

FINAL Dec 22 (6:00-8:00) at B-12-150

MATH 2003 (Pre-Calculus & Element of Calculus) Tentative *SYLLABUS || Fall 2015

Section: 10889 || Mon/Wed: 5:40 PM -7:20 PM || Classroom: A-1310

Office: #6-205 I (New Vertical Campus) || **Office Hour:** Friday: 7 :00 PM to 8:00 PM (Or by appointment)

Dept. of Mathematics at CUNY Baruch College

Instructor: Rashidul Bari || Email: Rashidul.Bari@baruch.cuny.edu

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Office Hours: 7: 20 to 7: 45 PM and 9:25 to 10:00 PM or by appointment || **Final Exam:** December 22 (Tuesday) at 6:00-8:00 PM || **Dropping date:** Monday, Nov 9 (with W) || **Graphing calculator (required):** TI-89/TI 92 + || **Homework:** All-online, using “MyMathLab”, and you can monitor the due dates online || **Tutoring location:** at SACC, Room 2-116, Vertical Campus, (646) 312-4830 || **Resources:** Final Exam Review Manual available at the Blackboard MTH 2003 Master Blackboard Site.

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Textbook: Gordon, Wang and Materowski, *Applied Calculus for Business, Economics and Finance*, Second Edition, Pearson, 2015 || Answers to the textbook exercises may be found at (See the link below) || There are two options for purchasing the new edition of the **MTH 2003** text and the **MyMathLab**: (1) Hard Copy of the text along with E-text and MyMathLab Access Code from Baruch College bookstore. (2) Access Code directly from the publisher at a reduced price: Etext and MyMathLab Access Code (See the link below)

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Course Description: This course integrates material from Pre-calculus with introductory topics from applied calculus, including a detailed study of functions, limits and continuity, the circle, tangent lines, rates of change, differentiation of algebraic functions, matrices, and systems of linear equations. Applications from economics and finance will be included, and the use of the TI 89 calculator, as well as Excel will be required. Students should be familiar with using **My Math Lab** to submit homework.

Objective - Upon completion of this course, students should have sufficient knowledge of the following: How to apply tools of mathematics such as functions, limits and continuity, the circle, tangent lines, rates of change, differentiation of algebraic functions, matrices, and linear systems of equations to for Economic analysis. **Goal** - The aim of this course is to expose you with the quantitative nature of the world around us—especially the quantitative world of business. I will Asses your current abilities in Pre-calculus with a Diagnostic Test on Monday (8/31) which will asses your current abilities. Based on that, I'll determine the **pace** of the lessons. Your assignments will be specially orientated towards your current understanding of the topics which we cover in-classroom. You are expected to apply your past knowledge of Algebra to new situations, and you will encounter problems which you may have never encountered before. You will discover a new, quantitative way of viewing the world around you—including the business world. **Detailed Overview of Semester Topics covered**

Tentative Schedule (Subject to change):

Day	Section	Topic	Math Lab Homework
8/31 (Mon)	1.1	Diagnostic Test (10 minutes) Syllabus overview Intro to TI-89 (only Q # 39) Intro to My Math Lab (only Q #1.1) The Line (from textbook P# 42-59)	HW 1.1
9/2 (Wed)	1.2	Applications of Linear Functions	1.2 DUE 9/9
9/9 (Wed)	1.3	Quiz # 1 (10 minutes) Regression	1.3 DUE 9/16

9/10 (Thursday) (Classes follow a Monday schedule)	1.3	Regression	1.3 DUE 9/16
9/16 (Wed)	1.4	Quiz # 2 (10 minutes) Basic Notions of Functions	1.4 DUE 9/21
9/21(Mon)	1.5	Quadratic Functions - Parabolas	1.5 & 1.6 DUE 9/28
9/28(Mon)	1.6	Quiz # 3 (10 minutes) More on Functions	NONE
9/30(Wed)	Exam 1		
10/05 (Mon)	1.7	The Circle	1.7 DUE 10/07
10/07(Wed)	1.8	Quiz # 4 (10 minutes) Economic Functions	1.8 DUE 10/14
10/14 (Wed)	2.1	Slope of a Curve (and Derivatives)	2.1 DUE 10/19
10/19 (Mon)	2.2	Quiz # 5 (10 minutes) Derivative Rules	2.2 DUE 10/26
10/21 (Wed)	2.2	Derivative Rules	2.2 DUE 10/26
10/26 (Mon)	2.3	Quiz # 6 (10 minutes) Limits and Continuity	2.3 & 2.4 DUE 11/02
10/28(Wed)	2.3	Limits and Continuity	2.3 & 2.4 DUE 11/02
11/02 (Mon)	Exam #2		
11/04(Wed)	2.4	Limits at Infinity, Infinite Limits and Asymptotes	NONE
Nov 9 is last day to withdraw with W			

