Abbreviated Course Syllabus (effective Fall 2016)

Course Supervisor: Mr. Chun S Park   e-mail: cpark@ccny.cuny.edu

1.   Text: *Essential Calculus* 2st edition by James Stewart, 2013, Cengage Learning (Thompson-Brooks-Cole):
        Your class may use WebAssign; therefore, you should purchase the textbook with WebAssign code or just purchase the on-line text with WebAssign directly from Cengage.
2.   Review of Conic Sections by James Stewart (available in CCNY Math Dept web page of MATH 20200) [http://math.sci.ccny.cuny.edu/course/list]
3.   Rotation of Axes Notes by Professor J. Douglas Faires, Youngstown State University (also available in CCNY Math Dept web page of MATH 20200)
        http://www.as.ysu.edu/~faires/PreCalculus4/rotatedconics.pdf

Note that students are **not** allowed to use a calculator on the final exam in this course.

		NOTE: 1 Unit = 50 minutes
Section	**Title**	**Units**
5.1	Inverse Functions	1.5
5.2	The Natural Logarithmic Function	1.5
5.3	The Natural Exponential Function	1.5
5.4	General Logarithm and Exponential Functions	1.5
5.5	Exponential Growth and Decay (Omit Compound Interest)	1.5
5.6	Inverse Trigonometric Functions	2
5.7	Hyperbolic Functions	1.5
5.8	Indeterminate Forms and L'Hospital's Rule	2.5
6.1	Integration by Parts	2
6.2	Trigonometric Integrals and Substitutions	4
6.3	Partial Fractions	3
6.5	Approximate Integrals (set up the expansion and simple computations "calculators are not allowed")	1.5
6.6	Improper Integrals	2.5
7.1	Areas Between Curves	2
7.2	Volumes by Method of Disc or Washer	1.5
7.3	Volumes by Cylindrical Shells	1.5
7.4	Arc Length	1.5
7.6	Work (Omit: Hydrostatic Pressure and Force, Moments and Centers of Mass)	2.5
9.1	Parametric Curves (Omit Graphing Devices)	1.5
9.2	Calculus with Parametric Curves	2
9.3	Polar Coordinates	2.5
9.4	Areas and Lengths in Polar Coordinates	2.5
	Conic Sections (Shifted Conics) [use Review of Conic Sections by James Stewart]	2
	Conic Sections (Rotation of Axes) [use Rotation of Axes by J. Douglas Faires]	2

The time frame allows a week for testing and a week for review or increased emphasis on certain topics.