Baruch College
Department of Mathematics
MTH 1023 Course Syllabus

Textbook: Martin-Gay, *Beginning & Intermediate Algebra, 6th Ed.*

Grading Policy

1. As per the policy of the Department of Mathematics, any student who scores less than 66% on the final examination or has a class average of less than 73% will be assigned a grade of **F**.

2. The table below indicates the composition of the overall course grade.

ASSESSMENT TYPE	GRADE PERCENTAGE
Homework	10%
Quizzes	10%
In-Class Tests	50%
Final Exam	30%
TOTAL	**100%**

Tentative Schedule of Classes

SESSION NO.	TOPIC(S)		MML ASSIGNMENTS
1	3.3 3.4	Intercepts Slope and Rate of Change	Section (s): 3.3 & 3.4
2	3.2 3.5	Graphing Linear Functions Equations of Lines	Section(s): 3.2 & 3.5
3	3.6	Properties of Functions	Section(s): 3.6
4	4.1 4.2	Linear Systems of Equations: Graphical Method Linear Systems of Equations: Substitution Method	Section(s): 4.1 & 4.2
5	4.3	Linear Systems of Equations: Addition Method	Section(s): 4.3
6	4.5	Problem-Solving w/ Linear Systems of Equations	Section(s): 4.5
7	--	Review for Exam #1	None
8	**--**	**Exam #1**	**None**

SESSION NO.	TOPIC(S)		MML ASSIGNMENTS
9	5.1 10.2	Properties of Exponents Rational Exponents	Section(s): 5.1 & 10.2
10	5.2 5.3	Operations w/ Polynomials: Addition & Subtraction Operations w/ Polynomials: Multiplication	Section(s): 5.2 & 5.3
11	5.4 6.1	Special Products w/ Polynomials GCFs & Factoring by Grouping	Section(s): 5.4 & 6.1
12	6.2 6.3	Factoring Trinomials: Leading Coefficient of $A = 1$ Factoring Trinomials: Any Leading Coefficient	Section(s): 6.2 & 6.3
13	6.4 6.5	Factoring Trinomials: Any Leading Coefficient (CON'T) Factoring Binomials	Section(s): 6.4 & 6.5
14	6.6	Solving Quadratic Equations: Factoring	Section(s): 6.6
15	6.7	Problem-Solving w/ Quadratic Equations	Section(s): 6.7
16	--	Review for Exam #2	None
17	**--**	**Exam #2**	**None**
18	7.1	Simplifying Rational Expressions	Section(s): 7.1
19	7.2	Rational Expressions: Multiplication & Division	Section(s): 7.2
20	7.3 7.4	Rational Expressions: Addition & Subtraction	Section(s): 7.3 & 7.4
21	7.5	Solving Equations w/ Rational Expressions	Section(s): 7.5
22	7.6	Problem-Solving w/ Rational Equations	Section(s): 7.6
23	7.7 8.4	Complex Fractions Variation	Section(s): 7.7 & 8.4
24	--	Review for Exam #3	None

SESSION NO.	TOPIC(S)		MML ASSIGNMENTS
25	**--**	**Exam #3**	**None**
26	10.1 10.3	Radical Functions & Expressions Simplifying Radical Expressions	Section(s): 10.1 & 10.3
27	10.4	Operations w/ Radical Expressions	Section(s): 10.4
28	10.5	Rationalizing Denominators	Section(s): 10.5
29	--	Indeterminate Forms	None
30	10.6	Problem-Solving w/ Radical Equations	Section(s): 10.6
31	10.7	Elementary Complex Numbers	Section(s): 10.7
32	--	Review for Exam #4	None
33	**--**	**Exam #4**	**None**
34	11.1	Solving Quadratic Equations: Completing the Square	Section(s): 11.1
35	11.2	Solving Quadratic Equations: The Quadratic Formula	Section(s): 11.2
36	11.3	Solving Equations w/ Quadratic Methods	Section(s): 11.3
37	11.4	Nonlinear Inequalities	Section(s): 11.4
38	11.5 11.6	Graphs of Quadratic Functions	Section(s): 11.5 & 11.6
39	--	Review for Exam #5	None
40	**--**	**Exam #5**	**None**

SESSION NO.	TOPIC(S)		MML ASSIGNMENTS
41	--	Review for Final Examination	None
42	--	Review for Final Examination	None

Course Requirements and Policies

Attendance:

Attendance and class participation are crucial for learning the material for this course. All students are expected to be ON TIME. If you arrive more than 10 minutes after the beginning of lecture it will count as ½ of an absence. Excessive absences may result in a failing grade for the course.

