## Course Syllabus

North Atlanta High School
GSE Pre-Calculus
2019/2020 School Year

## TEACHER INFORMATION

Teacher: Mr. D. Ehrman
E-mail: dpehrman@atlanta.k12.ga.us
Room: 8117

Web Page: http://ehrman.weebly.com/
Phone: 404-802-4700
Sign up for text/email reminders: Send a text to 81010 containing the class code 0 a4d66fd

Please read this statement and note your agreement on the signature form provided to students in class: As a stakeholder (parent and student) of North Atlanta High School, I will adhere to the academic honesty policy provided in the handbook and consistently and frequently monitor Infinite Campus for attendance and academic performance.

Prerequisites: Successful completion of Coordinate Algebra, Analytic Geometry, and Advanced Algebra.

## II. COURSE DESCRIPTION AND OBJECTIVES

Pre-Calculus focuses on standards to prepare students for a more intense study of mathematics. The critical areas organized in eight units delve deeper into content from previous courses. The study of circles and parabolas is extended to include other conics such as ellipses and hyperbolas. Trigonometric functions are introduced and developed to include inverses, general triangles and identities. Matrices provide an organizational structure in which to represent and solve complex problems. Students expand the concepts of complex numbers and the coordinate plane to represent and operate upon vectors. Probability rounds out the course using counting methods, including their use in making and evaluating decisions. The Mathematical Practice Standards apply throughout each course and, together with the content standards, prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

## Middle Years Program

This course is part of the International Baccalaureate Middle Years Program at North Atlanta High School which emphasizes a format based on the following concepts: holistic learning, intercultural awareness and communication. Students will gain analytical skills in order to promote informed decisionmaking. Technology will be used appropriately through inquiry-based learning in order for students to gain an increased understanding of how mathematics relates to the world around them.

Assessments for this course also include how well student work relates to the following MYP criteria: knowledge, concepts, skills, and organization and presentation. A yearlong MYP personal project accompanied by a journal is to be produced at the end of the $10^{\text {th }}$ grade year for the MYP Diploma. Timelines and descriptions of tasks will be provided.

The Georgia Standards of Excellence and Curriculum Map for this course can be found at the following link: https://www.georgiastandards.org/Georgia-Standards/Frameworks/Pre-Calculus-Curriculum-Map.pdf

## III. MATERIALS

Students are required to bring the following to every class:

1. 3 ring binder (at least $1 \frac{1}{2}$ inch)
2. Loose-leaf paper
3. Spiral Notebook (suggested)
4. Sharpened Pencils
5. Graphing Calculator (TI-84 recommended or TI-Nsprie CX)

## IV. COURSE OUTLINE

(Use the curriculum map link above to see which standards are assigned to each unit.)

| 1 | Introduction to Trigonometric Functions | 5 | Matrices |
| :--- | :--- | :--- | :--- |
| 2 | Trigonometric Functions | 6 | Conics |
| 3 | Trigonometry of General Triangles | 7 | Vectors |
| 4 | Trigonometric Identities | 8 | Probability |

## V. GRADING POLICY

A. Weights:

Summative Assessments 45\%
Common Assessments, Unit Tests, Midterm Exam, Major Assignments, Projects
Formative Assessments 45\%
Homework checks, classwork, quizzes, minor assignments
Final
10\%
Final Exam
B. APS Grading Scale:

| A $90-100$ | B | $80-89$ | C | $70-79$ | F | $0-69$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

C. Homework

- Students will be assigned HW daily and solutions to this HW will be provided for students to check their progress and success. It is expected that students complete this daily HW as problems on quizzes and tests mirror HW and notes.
- HW checks will occur regularly throughout the semester.


## VI. CLASSROOM POLICIES

A. Classroom Expectations:

1. Be Prepared and on Time. Be in your seat with all your supplies ready to learn when the bell rings.
2. Take Pride in Your Work. Be proud of what you accomplish, work hard, and do your best work - all with a positive attitude. Also - always exercise academic honesty and DO YOUR OWN WORK!
3. Challenge Yourself. Don't give up when the work is difficult. Willingly attempt to understand and solve all problems.
4. Be a Team Player. Work together towards success for every member of our class. Please offer assistance to those who need it and do not be afraid to ask for help.
5. Be Kind and Courteous. Negative comments, put-downs, and talking while someone is speaking will not be tolerated. Demonstrate respect for yourself and others.
6. Make sure all electronic devices are turned OFF. This includes cell phones, ipods, MP3 players, cameras, etc.
7. Leave all food and drinks outside the classroom. Only water in a clear container will be allowed in the classroom.
8. Abide by all the policies outlined in the North Atlanta Student Handbook.

## B. Notebook

You are encouraged to keep an organized 3 ring binder for this class. It should be divided into sections by units. A spiral notebook can come in handy to take notes that don't fit within the confines of any guided notesheets that I give you.

## C. Attendance/Absences

* You are responsible for reading and following the school's attendance policy as stated in the student handbook.
* For one-day absences: on the day you return you should:

1. Find out what you missed from your classmates and check with me for any missed sheets (or print from website).
2. Copy any missed notes from a classmate.
3. Complete any missed assignments by the next class period along with the current assignment.
4. Take any test given on the day you were absent.

* For any lengthy or known absence, see me to decide on a make-up schedule. All work, including tests and quizzes MUST be made up within two days upon return.
* Unexcused absences will result in an immediate disciplinary action.
* Field Trips: For any school field trip, college visit, special assembly, or anything that voluntarily take you out of my class, come clear it with me BEFORE the absence. This merely ensures that you minimize the impact the trip has on your success in my class.

