

# Course Information Sheet: Math 34600, Section B, Spring 2015

**Course Title:** Elements of Linear Algebra

**Pre-requisite:** Math 20300 *or* **co-requisite:** Math 203 and departmental permission

**Catalog Description:** Vector spaces, basis and dimension, matrices, linear transformations, determinants, solution of systems of linear equations, eigenvalues, and eigenvectors.

**Meeting time and place:** Mondays and Wednesdays 9:30-10:45am in NAC 5/102.

## Instructor Information:

- **Name:** Prof. Patrick Hooper
- **Office hours:** Mondays 2:30-3:30pm (on any day our class meets). Appointments are also accepted.
- **Office:** NAC 6/282
- **Email:** whooper@ccny.cuny.edu
- **Office Phone:** (212) 650-5149

## Course Textbooks:

- *Elementary Linear Algebra*, 10th edition, by Howard Anton, John Wiley & Sons Publ.
- *Linear Algebra Done Wrong*, by Sergei Treil, freely available from:

<http://www.math.brown.edu/~treil/papers/LADW/LADW.html>

I anticipate covering the material from Chapters 1-5 of *Elementary Linear Algebra*, and Chapters 1-4 of *Linear Algebra Done Wrong*. Additional topics may be covered if there is sufficient time.

**Grades:** Grades will be computed from the following:

- Attendance
- Homework (15%)
- First Midterm (15%): Monday, March 2nd.
- Second Midterm (15%): Wednesday, April 1st.
- Third Midterm (15%): Monday, May 4th.
- Final Exam (40%): Monday, May 18th from 8-10:15am in our usual classroom.

Your final score will be tabulated out of 100% as indicated by the percentages above, with attendance taken into account. (See the attendance section below.) A letter grade will be assigned to you according to the table below.

A+	97-100	B+	87-89	C+	77-79				
A	95-96	B	84-86	C	74-76	D	60-69	F	0-59
A-	90-94	B-	80-83	C-	70-73				

**Course information:** Course information can be found on the course website,

<http://wphooper.com/teaching/2015-spring-346/>.

This includes lists of homework assignments and a collection of course documents.

**Blackboard:** I use blackboard to keep track of your grades, and you can view your grades there. To access blackboard visit <http://bbhosted.cuny.edu/>.

**Philosophy of the class:** This is an upper level undergraduate mathematics course. As such, I expect students to develop a theoretical understanding of the subject. I anticipate at least 50% of the problems asked in the course will test theoretical understanding, including proof writing and theoretical explanations, while other questions will be more computational. In particular, proof writing will be essential to pass the course. On the other hand, I do not have an expectation that you have written proofs before.

**Expectations of time devoted to class:** For each hour spent in the classroom, I expect you to spend at least three hours reading and understanding the book, understanding lecture notes, and doing homework. Practice (doing problems and writing proofs) is an important part of understanding mathematics. Only adequate practice will guarantee that you can complete midterm and exam problems in a timely manner.

**Expectations of written work:** Mathematical computations and proofs will be graded partially on presentation. In order to receive full credit, a student who reads your answer should be able to easily understand how you solved the problem. Written work is expected to be legible and arguments are expected to be well articulated.

**Email:** It is important that you are accessible via email through blackboard. To change or update your email address go to <http://portal.cuny.edu>, then login, and select “My profile” at the top right.

**Final exam:** The final exam will be held on Monday, May 18th from 8:00am to 10:15am according to the university’s final exam schedule. Ensure that you have no time conflicts. A makeup for the final exam is offered only under extremely compelling circumstances. Notify me as soon as you know you will have to miss the final.

**Midterms:** Your midterm grade constitutes 45% of your total grade in the class, with each of the three midterms counting for 15%. A grade of zero will be assigned for midterms missed without a good reason. If you miss a midterm under compelling circumstances, that midterm will be dropped and no makeup will be given. In this case, your midterm grade will be computed by averaging your remaining midterms. Notify me ahead of a midterm you expect to miss to be sure your circumstances are sufficiently compelling. Makeup midterms will only be given for the second midterm missed, and only under extremely compelling circumstances.

**Homework assignments:** Homework will be assigned weekly and will have a due date. I encourage you to work in groups on the homework problems, especially if this best suits your learning style. Nonetheless, you should be confident that you understand how to do each problem, and should be able to solve similar problems independently. Failure to ensure that you can solve problems independently will surely have a negative effect on exam grades. You must turn in your own write up of each homework problem. Your grade on the assignment will be based on completing the whole assignment and the grading of a few selected problems.

**Homework grades:** Homework will be collected at the beginning of the class it is due. If you can

not attend class, scan and email you homework answers to me before class begins. Late homework will not be accepted. The two lowest homework grades will be dropped when computing your homework grade.

**Attendance Policy:** As students, class time is extremely important for learning. You will be introduced to the material, and the relative importance of topics in the course will be revealed. For this reason, attendance is mandatory. **Missing an excess of eight 50 minute periods (or 4 classes) may result in you being dropped from the course, and will certainly result in the reduction of your final grade by 5% (or half a letter grade).** Occasionally, exceptions to this policy will be made, but only for good reason and only with notification prior to the absence. Good reasons include illness with a doctor's note and many religious observations.

**Lateness:** Lateness to class is unacceptable because it disrupts the learning process of the whole class. For this reason, any student who arrives more than 5 minutes after class begins will be considered late. Three late attendances are considered the equivalent of one absence. Thus, sufficiently many late attendances will result in actions as described in the Attendance Policy. In addition, any student who arrives 15 minutes after a class begins will be considered absent from that class period.

**Academic integrity:** You are expected to adhere to the CUNY Policy on Academic Integrity. This policy is posted at <http://www.ccny.cuny.edu/about/integrity.cfm>. As a particular note, you are required to acknowledge sources used when turning in work including homework. This includes disclosing collaborators on homework problems.

**Accommodations for Students with Disabilities:** Qualified students with disabilities will be provided reasonable academic accommodations if determined eligible by the AccessAbility Center (AAC). Prior to granting disability accommodations in this course, the instructor must receive written verification of a student's eligibility from the AAC, which is located in NAC 1/218. It is the student's responsibility to initiate contact with the AAC and to follow the established procedures for having the accommodation notice sent to the instructor.