Title of Course: Precalculus   **Class Hours:** 4

Course: MAT 206   **Semester:** Fall 2020

Instructor: Ivan Retamoso   **Phone:** 212 776 6432
Office: S-642D   **Email:** iretamoso@bmcc.cuny.edu
Credits: 4

Website: https://openlab.bmcc.cuny.edu/precalculus-mat-206-0511-fall-2020/

MAT 206-0511 (5266) is an online course. You are expected to devote 6-9 hours a week for this course. Check your BMCC email and announcements in BLACKBOARD, at least twice a day, be updated, this course will run in BLACKBOARD, Assignments and Exams will be given in BLACKBOARD, so make sure you are able to sign into BLACKBOARD from day one.

I will give online ZOOM Lectures Tuesday, and Thursday from 6:00 pm to 7:40 pm starting on Thursday August 27, the ZOOM links for these Lectures will be posted in BLACKBOARD and in our website. All ZOOM Lectures will be recorded and posted in BLACKBOARD and in our website so if you miss a Lecture you can watch it later.

My Office Hours:
I will be available for Virtual office hours via ZOOM Fridays from 6:00 pm to 9:00 pm, The ZOOM links will be posted in BLACKBOARD and in our website.

Course Description: This course covers basic algebraic and trigonometric skills, algebraic equations, and functions. Topics include mathematical induction, complex numbers, and the binomial theorem.

Prerequisites/Co-requisites: Intermediate Algebra and Trigonometry (MAT 056) or the equivalent with the departmental approval.

Student Learning Outcomes:

Course Student Learning Outcomes	Measurements
1. Students will be able to graph, interpret, and analyze linear, quadratic, and other higher order polynomial functions	1. Homework assignments and/or take home projects; Quizzes and/or Midterm Exams; Final Exam.

2. Students will understand quadratic and rational functions and the properties associated with their graphs.	2. Homework assignments and/or take home projects; Quizzes and/or Midterm Exams; Final Exam.
3. Students will be familiar with transcendental functions, their respective graphs, and properties.	3. Homework assignments and/or take home projects; Quizzes and/or Midterm Exams; Final Exam.
4. Students will be able to verify trigonometric identities and solve trigonometric equations.	4. Homework assignments and/or take home projects; Quizzes and/or Midterm Exams; Final Exam.

General Education Outcomes and Assessment:

General Education Learning Outcomes	Measurements
Communication Skills- Students will be able to write, read, listen and speak critically and effectively.	Assignments and/or take home projects; exams and/or Midterm Exam; Final Exam.
Quantitative Reasoning- Students will be able to use quantitative skills and the concepts and methods of mathematics to solve problems.	Assignments and/or take home projects; exams and/or Midterm Exam; Final Exam.
Information & Technology Literacy- Students will be able to collect, evaluate and interpret information and effectively use information technologies.	Assignments and/or take home projects; exams and/or Midterm Exam; Final Exam .

Required Text:

Zero cost OER Textbook can be downloaded as a PDF file and it can be read online or offline, by clicking the link below.

https://openstax.org/details/books/precalculus

Also, you can get the Textbook by downloading the free OpenStax + SE app.

For IOS (Apple) go to:
https://apps.apple.com/us/app/openstax-with-studyedge/id1473661166?book=precalculus

For Android go to:
https://play.google.com/store/apps/details?id=com.openstax.openstax&hl=en

Free Tutoring:
For Help (Free online Tutoring) with this course you can click the link below:
https://www.bmcc.cuny.edu/students/lrc/virtual-learning-center/

Calculator:

Scientific Calculator (Such as Texas Instrument model TI-30XIIS or similar) is needed for this course, as an alternative, you can use the DESMOS scientific calculator by clicking the link below:
https://www.desmos.com/scientific

Homework: Homework will be assigned in **WEBWORK,** to do it click on the link below:

http://webwork.bmcc.cuny.edu/webwork2/2020_Fall_MAT206_0511_Retamoso/

To sign into **WEBWORK**,
If your name is: Adam Smith then
your Username is: asmith and
your Password is: your cuny id number.

Final Grade computation:

Exam 1:	15%
Exam 2:	15%
Exam 3:	15%
Homework (WEBWORK):	15%
DESMOS Activities:	10%
Special Assignments:	10%
Final Exam:	20%

Outline of Topics:

1 Functions

- 1.1 Functions and Function Notation
- 1.2 Domain and Range
- 1.3 Rates of Change and Behavior of Graphs
- 1.4 Composition of Functions
- 1.5 Transformation of Functions
- 1.6 Absolute Value Functions
- 1.7 Inverse Functions

2 Linear Functions

- 2.1 Linear Functions
- 2.2 Graphs of Linear Functions
- 2.3 Modeling with Linear Functions

3. Polynomial and Rational Functions

- 3.1 Complex Numbers
- 3.2 Quadratic Functions
- 3.3 Power Functions and Polynomial Functions

BMCC is committed to the health and well-being of all students. It is common for everyone to seek assistance at some point in their life, and there are free and confidential services on campus that can help.

Single Stop www.bmcc.cuny.edu/singlestop, room S230, 212-220-8195. If you are having problems with food or housing insecurity, finances, health insurance or anything else that might get in the way of your studies at BMCC, come by the Single Stop Office for advice and assistance. Assistance is also available through the Office of Student Affairs, S350, 212-220-8130.

Counseling Center www.bmcc.cuny.edu/counseling, room S343, 212-220-8140. Counselors assist students in addressing psychological and adjustment issues (i.e., depression, anxiety, and relationships) and can help with stress, time management and more. Counselors are available for walk-in visits.

Office of Compliance and Diversity www.bmcc cuny.edu/aac, room S701, 212-220-1236. BMCC is committed to promoting a diverse and inclusive learning environment free of unlawful discrimination/harassment, including sexual harassment, where all students are treated fairly. For information about BMCC's policies and resources, or to request additional assistance in this area, please visit or call the office, or email olevy@bmcc.cuny.edu, or twade@bmcc.cuny.edu. If you need immediate assistance, please contact BMCC Public safety at 212-220-8080.

Office of Accessibility www.bmcc.cuny.edu/accessibility, room N360 (accessible entrance: 77 Harrison Street), 212-220-8180. This office collaborates with students who have documented disabilities, to coordinate support services, reasonable accommodations, and programs that enable equal access to education and college life. To request an accommodation due to a documented disability, please visit or call the office.

BMCC Policy on Plagiarism and Academic Integrity Statement
Plagiarism is the presentation of someone else's ideas, words or artistic, scientific, or technical work as one's own creation. Using the idea or work of another is permissible only when the original author is identified. Paraphrasing and summarizing, as well as direct quotations, require citations to the original source. Plagiarism may be intentional or unintentional. Lack of dishonest intent does not necessarily absolve a student of responsibility for plagiarism. Students who are unsure how and when to provide documentation are advised to consult with their instructors. The library has guides designed to help students to appropriately identify a cited work. The full policy can be found on BMCC's Web site, www.bmcc.cuny.edu. For further information on integrity and behavior, please consult the college bulletin (also available online).