CSCI 15000 §01 # 4567 and recitations
Discrete Structures Spring 2020

Eric Schweitzer

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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, by stopping up at his office (N-1000E) during scheduled office hours (Mondays and Wednesdays, 4:000-5:00), or any other time he's there, 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, 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 Monday recitation sections (1R01, 1R02, 1R03 and 1R04 (# 4568 - 4571 resp.)) are taught by Brandon Foster. He can be reached at Brandon.Foster81@myhunter.cuny.edu.
Wednesday recitations (1R05 and 1R06 (# 4572 and 31083 resp.)) are taught by Melissa Lynch. Her email address is Melissa.Lynch45@myhunter.cuny.edu.
Thursday recitations (1R08, 1R09 and 1R10 (# 4706, 4707 and 31084 resp.)) are taught by Jordi Navarrette. His email address is jnavarr@hunter.cuny.edu.

Your recitation instructor will supply additional information about what will happen in his or her 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, quizzes and exams. 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 Attendance 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 in the lecture who help manage the class and will also facilitate small group discussions. 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. In addition, your graded work will be returned during recitations or via Gradescope.

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.

Attendance in the lecture, general feedback about the lecture, and quizzes will handled through "exit slips" that must be given to one of the Teaching Assistants as you leave. You *MUST* write your name, EMPLID and recitation section number on that slip in order to get credit. Every three missed classes will reduce your grade by one, for example from a B+ to a B or from a B- to a C+.

During "regular" lectures you are asked to sit in the front of the assembly hall. Seats that you should not use will be roped off.

During exams you will be asked to sit in "every other" row. This will allow TAs and your lecturer to get to people who may have questions. You will also be asked not to sit next to anyone else. Finally, you *MUST* bring your Hunter ID card to exams. Expect to have your face and picture compared.

Gradescope and Piazza Gradescope (`www.gradescope.com`) will be used to collect some work and disseminate some grades. Expect to get email from them at your "myhunter" address after the first week of classes. It will also be used to record attendance via "exit slips". 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 attendance or grades.

Piazza (`piazza.com`) will be used to facilitate discussions about class material. It will be monitored. 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. As above, expect email from them after the first week of class.

Grades: Grades will be based on a midterm exam, a final exam, engagement during recitations, and a few quizzes and graded home work assignments.

- The home work assignments will be worth a total of 10% of your grade.
- The quizzes will be worth a total of 10% of your grade and will be surprises.
- Your recitation instructor will give a grade worth 10% of your course grade. He or she will tell you what that grade is based on.
- The midterm exam will be given during the lecture on Thursday, March 19. It will count for 35% of your grade.
- The Final will be given when the college schedules it. Currently this is Thursday, May 21 from 1:45 to 3:45. There have been occasions when this schedule is changed. We will follow the changes. The Final will be 35% of your grade.

- Lack of attendance (as above) can adversely effect your grade.

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 home work problems*" enough. The best way to do well in the class is to do well on the exams. The best way to do well on the exams is to do the assigned problems. Do them before recitation. Do them again before the exams. Do some unassigned problems if you want more practise. Be confident that you can do the problems before you take the exam.

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
	FINAL EXAM	

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/la/Policy-on-Sexual-Misconduct-12-1-14-with-links.pdf

Electronics We expect all cell phones, pagers, etc. to be inaudible during class. We expect laptops and other electronic devices, if used, to be used only for class related activities. Activities not related to class include but are not limited to facebook, twitter, other social networking web sites, "surfing", email, mu*s, hulu, southparkstudios, etc. Any student with an electronic device that disrupts the class or is used for anything other than class related activities will lose two (2) points from their final average (per occurrence).

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