Syllabus for MTH 30

1. <u>GENERAL COURSE INFORMATION</u>

   Instructor: Kerry Ojakian (*Email*: ojakianteaching@gmail.com).

   Website: http://fsw01.bcc.cuny.edu/kerry.ojakian/TeachingPages/TeachingMainPage.html

   See website for other course information (book, office hours, etc)

2. <u>TESTS</u>

   - There will be 3 tests during the semester, and a fourth exam (the final exam), after the semester. The lowest of your 3 in-class tests will be dropped completely. The final exam cannot be dropped.
   - For each test, you are responsible for all material covered prior to it. The final exam will be comprehensive, covering all the course material.
   - There are no make-up exams.

3. <u>IN-CLASS WORK</u>

   - We will have regular "in-class" assignments (sometimes done in groups). They will be worth 5 points, with a possible grade of 3, 4, or 5.
   - If you are not present for a class when an in-class assignment is being worked on, you will receive a 0 for that assignment (except under extenuating circumstances cleared by the professor). However, if you are present and put in some work, you will get at least a 3.
   - Your lowest in-class assignment grade will be dropped.

4. <u>HOMEWORK</u>

   - There will be two kinds of homework: Paper-and-pencil homework, and WEBWORK homework. The WEBWORK homework is done online, on a computer. For the paper-and-pencil homework, there will be 3 in total, one due before each of the exams.
   - Late homework is not accepted. However, your lowest handwritten homework grade will be dropped. I also essentially drop your lowest couple of WeBWork homeworks; in fact I do better: I simply add 5 % points to your WEBWORK homework score at the end of the semester (though your score can't go above 100%).

5. <u>GRADING</u>

   Your final numerical grade will be determined as follows:

   (a) Final Exam: 34%
   (b) In-Class Tests: 46% (i.e. your 2 highest tests count 23% each)
   (c) Homework: 13%
   (d) In-Class Assignments: 7%

   From the final numerical grade, the guaranteed minimum term grade is as follows:

   A- for 90 or above,   B- for 80 or above,   C- for 70 or above,   D- for 60 or above

6. <u>AI Help</u>

   Yes, you may use ANY online computer tools and AI for all homework and classwork! However! - 1) You may not simply copy a verbatim solution, and 2) On tests you may use NO electronic devices whatsoever!

   Look above: Tests are worth 80% of your grade! Use computers/AI to learn or you will fail the tests ...

7. <u>EXPECTATIONS</u>

Respect. You are expected to show respect for the other students, the professor, and the class environment. In particular, behavior which disrupts the learning of other students will not be tolerated (for example, engaging in a conversation while I am lecturing).

Class Attendance. You are responsible for everything discussed in class. If you miss class, it is *your responsibility* to find out what you missed. There will be in-class work, which you can **not** make up if you miss class.

8. <u>ACADEMIC INTEGRITY</u>

Academic dishonesty (such as plagiarism and cheating) is prohibited at Bronx Community College and is punishable by penalties, including failing grades, dismissal and expulsion. For additional information and the full policy on Academic Integrity, please consult the BCC College Catalog.

9. <u>ACCOMMODATIONS/DISABILITIES</u>

BCC respects and welcomes students of all backgrounds and abilities. In the event you encounter any barrier(s) to full participation in this course due to the impact of a disability, please contact DisAbility Services as soon as possible this semester. A Disability Services specialist will work with you to review the barriers you are experiencing and explain the eligibility process for establishing academic accommodations for this course. You can reach DisAbility Services by email at disabilityservices@bcc.cuny.edu or by phone at (718) 289-5874.

10. <u>LEARNING OBJECTIVES</u>

Student Learning Objectives: Upon completion of this course, students will be able to: 1. Solve polynomials equations of 3rd degree in one real variable and 2nd degree rational equations in one real variable (b, c, e, B, C, D, E) 2. Graph polynomial, rational, exponential, logarithmic and trigonometric functions (b, d, e, f, A, B, D) 3. Verify trigonometric identities and solve trigonometric equations (b, d, B, C, D) 4. Employ transformations of functions algebraically and graphically as problem-solving tools (b, c, A, B, D, E) 5. Compute inverse functions and use their properties to obtain more precise algebraic information about the corresponding original functions (a, b, c, D, E) 6. Demonstrate fluency with function notation and operations on functions including composition (b, c, D) 7. Identify whether a given graph or algebraic relation represents a function and analyze it to determine its particular properties such as domain and range, end behavior, asymptotes, and periodicity (a, c, d, A, B, C, D, E) 8. Form models to apply them in the solution of real-world problems such as involving exponential growth and decay and optimization in finance, biology, chemistry, or physics (a, b, c, d, e, f, A, B, C, D, E, F)

11. <u>PATHWAYS</u>

This course satisfies CUNY Pathways Required Core Area B (Mathematical and Quantitative Reasoning) and Pathways Flexible Core Area E (Scientific World).

This course is a Pathways Required Core B (Mathematical and Quantitative Reasoning) Course: This course meets the following learning outcomes. A student will: a) Interpret and draw appropriate inferences from quantitative representations, such as formulas, graphs, or tables. b) Use algebraic, numerical, graphical, or statistical methods to draw accurate conclusions and solve mathematical problems. c) Represent quantitative problems expressed in natural language in a suitable mathematical format. d) Effectively communicate quantitative analysis or solutions to mathematical problems in written or oral form. e) Evaluate solutions to problems for reasonableness using a variety of means, including informed estimation. f) Apply mathematical methods to problems in other fields of study.

This course is a Pathways Flexible Core E (Scientific World) Course: This course meets the following learning outcomes. A student will: A) Gather, interpret, and assess information from a variety of sources and points of view. B) Evaluate evidence and arguments critically or analytically. C) Produce well-reasoned written or oral arguments using evidence to support conclusions. D) Identify and apply the fundamental concepts and methods of a discipline or interdisciplinary field exploring the scientific world, including, but not limited to: computer science, history of science, life and physical sciences, linguistics, logic, mathematics, psychology, statistics, and technology-related studies. E) Demonstrate how tools of science, mathematics, technology, or formal analysis can be used to analyze problems and develop solutions. F) Understand the scientific principles underlying matters of policy or public concern in which science plays a role.