1 Prerequisite

C or better in CS 217 and CS 252.

2 Instructor Info

Instructor: Christine Cheng, EMS 1045, 229-5170, ccheng@cs.uwm.edu.
Office Hours: TR 10:00-11:00AM or by appointment.

3 Textbook:


4 Objectives:

CS 535 is an introduction to data structures and algorithms commonly used in programming. At the end of this course you should be able to

- describe and use the basic data structures in Computer Science, and evaluate their performances in different situations,
- theoretically analyze the time complexities of algorithms,
- design and prove the correctness of efficient algorithms for many problems that arise in Computer Science.

5 An Outline

1. Framework for Algorithm Analysis, Sections 1.1-1.4, 1.6.
2. Basic Data Structures, Chapter 2
3. Advanced Data Structures, Chapter 3
4. Sorting, Sets, and Selection, Chapter 4
5. Graph Algorithms, Chapter 6
6. Weighted Graph Algorithms, Chapter 7
6 HWs, Exams, and Grading Scheme

Homeworks. There will be six to seven homeworks assigned every other week. You will have about two weeks to work on them. No homeworks will be accepted after the deadline.

You are allowed to collaborate with your peers. However, you must write up the solutions on your own and cite your collaborators. If you obtained your solution from a book, website, etc., you must indicate the title of the book and page no., the address of the website, etc. Deductions will be made if this policy is violated.

Exams and Finals. There will be one midterm exam and one final exam.

A tentative Grading Scheme. Homeworks 30%, Midterm Exam 35%, Final 35%. Active participation in class will be taken into account when your final score is in between two letter grades (e.g., between a B and a B-, etc.).

In case of an emergency, contact the instructor at the earliest possible opportunity via e-mail or phone. No arrangements will be made for missed homeworks and exams unless these rules are followed, and an acceptable evidence of legitimate emergency is submitted.

7 Academic Misconduct

Submitting someone else's work in a homework or an exam and calling it your own is an academic misconduct at UWM. It will be dealt with accordingly. For more information, check the website www.uwm.edu/CHS/administrationinfo/academic.html.