

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

STUDENT SYLLABUS

Math10150 - Mastery of Symbolic Computation

2hr – 1 Credits

Fall 2023

Time: asynchronous online

Room: online

Instructor: *****

Email: *****

Office Hours: *****

Course Description:

This online course focuses on developing symbolic computation skills needed for Precalculus (Math12550). All lectures are asynchronous, the final exam is in-person during final exams week.

Prerequisites:

Math101 or appropriate score on the Accuplacer Exam/Hunter College Placement Test.

Textbook: Lumen OHM - Custom Text/Videos

All text/videos provided on Lumen. Lumen OHM costs \$35 for the semester.

Sources for texts:

Beginning and Intermediate Algebra, Tyler Wallace

OpenStax College Algebra, Jay Abramson

CK-12 Foundation, Algebra – I, Second edition, Andrew Gloag

College Algebra, adaptation of Stitz-Zeager

Course videos recorded for this course by Dr. Tatyana Khodorovskiy.

Course Learning Outcomes:

- Achieve mastery with manipulation of variables and coefficients in equations and systems of equations.
- Develop multiple strategies in solving linear, quadratic, polynomial and rational equations.
- Compute and graph the solution sets of linear, polynomial, and rational inequalities.
- Solve systems of three linear equations and inequalities
- Apply polynomial equations to solving problems involving basic geometry and trigonometry.

Lesson #	Topic
1	Lines, linear equations <ul style="list-style-type: none"> ○ <i>(Sections 1.3-1.4, Beginning and Intermediate Algebra, Tyler Wallace)</i> ○ <i>(Sections 2.3-2.4, Beginning and Intermediate Algebra, Tyler Wallace)</i>
2	Functions, operations/composition, difference quotient <ul style="list-style-type: none"> ○ <i>(Section 3.1, OpenStax College Algebra, Jay Abramson)</i> ○ <i>(Section 10.2, Beginning and Intermediate Algebra, Tyler Wallace)</i>
3	Algebra with radicals and complex numbers <ul style="list-style-type: none"> ○ <i>(Section 1.3, OpenStax College Algebra, Jay Abramson)</i> ○ <i>(Section 8.8, OpenStax Intermediate Algebra, Jay Abramson)</i>
4	Quadratic equations <ul style="list-style-type: none"> ○ <i>(Sections 9.1-9.3, OpenStax Intermediate Algebra, Jay Abramson)</i>
5	System of linear equations, 2 and 3 equations <ul style="list-style-type: none"> ○ <i>(Sections 4.1-4.4, Beginning and Intermediate Algebra, Tyler Wallace)</i>
6	Linear inequalities, one variable, two variable, systems of inequalities <ul style="list-style-type: none"> ○ <i>(Section 3.1, Beginning and Intermediate Algebra, Tyler Wallace)</i> ○ <i>(Section 7.5, CK-12 Foundation, Algebra – I, Second edition, Andrew Gloag)</i>
7	Polynomial equations <ul style="list-style-type: none"> ○ <i>(Section 9.6, Beginning and Intermediate Algebra, Tyler Wallace)</i> ○ <i>(Section 9.4-9.7, CK-12 Foundation, Algebra – I, Second edition, Andrew Gloag)</i>
8	Polynomial inequalities <ul style="list-style-type: none"> ○ <i>(Section 2.6, College Algebra, adaptation of Stitz-Zeager)</i>
9	Rational expressions/equations <ul style="list-style-type: none"> ○ <i>(Sections 7.1-7.4, 7.7 Beginning and Intermediate Algebra, Tyler Wallace)</i>
10	Rational inequalities <ul style="list-style-type: none"> ○ <i>(Section 3.4, College Algebra, adaptation of Stitz-Zeager)</i>

Grading Policy

FINAL	40%
Online Homework	30%
Handwritten Assignments (5 total)	30%

Letter grades are determined by the following standard Hunter system:

<u>Grade</u>	<u>Percent</u>
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

Per department policy, there is no CR/NC grading option for this class.

Exams

The final exam will be IN PERSON. Some time during finals week, day/time TBA.

Handwritten Assignments

There will be 5 handwritten assignments to be submitted to the instructor electronically.

Homework

There will be ten online homework assignments, coordinated with 10 textbook modules. All homework is completed on Lumen OHM.

Tutoring

Drop-in tutoring and audiovisual materials are available at The Dolciani Mathematics Learning Center, located at the Silverstein Student Success Center 7th Floor Hunter East.

Best Practices

- Make sure to complete all the homework and assignments in a timely manner.
- If you need extra help, go to your instructor's office hours or the math learning center.

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>