

Advanced Discrete Structures (Spring 2020)

CSCI 395.62/MATH 395.62/MATH 78000/CSCI 79513

Meeting Time: Monday, Wednesday 7⁰⁰ – 8¹⁵ PM, TH-412

Instructor: Subash Shankar

Office: 1000F Hunter North

Office Hours: Mon. 3³⁰ – 5³⁰ PM or by appointment (Master's advising gets preference after 5)

Contact: 212 650 3392 or preferably subash.shankar@hunter.cuny.edu.

Bulletin Board: You should check Blackboard (<http://bb.hunter.cuny.edu>) regularly since all class material (reading lists, homework, corrections, etc.) will be posted there. Please make sure you have configured bb to use your preferred email address, since you are responsible for any email I might send to that address (your Hunter email address, by default).

Prerequisites: CSCI 150, or instructor's permission

Texts: The required text is: Kenneth H. Rosen, Discrete Mathematics and its Applications, 7th Edition, ISBN 978-0073383095.

Reading: You are responsible for all the material in the reading list, even though the lectures will not cover a considerable portion of it.

Grading: 30% Homework

70% Tests

+/-10% Participation

This is subject to change.

Late Policy: There are no makeups for tests. Homework will get 5% off within 4 hours, and 10% off each calendar day after that. No homeworks will be accepted after they are discussed or handed back.

Homework: There will be one homework set per unit, with the average unit lasting 2-3 weeks. In accordance with department policy, at least one homework will involve a project (either >5 minute presentation or >500 word paper). Feel free to submit homework by email, but please keep email submissions platform-independent (pdf, postscript).

Homework problems are discussed when handed back, *if* you ask me to. Since I assume poor homework grades are due to a lack of effort otherwise, you should make sure to ask me if you have any questions.

All submitted work should be written by yourself. It is standard professional practice to acknowledge any assistance you might have received in your homework, including any *thinking/discussion* done in a group. I will be enforcing this.

Tests: There will be 2-3 tests. Most test questions will be conceptual and will require a good understanding of the material rather than rote memorization. Thus, you should concentrate on understanding the concepts and knowing how to apply the material.

Graduate Students: Students enrolled in the graduate version of this course will receive additional (and more rigorous) homework problems, along with a longer project. Undergraduates are also encouraged (but not required) to do these problems. Additionally, grad students are strongly encouraged to write their homework using L^AT_EX(required for project).

Other: I ask that all **cell phones** be turned off in class.

All course material (including lectures, homeworks, solutions, etc.) is owned by me and protected by **copyright**. You may use material for yourself, but any other use (including posting on websites, whether free or not) is illegal without my express written permission.

I take **academic honesty** very seriously, and any violation results in an automatic F for the course along with sanctions in accordance with Hunter College procedure. The official college statement is:

Hunter College regards acts of academic dishonesty (e.g., plagiarism, cheating on examinations, obtaining unfair advantage, and falsification of records and official documents) as serious offenses against the values of intellectual honesty. The College is committed to enforcing the CUNY Policy on Academic Integrity and will pursue cases of academic dishonesty according to the Hunter College Academic Integrity Procedures.

In compliance with the American Disability Act of 1990 (ADA) and with Section 504 of the Rehabilitation Act of 1973, Hunter College is committed to ensuring educational parity and accommodations for all students with documented disabilities and/or medical conditions. It is recommended that all students with documented disabilities (Emotional, Medical, Physical and/ or Learning) consult the Office of Accessibility located in Room E1124 to secure necessary academic accommodations. For further information and assistance please call (212-772-4857)/TTY (212-650-3230).

In compliance with the CUNY Policy on Sexual Misconduct, Hunter College reaffirms the prohibition of any sexual misconduct, which includes sexual violence, sexual harassment, and gender-based harassment retaliation against students, employees, or visitors, as well as certain intimate relationships. Students who have experienced any form of sexual violence on or off campus (including CUNY-sponsored trips and events) are entitled to the rights outlined in the Bill of Rights for Hunter College.

- *Sexual Violence: Students are strongly encouraged to immediately report the incident by calling 911, contacting NYPD Special Victims Division Hotline (646-610-7272) or their local police precinct, or contacting the College's Public Safety Office (212-772-4444).*
- *All Other Forms of Sexual Misconduct: Students are also encouraged to contact the College's Title IX Campus Coordinator, Dean John Rose (jtrose@hunter.cuny.edu or 212-650-3262) or Colleen Barry (colleen.barry@hunter.cuny.edu or 212-772-4534) and seek complimentary services through the Counseling and Wellness Services Office, Hunter East 1123.*

CUNY Policy on Sexual Misconduct Link: <http://www.cuny.edu/about/administration/offices/la/Policy-on-SexualMisconduct-12-1-14-with-links.pdf>

This course partially fulfills the department's learning goals 1C, 1D, and 3A-D.