

## Stat 311.01

### Fall 2021

**Time:** M, W 5:35 - 6:50

**Room:** ZOOM Meeting ID: **954 756 9235**

**Instructor:** Arkady Etkin

**E-mail:** [arkadyetkin@yahoo.com](mailto:arkadyetkin@yahoo.com)

**Website:** [www.aetkin.com](http://www.aetkin.com)

**Office Hours:** M, W 7:00 - 8:00

### Prerequisites

This course is an introduction to probability theory. It is therefore not assumed that the student is familiar with any concepts particular to this subject. However, probability theory is heavily reliant on ideas developed in single and multivariate calculus. The student is advised to review operations on infinite series, representation of functions with power series, differentiation and integration, and the change of variables theorem from multivariate calculus.

### Textbook

*A first course in probability theory*, by Sheldon M. Ross, Prentice Hall, 2010.

### Learning Objectives:

The student will be introduced to the axioms of probability theory and develop techniques to solve various problems to which this theory applies. In the process, the student will learn the basics of combinatorial analysis, conditional probability and independence, discrete and continuous random variables, jointly distributed random variables, expected value and variance.

### Syllabus

Ch.1-6

### Homework

Regular homework will be assigned, but not collected. The student is strongly encouraged to do every assigned problem thoroughly, since the exam questions will be picked out of the set of questions on your homework.

### Grading Policy:

Exam 1:	Ch. 1-2	30%
Exam 2:	Ch. 3-4	30%
Final Exam:	Cumulative (1-6)	40%

---

Total	100%
-------	------

The letter grade is computed in accordance with the following rubric:

<u>Grade</u>	<u>Percent</u>
A+	97.5-100
A	92.5-97.4
A-	90.0-92.4
B+	87.5-89.9
B	82.5-87.4
B-	80.0-82.4
C+	77.5-79.9
C	70.0-77.4
D	60.0-69.9
F	0-59.9

### **Attendance**

The student's presence will be verified both digitally and spiritually. It will be noted whether the camera is on or off during the lecture and the degree of interest and involvement will be assessed. The student is not only encouraged to attend every lecture, but to stay for office hours for further discussion.

### **Academic Dishonesty**

Many interesting problems in probability theory are too time consuming to solve under time constraint. You will be receiving take-home exams. You may request my assistance, but you may not work on these tests together or post problems on the internet. If you are caught posting problems online - one problem even - you will fail that exam!

Last semester I have caught many students engaged in this sort of thing. I was reluctantly thrown into needless policing and disciplinary activities and many interesting, carefully thought out problems were rendered non-reusable. Do not even tempt me!

Expect random verifications of your knowledge and mastery of topics in person.

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