Math 15a: Linear Algebra
Brandeis University • Spring 2019 • Tuesdays and Fridays - 11:00-12:20 • Gerstenzang 122
Charlie Cosnier-Horeau • Goldsmith 118A • cchoreau@brandeis.edu • Office hours Wednesday 1:40-3:40

Teaching assistant

Chris Simonetti • Goldsmith 101 • csimonetti@brandeis.edu • Office hours Thursday 11:00-1:00

Objectives of the lecture

• How to solve systems of linear equations?
• What are vectors and matrices and how to work with them?
• What is a basis and how to find one?
• What are eigenvalues and eigenvectors and how to compute them?
• What are determinants and why are they useful?

Practical details

Textbook Linear Algebra by Jim Hefferson • Freely available on his website • Other approach for further reading Linear Algebra Done Right by Sheldon Axler, also available online.

Prerequisites calculus courses (math 10a or 10b), or higher, or precalculus (math 5a) and permission of the instructor • If you have any question, please ask.

Grading Final 40%, Midterm 1 20%, Midterm 2 20%, Homeworks 20% • Midterm 1 and 2 will be held the 19th of February and the 26th of March, the final is scheduled for the 10th of May. All three are mandatory to pass • Collisions with other university duty should be mentioned to me at least two weeks before the exam, and a make-up exam will be issued • In case of medical (or other) emergency (with proof) a make-up exam will be issued as well.

Calculators are not allowed during exams • textbooks and lecture notes are not either.

Homeworks will be issued every week and collected at the beginning of Friday class • You can collaborate if and only if you write down your own answers and you list the name of your collaborators on your homework • Deduction steps are worth the entirety of the grading, make sure to write down your entire reasoning • Staple your sheets together it your homework contains more than one.

Accessibility support If you need academic accommodations because of a documented disability, please contact me with your letter of accommodation as soon as possible • If you have questions about documenting a disability or requesting academic accommodations, you should contact Beth Rodgers-Kay in Academic Services (x6-3470 or brodgers@brandeis.edu) • Letters of accommodation should be presented at the beginning of the semester to ensure provision of accommodations • Accommodations cannot be granted retroactively.

Academic integrity You are expected to follow the University’s policy on academic integrity, which is distributed annually as Section 4 of the Rights and Responsibilities student code (see References) • Instances of alleged dishonesty will be forwarded to the Department of Student Development and Conduct for possible referral to the Student Judicial System • If you have any questions about how these policies apply to your conduct in this course, please ask.

References

• Linear algebra done right by Sheldon Axler - http://linear.axler.net/
• Spring 2019 calendar at Brandeis - https://www.brandeis.edu/registrar/calendar/spring19.html
• LATTE - http://latte.brandeis.edu
• Student accessibility support - https://www.brandeis.edu/accessibility/accommodations.html
• Rights and Responsibilities student code - https://www.brandeis.edu/studentlife/srcs/rightsresponsibilities/index.html