

CSCI 15000 §01 # 45844 and recitations

Discrete Structures Spring 2021

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Text etc.: Epp, Susanna S.; *Discrete Mathematics with Applications, Fourth Edition*; Brooks/Cole–CENGAGE Learning; 2011; ISBN-13 978-0-495-39132-6

Additional material, such as a list of assigned home work and an updated copy of this document, can be found on the web at <http://www.cs.hunter.cuny.edu/~eschweit/150stuff/150.html>

Finding your Lecturer Eric can be reached to make appointments etc. by contacting him before or after class, by phoning his office at (212)772-4349 or Zoom-ing to <https://us02web.zoom.us/j/4678462663> during office hours (Mondays 5:000-6:00 and Thursdays 2:30-3:30), or (by far the best way) by sending him e-mail at eric.schweitzer@hunter.cuny.edu. Please note that he will only read plain ASCII text email, not HTML or MicroSoft Word encoded documents. Also note that any email concerning anything that might fall under the FERPA regulations (e.g. questions about grades or other class related issues) *must* be sent from your “myhunter” account.

In addition, if the school is open, messages can be left for him at the Computer Science Department office, which is located in N-1008 and is reachable at (212)772-5213.

Finding your Recitation Instructors All Monday recitation sections (1R01, 1R02, 1R03 and 1R04 (# 45854, 45857, 45860, and 45862 resp.)) as well as Wednesday’s 1R06 (# 45872) and Thursday’s 1R08 (# 45875) are taught by Brandon Foster. He can be reached at Brandon.Foster81@myhunter.cuny.edu. The other Wednesday recitations (1R05 and 1R07 (# 45863 and 45873 resp.)) are taught by Jaime Canizales. His email address is JAIME.CANIZALES97@myhunter.cuny.edu.

Your recitation instructor will supply additional information about what will happen in his classroom.

Learning Outcomes The successful student will acquire the mathematical foundations needed for later computer science classes such as automata theory, formal languages, cryptography, relational database theory, data structures, etc. She will understand and be able to construct proofs, especially those involving discrete structures. She will demonstrate this mastery by solving problems and supplying proofs during classroom discussion and on written instruments such as home work and quizzes. This class directly supports Departmental Learning Outcomes 1A (“demonstrate an understanding of the basic foundations ... of mathematics and statistics ...”) and 1C (“display knowledge of the theory of computation and algorithms”).

Lectures, Recitations and Tutoring You should be scheduled for three “hours” (150 minutes) of lecture and one “hour” (50 minutes) of recitations each week. Although lectures are large classes that tend to have “one way” communication, questions are encouraged. There are UTAs monitoring the lecture who help manage the class and can answer texted questions. Of course with a class of over 200 there is not enough time for all questions to be answered. That is why you will meet in smaller groups (recitations). That is your opportunity to ask questions and discuss home work problems. If you want to succeed in this class you should show up for your recitation having attempted all the assigned homework. In addition, your graded work will be returned during recitations or via Gradescope.

Lectures will be delivered via BlackBoard Collaborate Ultra. Quizzes will be distributed via BlackBoard and collected on Gradescope. Discussion about the class, which will be monitored by faculty and teaching assistants, will take place on BlackBoard’s Discussion Board. We will remove any posts that are not about class material. This includes, but is not limited to personal remarks about other students or the instructional staff and discussions about choice of material or the delivery of the material.

To get the most out of the lectures, you would do well to read ahead in the text book. To get the most out of the recitations, you should have attempted all the assigned problems.

If you find you need more assistance than is available in recitations, you are encouraged to use the tutoring services at Dolciani Learning Center. The tutors for this class are UTAs and recitation instructors. The schedule is here: <http://www.hunter.cuny.edu/dolciani/hours/tutoring>

Gradescope Gradescope (www.gradescope.com) will be used to collect work and quizzes and to disseminate grades on those items. Expect to get email from them at your “myhunter” address after the first day of classes. Because Gradescope does optical character recognition, you will have to write your name, EMPLID and section numbers legibly. Failure to do so may result in incorrectly recorded grades.

Grades: Grades will be based on two types of grading instruments: quizzes and home work.

- The home work assignments will be worth a total of 10% of your grade. They will be calculated by your recitation instructor and based on a very coarse 0-3 scale (1 if you turn something in, 3 if it is totally correct).
- The quizzes will be worth 90% of your grade and will be surprises. There will be at least 15 and at most 20 quizzes. We will drop your worst 3 quiz grades. rev: If we have 20 quizzes, 5 will be dropped. If you miss a quiz, you will get 0 points (and hopefully that will be a dropped grade). You can not make up quizzes.
- **There are no exams in this class, only the quizzes.**
- Quizzes will be distributed as .pdf’s and are timed. You will be given a few minutes to upload the completed quiz (preferably as a pdf) to GradeScope. **You MUST be able to print, write on and scan a pdf document, or print, write on and photograph a pdf document, or write directly on a pdf and upload it to GradeScope.**

I do not give “extra credit” assignments. Do not expect to be able to pull up your grade by doing additional work. Do your work first, and avoid the problem. I can not stress “*do the assigned homework problems*” enough. The best way to do well in the class is to do well on the quizzes. The best way to do well on the quizzes is to do the assigned problems. Do them before recitation. Do some unassigned problems if you want more practise. Be confident that you can do the problems before you take the quiz.

Topics: We will cover topics in the following order. Exact timing is unknown.

week	subject	chapter
1	Introduction and Compound Statements	Ch.1, 2.1, 2.2
2	Arguments, Predicates, Quantification	2.3-2.4, 3.1
3	Predicates and Quantification, Arguments	3.2-3.4
4	Number theory and Direct Proofs	4.1-4.4
5	Number theory and Indirect Proofs	4.5-4.7
6	Sequences and Induction	5.1-5.3
7	Complete Induction and Recursive Definitions	5.3-5.6
8	Recurrence relations, Sets	5.7, 6.1
9	Sets and Russel's Paradox	6.2, 6.4
10	Functions, composition, bijections	7.1-7.3
11	Cardinality, Counting and Cantor diagonalization	7.4, 9.1
12	Pigeonhole principal, $\binom{n}{r}$	9.2, 9.3
13	Graphs and Paths	10.1, 10.2
14	Graphs, Paths, Trees	10.3, 10.5

Policy on Academic Integrity: 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.

ADA Compliance: 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 AccessABILITY located in Room E1124 to secure necessary academic accommodations. For further information and assistance please call (212-772-4857)/TTY (212-650-3230).

Hunter College Policy on Sexual Misconduct 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.

a. 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).

b. 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/1a/Policy-on-Sexual-Misconduct-12-1-14-with-links.pdf>

Note that details of this document are subject to change if the need arises.