Students who miss class are responsible for all material and assignments covered during missed lecture(s).

In addition to attending lecture three times per week, students will participate in a weekly session of Peer Led Team Learning (PLTL). During weekly PLTL session, students meet in small groups to work collaboratively on practice problems to help master concepts and develop problem solving skills. A trained PLTL Peer Leader will guide the group. Students need to bring class notes and textbooks to every PLTL meeting. Most students will have the electronic ("e-book") version of the textbook, accessible through MyMathLab. Students who don't have a tablet or a laptop may want to borrow one from the kiosk on the second floor of the Vertical Campus near the main elevators to access the e-book during PLTL. The problem sets used during PLTL are developed by faculty, and will be similar to what appear on homework, quizzes, and exams. Attendance at PLTL is mandatory. Absence from PLTL counts the same as absence from class.

Academic Honesty:

The Department of Mathematics and the course instructor fully support Baruch College's policy on academic honesty, which states in part:

> "Academic dishonesty is unacceptable and will not be tolerated. Cheating, forgery, plagiarism, and collusion in dishonest acts undermine the college's educational mission and the students' personal and intellectual growth. Baruch students are expected to bear individual responsibility for their work, to learn the rules and definitions that underlie the practice of academic integrity, and to uphold its ideals. Ignorance of the rules is not an acceptable excuse for disobeying them. Any student who attempts to compromise or devalue the academic process will be sanctioned."

Academic sanctions in this class will range from an F on the assignment to an F in this course. A report of suspected academic dishonesty will be sent to the Office of the Dean of Students. Additional information and definitions can be found at www.baruch.cuny.edu/academic/academic_honesty.html and the Student Guide to Academic Integrity www.baruch.cuny.edu/facultyhandbook/documents/StudentGuideOct06.pdf

Conduct:
Cell phones should be turned off during class and MUST be turned off and put away during all examinations.

Laptops should be used only for taking or reading lectures notes.

As per Mathematics Department policy, no calculators of any kind are permitted on any examinations including but not limited to Class Exams and the uniform Final Exam.

To do well in this course, it is essential to study on a daily basis and to work out homework problems as soon as they are assigned. Merely attending lecture is not enough: in order to pass this class, you will need to read the assigned sections and work on the suggested homework problems on your own.

Each class will consist of a lecture explaining the concepts and showing examples from that day's section(s), which you should have read prior to class. After class, you should complete the homework problems related to that day's lecture, and before the next class, you should read the next assigned sections from the textbook. Read the corresponding sections from your notes and the textbook before you start doing the homework. You may discuss difficult homework problems with others, but make sure you try them first.

If you need help with the material, talk to the instructor as soon as possible. Work extra homework problems. Do not stop working when you think you understand the material. Instead, stop when going through the problems is a matter of routine, and you have a high level of confidence that your answers are correct.

You are strongly urged to take full advantage of office hours if you have any questions or course-related concerns.

Statement for Students with Disabilities:

Students with disabilities may be eligible for reasonable accommodations to enable them to participate fully in courses at Baruch College. Any student needing accommodation is requested to speak directly to the Office of Services for Students with Disabilities (VC 2-271; 646-312-4590) and to the instructor as early as possible in the semester (preferably during the first week of class). All discussions will remain confidential.

Evaluation:

Each week, a quiz or homework, or both, will be given. All quizzes will be announced at least a week beforehand. No extensions will be granted on any homework assignments.

Five in-class tests will be given during the semester. A cumulative final exam will be given at the time and date assigned to this course. There are no make-up examinations! Absence from two examinations will result in an automatic failure for the course.

Per department policy, any student who receives a grade below 66% on the final exam will receive a failing grade for the course.

Course Grade Components:

The final grade will be computed according to the following distribution:

- In class exams (5): 50% total;
- Homework: 10% total;
- Quizzes: 10% total;
- Final Exam: 30%

Course letter grades will be assigned based on the overall percentage as described at http://www.baruch.cuny.edu/undergraduate-advisement-and-orientation/grades-and-gpa.html

LEARNING GOALS OF COURSE:

Upon completion of this course, students will be able to:

- Solve systems of linear equations.
- Use the concept of slope to illustrate rates of change.
- Perform algebraic manipulation on polynomials.
- Factor polynomials and solve quadratic equations.
- Manipulate irrational expressions.
- Determine the domain and range of a function.
- Solve non-linear inequalities.
- Graph quadratic functions and solve related applied problems.
- Compose functions
- Solve non-linear systems