## Class: TR 8-9:15 A.M., Hamann-Ray Science Center 310 Lab: W 4:30-6:15 P.M., Hamann-Ray Science Center 314

# Instructor

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# Text

C++ Programming: Program Design Including Data Structures, 6th ed. by Malik.

## Prerequisite

CSC 121, Computer Science I (or equivalent)

#### **Course Objectives**

This course is the second in a two-semester sequence designed to introduce the student to computer science and computer programming. A student successfully completing this course will be able to:

- Implement exception handling.
- Implement a recursive function.
- Implement and use a linked list, a stack, and a queue.
- Implement a linear search algorithm and a binary search algorithm.
- Implement a selection sort, an insertion sort and a quick sort on array-based lists.
- Implement a merge sort on a linked-list based list.
- Implement a binary tree.
- Write graphics applications.

#### Grades

Grades will be based on the following activities:

1. Four comprehensive exams worth 100 points each. Each exam covers material from the beginning of the semester up to the most recent material covered. The first three exams will be given during regular class time and the fourth exam will be given during the normal final exam period.

2. Ten laboratory assignments worth 10 points each. Lab assignments are due at the end of the lab period.

3. Ten homework assignments worth 10 points each. Homework assignments are due at the beginning of the class.

Letter grades are assigned on the basis of the number of points earned.

Grade Points

- A 558-600
- A- 540-557
- B+ 522-539
- B 498-521
- B- 480-497 C+ 462-479
- C+ 402-479 C 438-461
- C- 420-437
- D 360-419
- F 000-359

#### Attendance Policy

I will take class attendance. Ten points will be deducted from your total points for each unexcused absence after three unexcused absences. Make-up tests will be given only if the student arranges it AHEAD of time or if the absence is officially excused.

### Academic Integrity

You are welcome to exchange ideas with your classmates, but the work submitted by a student is expected to be the product of the student alone. Cheating, in any form, will result in a grade of zero for the work involved (or more severe penalty for a repeat offender). Students who give assistance to other students will suffer the same penalty. Multiple occurrences will be dealt with under the policies established by the college.