Data Structures and Algorithms II
CS 362 Tues/Thurs 12:30-1:45, Room: WOOD-149

Instructor: Prof. Lydia Tapia, Farris 3400B, Email: tapia@cs.unm.edu
Office Hours: Tues/Thurs 9-10 AM, W 1:00PM-2:00PM, and by appointment.
Teaching Assistant: Jon David, Farris 3440, Email: jdavid@cs.unm.edu
Office Hours: TBD.
Course Webpage: On UNM Learn
Textbook: Cracking the Coding Interview (6th Edition), Gayle Laakmann McDowell, CareerCup, 2016.
(optional) Algorithm Design, Kleinberg and Tardos, Pearson Education, 2014.
Course Topics:

A continuation of 361L with an emphasis on design of algorithms. Topics include: amortized analysis and self-adjusting data structures for trees and priority queues; union-find; minimum spanning tree, shortest path and other graph algorithms; elementary computational geometry; greedy and divide-and-conquer paradigms.

Grade Policy: Your grade will be based on four components:

- first exam 25%
- second exam 25%
- homework and quizzes 30% There will assignments and/or in class exercises and/or quizzes, typically one per week.
- programs 20% We will exercise some concepts, as needed, through programming.
- participation 10% This includes attendance and will be defined ongoing in the course.

Assignments will be turned-in using UNM Learn and other online mechanisms. Detailed instructions will be given out for each assignment. For any given assignment, its online mechanism **MAY OR MAY NOT** accept late turn-ins late, but if it does, there will be fixed percentage penalties for lateness. Once the online turn-in window closes for an assignment **no further turn-ins** will be accepted, and note there are **absolutely NO 'free late days' or any other grace period**. If you are unable to turn-in an assignment on time due to an excused circumstance (e.g., illness, death in the family, or any other reason), you must make **ARRANGEMENTS** with the instructor via email **before the assignment is due, and then turn-in according to those arrangements AND follow-up** with appropriate problem-specific documentation (e.g., note from doctor, newspaper announcement, etc). Without such prior arrangements and supporting documentation, **any assignment not turned in by its online closing will receive a grade of 0**. There will be **no make-up exams except for university-excused absences**. Please discuss unusual circumstances in advance or immediately as possible with the instructor.

Requests for instructor-initiated drops MUST be in writing via email to the course instructor before the final exam. They will be evaluated on a case-by-case basis.

Once final course grades have been reported, **no changes to grades or grade modes will be made**, except possibly to correct a significant instructor error, or to complete a medical Incomplete under conditions that were prearranged before grades were reported

Academic Honesty: For everyone's benefit, students should uphold the guidelines in the University of New Mexico Student Code of Conduct.

For the assignments in this class, discussion of concepts with others is encouraged, but all assignments must be done on your own, unless otherwise instructed. If you use any source other than the text, reference it/him/her, whether it be a person, a book, a solution set, a web page or whatever. You MUST write up the solutions in your own words. Copying is strictly forbidden.

Programming courses can present some difficult situations for the student as to what is allowable. The guiding principle is that the work you turn in must be your own, not merely in terms of the specific code, but also in terms of the overall design of the program. The basic principle for discussing projects with other students is: *You may help each other understand the problems, but not the* **solutions**. It is acceptable to discuss algorithms and data structures in general, and coding style, and the requirements of the assignment, with other members of the class. It is acceptable to get a limited amount of debugging help from another member of the class.

The following are some examples of behavior that is not acceptable with regards to programming: Copying another person's program with or without their knowledge, codeveloping a program for an individual project, mailing all or portions of your program to another person, making your files readable so another person can copy them, reading another person's files, using another person's listing (taken from the trash, for example), having another person write any portion of your program for you.

The following are some examples of behavior that is not acceptable with regards to summaries and reports: Copying language from a research paper or any other document without placing in quotation marks and citing and copying algorithms or figures from other documents without appropriate citation.

Cheating or plagiarism will result in an automatic F for the entire course and turning the case over to the appropriate authorities for further disciplinary action. There will be no second chances. In cases of copying, where it is sometimes difficult to tell who was copying from whom, all students with knowledge of the cheating will be penalized except in rare circumstances. If in doubt it is your responsibility to ask your instructor in advance.

Americans with Disabilities Act (ADA) Policy Statement: The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact the Department of Student Affairs, Accessibility Resource Center in Mesa Vista Hall, Rm. 2021.

Please complete, sign, and return this page to Professor Tapia (**KEEP the previous pages for reference**.) Your assignments will not be graded until we have received this signed agreement.

CS 362
Spring 2020 Student Information

Your full name (print legibly): _____

Student ID number: _____

What you prefer to be called (seriously): _____

Student Declaration

I have read and understood the **CS 362** Syllabus and policies for **Spring 2020** and I agree to abide by its contents.

Signature _____

Date _____