11/09 (Mon)	2.5	Quiz # 7 (10 minutes) Derivative Rules 2	2.5 DUE 11/11								
11/11(Wed)	2.6	Quiz # 8 (10 minutes) Chain Rule	2.6 DUE 11/18								
11/16 (Mon)	2.7	Marginal Functions and Rates of Change	2.7 DUE 11/23								
11/18 (Wed)	2.7/2.8	Quiz # 9 (10 minutes) (Finish 2.7), 2.8 Implicit Differentiation	2.8 Due 11/25								
11/23 (Mon)	2.10	Related Rates	2.10 DUE 11/30								
11/25 (Wed)	A1/A2	Quiz # 10 (10 minutes) Matrices Basic Operations/Matrix Multiplication	A.1, A.2 DUE 12/02								
11/30 (Mon)	Review	Catch up/Review									
12/02 (Wed)	Exam #3										
12/07	A3	Gauss-Jordan Reduction	A.3 Due 12/14								
12/09 (Wed)	A4	Inconsistent Linear Systems/Systems with Infinite Number of Solutions	A.4 DUE 12/16								
12/14 (Mon)		Review (Last Day of Classes)									
12/22 (Tuesday)	6:00 to 8:00 FINAL EXAMINATION										
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">MTH 2003 SMWA</td> <td style="width: 25%;">DEC 22</td> <td style="width: 25%;">06:00PM- 08:00PM</td> <td style="width: 25%;">B-12-150</td> </tr> <tr> <td>MTH 2003 TMWC</td> <td>DEC 22</td> <td>06:00PM- 08:00PM</td> <td>B-12-150</td> </tr> </table>				MTH 2003 SMWA	DEC 22	06:00PM- 08:00PM	B-12-150	MTH 2003 TMWC	DEC 22	06:00PM- 08:00PM	B-12-150
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I just want you to know that I'm not the one who writes the FINAL. The Math Department as a whole will write the Final. So make sure you are 100% prepared for the FINAL.											

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Missed Exam Policies: If you miss an exam (does not apply for quiz/homework), and if you promptly provide me, in writing, a verifiable & acceptable excuse for your absence, then you are required to retake it. There are only four acceptable excuses for an individual missing an exam: (1) Documented Illness; (2) Documented Funeral attendance; (3) Documented courtroom

appearance and (4) CUNY/Baruch sponsored event. **There are two ways to resolve a missed exam:** (1) You can take the make-up exam on December 22 at anytime before the final (I will be at Baruch College all day on 12/22/2015) (2) If you don't want to take the makeup exam, then we'll apply the grade you will earn on the same material on the final exam (e.g., if you miss exam #3 (which will be on deriving the limits definition, product rule, quotient rule and chain rule), then after you take the final, we'll take a look at the problems that most of you got wrong. Supposing there were 6 problems and you scored correctly on 6 of them, then that would be a 100% on Exam #3. Caution: Only students with legitimate excuses will be allowed to make up missed exams.

Attendance: If you miss class, you will miss any current quizzes. **Assessments:** I will consistently assess your skills & knowledge on the content area. So, I will assess you in 5 different ways – Quiz (10 quizzes), Homework (My Math Lab), Exams (there are 3 exams) and the FINAL. **Grading Policy:** There will be 3 class examinations (51%), a final examination (33%), quizzes (8%) and online homework (8%). I already posted the quizzes and exam dates. I will give you quiz almost every other day (see the overview). You will have 10 minutes to finish any given quiz. Your class average will be calculated as follows:

Items	Percentage
Homework	8%
Quizzes (10 quizzes)	8%
3 Exams	51%
Final	33%
Total	100%

(5) GRADING POLICY:

The following tables list the and show how they are calculated to determine the grade point average (G.P.A.), or index.

Letter Grades and Grade Point Equivalents		
A	4.0	93.0–100.0
A-	3.7	90.0–92.9
B+	3.3	87.1–89.9
B	3.0	83.0–87.0
B-	2.7	80.0–82.9

C+	2.3	77.1–79.9
C	2.0	73.0–77.0
C-	1.7	70.0–72.9
D+	1.3	67.1–69.9
D	1.0	60.0–67.0
F	0.0	Below 60.0

Important Links	
CUNY Blackboard (You need to create user name & password if you don't already have one)	https://cunyportal.cuny.edu/cpr/authenticate/portal_login.jsp
My Math Lab (It's on the blackboard now. However, you can directly access to it from Pearson website)	http://www.pearsonmylabandmastering.com/northamerica/mymathlab/
BC Math Website	http://www.baruch.cuny.edu/math/
iTunes	https://itunes.apple.com/us/itunes-u/precaculus-elements-calculus/id556534192
Tutoring @ SACC	https://www.baruch.cuny.edu/sacc/tutorial_service.htm#math
Textbook	http://www.mypearsonstore.com/stores/AppliedCalc
Answer to the Textbook Questions	www.baruch.cuny.edu/math/Applied_Calculus/
Buy the Textbook Username: pearson Password: welcome	http://www.mypearsonstore.com/deals/promo_login.asp?promo=140606
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