. Turn it in to the grader or teaching assistant. Since no grader or teaching assistant has been assigned yet, you will get instructions later.

**Tuesday September 13.** Class.

**Thursday September 15.** Class. **Friday September 16.** Assignment 2 due. Turn it in to the grader or teaching assistant by midnight.

**Tuesday September 20.** Class.

**Thursday September 22.** Class. Assignment 3 due. Turn it in to the grader or teaching assistant.

**Tuesday September 27.** Class.

**Thursday September 29.** First Examination.

Topics will include:

- $O$ ,  $\Omega$ , and  $\Theta$ , and what they mean.

- Recurrences.

- Time complexity of code.

- Dynamic programming.

- Divide and conquer.

  - Mergesort.

  - Quicksort.

  - Binary search.

- Greedy algorithms.

  - Huffman's.

  - Kruskal's.

- Sorting algorithms.

- Data structures.

  - Priority queue.

    - Stack.

    - Queue.

    - Heap.

  - Search structure.

    - Unordered list, and linear search.

    - Binary search tree.

    - Hash table.

    - Collision resolution.

      - Array and linked list implementations of data structures.

- Sparse arrays and memoization.

- Loop invariants.

**Tuesday October 4.** Class.  
**Thursday October 6.** Class.  
**Tuesday October 11.** Class.  
**Thursday October 13.** Class. Assignment 4 due.  
**Tuesday October 18.** Class.  
**Thursday October 20.** Class. Assignment 5 due.  
**Tuesday October 25.** Class.  
**Thursday October 27.** Second Examination.  
**Tuesday November 1.** Class.  
**Thursday November 3.** Class.  
**Tuesday November 8.** Class.  
**Thursday November 10.** Class. Assignment 6 due.  
**Tuesday November 15.** Class.  
**Thursday November 17.** Class.  
**Tuesday November 22.** Third Examination.  
**Thursday November 24.** Thanksgiving Recess. No class.  
**Tuesday November 29.** Class.  
**Thursday December 1.** Class. Assignment 7 due.  
**Tuesday December 6.** Class.  
**Thursday December 8.** Class.  
**Thursday December 15.** Final Examination: 8:00 – 10:00.