# CS 253 – Algorithms and Data Structures - Course Syllabus

## Contact Information


| CS253 section A: | | CS253 section B: | |
|---|---|---|---|
| Class meeting times: | TR 8:05-9:20 | Class meeting times: | TR 0930-1045 |
| Instructor: | Chaman Sabharwal | Instructor: | Bruce McMillin |
| Email: | **chaman@umr.edu** | Email: | **ff@umr.edu** |
| Phone: | n/a | Phone: | 341-6435 (office) |
| Office: | CS rm 321 | Office: | CS rm 322 |
| Office Hrs: | | Office Hrs: | Tues and Thurs 0830-0930 |


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## Course Objectives

The purpose of this course is threefold:

- Learn advanced algorithmic techniques and put them into practice
- Build on the basic skills developed in CS 153 and 158
- Learn and apply algorithm complexity and correctness analysis techniques

## Intended Course Audience/Prerequisites

The intended audience for this course is Computer Science Sophomores/Juniors who have completed each of the following courses:

- Discrete Mathematics and boolean algebra ( CSc-158 )
- Data Structures I ( CSc-153 )

## Course Requirements/Policies

**Attendance is required unless prior arrangements have been made.** If an examination is missed for illness or unavoidable absence, a makeup examination will be given. For planned absences, programs should be turned in before the absence, rather than after.

Other policies stated within University guidelines are to be adhered to by the student.

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## Grading

18% Test I - September 25
18% Test II - October 30
18% Test III - December 11
36% Program Assignments (4-6 assignments)
10% Quizzes, Board Work, Worksheets (in class at random)

The exams, programs, and quizzes receive grades based on the following scale:

89-100 A
77-88 B
65-76 C
53-64 D

The final course grade is then a weighted average (according to the above table) of these individual grades.

### Program Assignments

Program assignments are **due 1 week after being assigned** unless otherwise stated in class. You may work in small groups (up to 3) on the programming assignments and homework. For each program, though, you should change group membership. Written reports will be required for each programming assignment. **Late program assignments, including revisions,** will be assessed a 10 point deduction per day and will not be accepted beyond one week of the assigned deadline.

### Homework Assignments

Homework assignments will be given regularly and corrected, but not graded. It is up to you to do the homework. However, in borderline grade situations, if you've completed all the homework, you will receive the next higher grade for the course.

### Quizzes

Quizzes are over material we will cover that day, so it is in your best interest to read ahead.

### Academic Honesty

You must work alone on all tests and exams. Any cheating will be handled with appropriate University action.

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## Course Materials

Text: Introduction to Algorithms, 2nd Edition, Cormen et. al., McGraw Hill

Handouts: As required