Stat 315, Fall 2025

Statistics I

Luc Rey-Bellet

Instructor

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Class Meeting

- Section 2: LGRC A203, MWF 12:20 PM –1:10 PM
- Section 4: LGRC A201, MWF 1:25 PM – 2:15 PM

Office hours

- W 3:00-4:00 PM in LGRT 1423 K or on ZOOM
- Th 11:00 AM-12:00PM in LGRT 1423 K or on ZOOM
- By appointment is always possible, and welcome, and/or ask your questions be email.

Syllabus

Detailed class information are in the Class Syllabus

Basic Course information

- There is a single canvas page common for all sections where you will submit your **hand-written** weekly homework and do your 5 quizzes.
- Homework is due on Thursdays at 11:59 PM except on the dates of the two midterms, Th October 9 and Th November 13.
- We use Piazza as a class forum and Gradescope for the exam.
- Grade: 25% homework, 25% quiz, 25% midterm, 25% final

A	A−	B+	B	B−	C+	C	C−	D +	D	F
93	89	85	80	75	70	65	60	55	50	<50

Online Ressources

Online Lectures by John Tsitsiklis

The lectures are conveniently split into short videos treating one single topic and are good for review.

Class slides

The slides are continuously updated and you should use these links for the latest version.

- Slides00-Syllabus
- Slides01-Probability Basics
- Slides02-Counting
- Slides03-Conditional Probability
- Slides04-Conditioning and Bayes rule
- Slides05-Random variables and expected value
- Slides06-Functions of random variables and variance
- Slides07-Binomial random variables
- Slides08-Geometric and negative binomial random variables
- Slides09-Hypergeometric random variables
- Slides10-Poisson random variables

- Slides11-Continuous random variables
- Slides12-Uniform random variables
- Slides13-Normal random variables
- Slides14-Exponential and gamma random variables
- Slides15-Beta random variables
- Slides16-Chebyshev inequality
- Slides17-Joint discrete random variables: pdf and independence
- Slides18-Joint continuous random variables: pdf and independence
- Slides19-Mean, Variance and Covariance for joint PDF
- Slides20-Binomial, Hypergeometric and Multinomial

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- Slides12-Joint discrete random variables: covariance
- Slides17-Joint continuous random variables
- Slides18-Conditional expectation
- Slides19-Moment generating functions
- Slides20-Chebyshev inequality
- Slides21-Function of RV: CDF method
- Slides22-Function of RV: MGF method
- Slides23-Law of Large Numbers
- Slides24-Central Limit Theorem