Syllabus of MAT 1475 Calculus I Section CP Fall 2015

Instructor Lucie Mingla

Office Room # 454

Email lmingla@citytech.cuny.edu

Class Site Engrade.com

Class Meeting: Tuesday/Thursday 8:00-10:00 pm

Office Hours Fridays: 8:00-9:00am

Calculator A graphing calculator is required. We recommend the TI-83 / TI-84 Plus.

Description Topics include functions, limits, differentiation, and tangent lines,

L'Hôpital's Rule, Fundamental Theorem of Calculus and Applications.

Learning Outcomes

1. Students will be able to solve problems related to limits and continuity.

- 2. Students will be able to find the derivative of functions using the definition, sum rule, product rule, quotient rule, and the chain rule.
- 3. Students will be able to:
 - ➤ Use the derivative of a function to find an equation for the tangent line at a point.
 - ➤ Use L'Hôpital's Rule to evaluate limits.
 - Sketch the graph of functions.
 - > Solve optimization problems.
 - Solve related rates problems.
- 4. Students will be able to evaluate definite and indefinite integrals of polynomials, trigonometric and exponential functions.

Texts Jon Rogawski, <u>Calculus: Early Transcendentals</u>, <u>Single Variable</u> 2nd

edition, W.H. Freeman, New York 2012.

Credits 4

Prerequisites MAT 1375/MA 375 or scores of 35 or higher on the Pre-Algebra, 65 or

higher on the Algebra, 50 or higher on the College Algebra, and 36 or higher on the Trigonometry sections of the ACT placement exam

Evaluation

Final Exam: 30%

The final exam is based on all material covered in class and it is written on the last day of class.

Tests: 20% each

There will be 3 tests in total. Weight of a missed test is added to the weight of the final exam. For instance, if one test is missed, the final exam is worth 50%. There are no make-up tests.

Homework: 10%

Students will put selected homework questions on the board before class. To get full marks, 10 questions must be put up in total. A student will put no more than one question on the board per class.

Grading

 $\begin{array}{ll} A = 93.0\text{-}100 & C = 70.0\text{-}76.9 \\ A\text{-} = 90.0\text{-}92.9 & D = 60.0\text{-}69.9 \\ B\text{+} = 87.0\text{-}89.9 & F = 0\text{-}59.9 \\ B = 83.0\text{-}86.9 & \\ B\text{-} = 80.0\text{-}82.9 & \\ C\text{+} = 77.0\text{-}79.9 & \end{array}$

Example of grade computation:

Exams	Final	Homework
	exam	
90	90	10 out of 10
70		
80		
240/3 =80	90	100

 $80 \times 0.60 = 48$ $90 \times 0.30 = 27$ $100 \times 0.10 = 10$ Total: 85 %

Final Grade: 85% = B

Note: There will be no make-up tests.

Note: No extra time will be given for tests and exams. If you are late for the class on the day of a test or exam, you may not have time to finish.

Attendance: Attendance will be taken every class. Missing more than 10% of the total

number of class meetings is considered excessive absence (more than 3 absences). In the case of excessive absences, the final grade may be reduced or the student may be asked to withdraw from the course.

Lateness: Being late two times count as one absence.

Records: Records should be kept by every student of all grades received, exam

papers, assignments and absences.