**Course Syllabus**

North Atlanta High School

GSE Pre-Calculus

2018/2019 School Year

**I. TEACHER INFORMATION**

**Teacher:** Mr. Ehrman **Room:** 8117

**E-mail:** [**dpehrman@atlanta.k12.ga.us**](mailto:dpehrman@atlanta.k12.ga.us) **Phone:** 404-802-4700

**Web Page:** [**http://ehrman.weebly.com**](http://ehrman.weebly.com) **Tutorial Day:** B-Days 3:45 – 4:45

**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 decision-making.  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 10th 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**](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 ½ 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**

1. **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

1. **APS Grading Scale:**

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

1. **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**

1. You are responsible for reading and following the school’s attendance policy as stated in the student handbook.
2. **For one-day absences:** on the day you return you should:
3. Find out what you missed from your classmates and check with me for any missed sheets (or print from website).
4. Copy any missed notes from a classmate.
5. Complete any missed assignments by the next class period along with the current assignment.
6. Take any test given on the day you were absent.
7. 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.
8. **Unexcused absences** will result in an immediate disciplinary action.
9. **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.
10. **Late Work Policy**

* **Late Work** –I do not accept late work.

GSE Precalculus

Parents please review and sign this page which will document your receipt and understanding of my syllabus. This will also count as your child’s first formative assessment and should remain in his/her notebook for the remainder of the year.

Student name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Student signature \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Parent/ Guardian Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Parent/ Guardian Best Daytime Telephone Number(s) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

* Parents please write a secure email address for correspondence. Our school grading program allows you to check your child’s grade at any time. If you do not already have access to the Parent Portal, you may contact the main office for instructions.

Parent/ Guardian email\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_