Math 22a – Honors Linear Algebra  
Information for students, Fall 2016

Class meets at: Goldsmith 116, TTh 3:30 PM-5:20 PM

Lecturer: Dmitry Kleinbock, office: Goldsmith 207, phone 6-3059;  
office hours: Wed afternoon (more precisely TBA);  
e-mail address: kleinboc@brandeis.edu

Grader/TA: TBA

Text: Linear Algebra Done Wrong, by S. Treil, freely available online at  
We will cover Chapters 1–5 with some omissions, and will go further if time allows.

Learning Goals for Math 22a. Students in Math 22a will: learn basic axioms  
and properties of vector spaces, matrices and operations with them; study systems  
of linear equations and methods for solving them, that is, describing the spaces  
of solutions, including its bases and dimension; learn about determinants, inverse  
matrices, eigenvalues, eigenvectors and eigenpaces, inner product and orthogonality;  
study applications of linear algebra.

4-Credit Course. Success in this 4 credit hour course is based on the expecta-
tion that students will spend a minimum of 10 hours of study time per week in  
preparation for class (readings, homework, preparation for exams, etc.).

Grades will be computed as follows:

Two midterm exams, in class, dates TBA = 40 %
The final exam, as scheduled by registrar = 45 %
Graded homework = 15 %

The dates of the midterm exams will be announced in advance. Homework will  
be assigned once every one or two weeks and will be due the following week; the  
deadline for the first assignment is Thursday, 9/1. Most of the homework problems  
will be drawn from the textbook. Late homework will not be accepted and there will  
be no make-up quizzes. Other parameters, such as class participation (answering or  
asking questions in class) and bonus points (for optional problems or exceptionally  
thoughtful analysis of tests/homework) will also affect the students’ performance.  
Late homework will be accepted with a 25% penalty, up to one week after the due  
date and before the solution has been posted. Homework submitted more than  
one week late or after the solution has been posted will not be accepted. Students  
who miss an exam) will not be granted a make-up testunless there is a documented  
medical or other emergencies.
Policies: You may discuss the homework problems with your classmates; however, if you do, you should write on your homework submission the names of the classmates with whom you have discussed the assignment. You do not need to mention any help you have received from the instructor or the TA. **You may not copy the written work of another student or from any other sources, or allow another student to copy your written work.** What you submit should be your own work.

You should state the source of a mathematical fact you use when writing up your work, unless the fact you use is something you had learned earlier as part of your prerequisite for 22a. You can state the source by citing a theorem in the textbook, the page number of an exercise we have gone over in class or in a prior homework, or a fact we have proved in class.

Both the instructor and the TA are available during their weekly office hours or by appointments. Students are encouraged to seek help from them on any course related matter.

**Students with Disabilities:** If you are a student with a documented disability on record at Brandeis University and wish to have a reasonable accommodation made for you in this class, please contact me immediately.

**Academic Integrity:** You are expected to be familiar with, and to follow, the University’s policies on academic integrity. Please consult Brandeis University Rights and Responsibilities for all policies and procedures. All policies related to academic integrity apply to in-class and take home projects, assignments, exams, and quizzes. Students may only collaborate on assignments with my permission. Allegations of alleged academic dishonesty will be forwarded to the Director of Academic Integrity. Sanctions for academic dishonesty can include failing grades and/or suspension from the university.

**Have a great semester!**