

**Hunter College  
of the City University of New York  
Department of Mathematics and Statistics**

**COURSE SYLLABUS  
Math 16000 – Matrix Algebra  
3 Hrs – 3 Credits  
Fall 2020  
Time: MoWe 2025-2140 Via Zoom**

**Instructor:** Weiyao Lin  
**Email:** Weiyao.Lin95@myhunter.cuny.edu  
**Office Hours:** 1900-2000 Mondays Via Zoom, room ID: 380-896-0843

**Prerequisite:** MATH 12500.

**Textbook Policy:** none of these texts are mandatory; they would be used as homework assignment throughout the course. However, they would be a great resource for preparing exams.  
Primary textbook: Linear Algebra with Applications by Stephen Leon

**Learning Objectives:** a student will be able to:

- Solve systems of linear equations using Gaussian elimination and Gauss-Jordan Elimination
- Perform operations using matrices and apply matrices in real-world applications
- Calculate determinants, understand their properties and some applications
- Define vector spaces, vector subspaces, and understand their properties
- Find length and the dot product in  $R^n$
- Calculate Eigenvalues and Eigenvectors

Tentative List of Topics:

- Matrices and Systems of Equations (Chapter 1.1-1.5)
- Determinants (Chapter 2.1-2.2)
- Vector Spaces (Chapter 3.1-3.4)
- Length and Dot product in  $R^n$  (Chapter 5.1)
- Eigenvalues and Eigenvectors (Chapter 6.1)

**Attendance:** Attendance is *not* mandatory but *highly recommended*. Class participation would be factored into grading and unannounced in-class quizzes would be held occasionally.

**Remote-learning Mode:** Due to the Covid-19 Outbreak, our instruction is completely moved to remote-learning mode. We will be using Zoom as platform. The room number, along with the password, for the meeting would be posted on Blackboard prior to the class meeting.

**Homework:** Homework serves as an extra-credit for exams; it is worth up to 5 points for the respective exam. No late submission is allowed. Please upload your work on Blackboard.

**Quizzes:** There will be short in-class quizzes occasionally. No make-up on quizzes but they would be available on blackboard as resource for exams.

**Exams:** There will be **3 in-class exams and a final. The final exam will count as 2 exams.** Of these 5 parts, the **lowest is dropped**, and the remaining 4 parts are averaged to obtain the exam average. Furthermore, since an exam is dropped, there are **no make-up exams**.

**Make-up Policy**

1) If a student has an *excused* scheduled conflict with the date of the exam, such as religious holiday or university travel (such as a sports event), the student must contact the instructor no later than **two weeks** prior to exam date. A make-up exam will be scheduled at the Testing center (subject to availability). This may not be used for leisure travel or extra-curricular activities.

2) If a student missed an exam, due to illness or family emergency, the student must contact the instructor no later than 24 hours after the exam. **The student must present documented evidence of absence, such as a doctor's note.** Since it is not practical to do a make-up after the exam, if the absence is considered excused by the instructor, the student's final exam grade may be used instead of the missed exam grade. This may only be done no more than **once** a semester.

**Grading Policy:**

Your final average is calculated as follows:

<b>90%</b>	<b>Exams</b>
<b>10%</b>	<b>Class Participation and Quizzes</b>

To receive an incomplete, you must have a C average on in-class exams and have a legitimate excuse for missing the final exam.

The letter grade is determined as follows:

<b>Grade</b>	<b>Percent</b>
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

**CR/NC – grades:** This course accepts CR/NC grading system. You must complete the course and present the CR/NC form to your instructor **at the beginning of the final exam**. Please discuss this grading option with your advisor, as it may not be applicable to your major/situation.

**Tutoring:** Table tutoring, and audiovisual materials are available at The Dolciani Mathematics Learning Center, located at the Silverstein Student Success Center 7<sup>th</sup> Floor Hunter East. Since the schedule is tight throughout the semester, I would not be able to have time for in-class exam reviews. However, I would be able to hold review session outside of our meeting time for the class, if enough people sign up.

**Calculators:** ~~A scientific calculator is allowed for the exams. Graphing calculators, cell phones, iPads, laptops, etc. are not permitted for the exams.~~

**Academic Integrity:**

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.

**Disability:**

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 1214B Hunter East to secure necessary academic accommodations. For further information and assistance please call (212-772-4857)/TTY (212-650-3230).

**Hunter College Policy on Sexual Misconduct:**

“In compliance with the CUNY Policy on Sexual Misconduct, Hunter College reaffirms the prohibition of any sexual misconduct, which includes sexual violence, sexual harassment, and gender-based harassment retaliation against students, employees, or visitors, as well as certain intimate relationships. Students who have experienced any form of sexual violence on or off campus (including CUNY-sponsored trips and events) are entitled to the rights outlined in the Bill of Rights for Hunter College.

a. Sexual Violence: Students are strongly encouraged to immediately report the incident by calling 911, contacting NYPD Special Victims Division Hotline (646-610-7272) or their local police precinct, or contacting the College's Public Safety Office (212-772-4444).

b. All Other Forms of Sexual Misconduct: Students are also encouraged to contact the College's Title IX Campus Coordinator, Dean John Rose (jtrose@hunter.cuny.edu or 212-650-3262) or Colleen Barry (colleen.barry@hunter.cuny.edu or 212-772-4534) and seek complimentary services through the Counseling and Wellness Services Office, Hunter East 1123.

CUNY Policy on Sexual Misconduct Link: <http://www.cuny.edu/about/administration/offices/la/Policy-on-SexualMisconduct-12-1-14-with-links.pdf>