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

COURSE SYLLABUS Math 150 – Calculus with Analytic Geometry I Fall 2020

Time: TuFri 3:10PM - 5:00PM

Instructor: Christopher Chan

Email: cc1444@hunter.cuny.edu (Put in the subject line "Math 150" & topic else it'll be treated as spam)

Office Hours: TBA (via email)

Prerequisite:

A grade of B- or better in Math 12550 (Pre-Calculus). Students are expected to be familiar with algebra and trigonometry.

Textbook:

Essential Calculus, 2nd Edition by Stewart, Cengage Learning

Learning Outcomes:

Upon completion of the course you should be able to:

The student will learn about functions of one variable, including the concepts of limit, continuity and the derivative. The student will be able to compute derivatives of various functions such as polynomials, rational functions, trigonometric functions, exponential and logarithm functions. The student will learn the Mean Value Theorem as well as the Intermediate Value Theorem. These concepts will be applied by the student to various problems involving related rates, curve sketching and optimization, and linear approximation. The student will learn about antidifferentiation and the Riemann integral, and will be able to compute Riemann integrals of some simple functions using the Fundamental Theorem of Calculus. Finally, the student will apply these techniques to computing areas.

Homework:

All homework is done on Lumen Learning's Online Homework System (OHM), there is an assignment for every section of the textbook, due about once a week. Always check OHM for upcoming assignments. OHM is a wonderful, modern, interactive resource, including features such as graphing applets and videos.

In order to see the assignments for this course, you must set up an OHM account, (https://ohm.lumenlearning.com). Select "enroll in a new course", you will be prompted to enter the course id and the enrollment key, which for this section is:

Course Id: 47157 Enrollment Key: 150chan13

Exams:

There will be 3 exams and 1 final exam. (All exams are online on Lumen OHM). The final exam will count as 2 exam grades. Of these 5 parts, the lowest is dropped, and the remaining 4 parts are averaged to obtain the exam average. The final exam is required for every student; no one is exempt from taking the final exam. The final exam will be cumulative.

Grading Policy:

Your final average is calculated as follows:

90% Exams

10% Lumen OHM Homework

To receive an incomplete, you must have taken at least three of the in-class exams, have a C average on those exams, and have a legitimate excuse for missing the final exam. To request a CR/NC you must attend class and take the exams including the final exam. The letter grade is determined as follows:

<u>Grade</u>	Percent
A+	97.5-100
A	92.5-97.4
A-	90.0-92.4
B+	87.5-89.9
В	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

Lecture	Section	Topic
1	1.3	Introduction to Limits
2	1.4	Calculating Limits
3	1.5	Continuity
4	1.6	Limits involving Infinity
5	2.1	Derivatives and Rate of Change
6	2.2	Derivative as a Function
7	2.3	Basic Differentiation Formulas
	2.4	Product and Quotient Rules
8	2.5	Chain Rule
9	2.6	Implicit Differentiation
10	2.7	Related Rates
11		EXAM 1
12	2.8	Linear Approximation
13	3.1	Maximum and Minimum Values
14	3.2	Mean Value Theorem
	3.3	Derivatives and the Shapes of graphs
15	3.4	Curve Sketching
16	3.5	Optimization Problems
17		EXAM 2
18	3.7	Anti-derivatives
19	4.1	Areas and Distances
20	4.2	Definite Integrals
21	4.3	Evaluating Definite Integrals
22	4.4	Fundamental Theorem of Calculus
23	4.5	Substitution Rule
24	7.1	Areas Between Curves
25	7.2	Volumes
26	7.3	Volumes by Cylindrical Shells
27		EXAM 3

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