CS 2500 – Algorithms - Course Syllabus

Instructor: Dr. Bruce McMillin
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Office Hours: Thursday   9:30-12 or by appointment or drop-in.

Course Objectives

The purposes of this course are fivefold:

- Put advanced algorithmic techniques into practice
- Build on the basic skills developed in CS 1575 and 1200
- Apply algorithm complexity and correctness analysis techniques
- Develop Written Communication Skills within the Context of Computer Science
- Develop Lifelong Learning Skills

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 (CS 1200)
- Data Structures I CS 1575

Course Materials

Text: Introduction to Algorithms, 3rd Edition, Cormen et. al., McGraw Hill

Handouts: As required

Grading

11% Test I -

11% Test II -

11% Test III   -

20% Final - During Prescribed Final Time

37% 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.   Some work may be in small groups (up to 3) and some work will be individual effort on the programming assignments. For group assignments, though, you must change group membership with each assignment. Written reports will be required for each programming assignment.   **Late program assignments** will be assessed a 10 point deduction per day and will not be accepted beyond one week of the assigned deadline. A program is considered late if it is not turned in when collected at the start of class. Revisions of assignments will be accepted on the writing portion only and will also be subject to a 10 point deduction per day with a minimum of one day's penalty.

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.

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, including those as listed under Missouri S&T's "Student Academic Regulations" are to be adhered to http://registrar.mst.edu/academicregs/index.html.

Attendance

Regular attendance is required; if you miss more that 2 classes in a row, I will file an Academic Alert indicating you are not meeting the requirements for the course.   If you miss over 7 classes during the semester and have less than an "A" average, you will be administratively dropped.

Personal Electronics

Personal electronic devices such cell phones, etc, are not to be used during class for voice calls, texting, etc. The one exception is emergency calls. If you receive an emergency call, please exit the room quickly.