

# **Sharyland Pioneer High School**

# **Department of Mathematics**

**Tutorials:** Tuesday

7:25am-7:55 am and

4:00 pm-5:00 pm

### **Instructor's Information:**

**Instructor Name:** Noe Gamez **Office Location:** SPHS-235

**Telephone #:** 956-271-1600 Ext 4165

Conference: 3<sup>rd</sup> Block(11:21 am-12:51 pm)
E-mail: ngamez@sharylandisd.org

**Course Information:** 

Course Name: Pre-Calculus Pre-AP

**Room Location:** *SPHS-235* 

# **Course Description:**

In Pre-Calculus, students continue to build on the k-8, Algebra I, Algebra II and Geometry foundations as they expand their understanding of mathematics. Students will use functions, as well as, symbolic reasoning to represent and connect ideas in geometry, probability, statistics, trigonometry and calculus to model physical situations. Finally, students will use a variety of representations (concrete, pictorial, numerical, symbolic, graphical, and verbal), tools and technology (including, but not limited to calculators with graphing capabilities, data collection devices and computers) to model functions and equations and solve Real-Life problems.

#### **Course Objective:**

Pre-Calculus students will acquire and demonstrate knowledge of concepts, definitions, properties and applications of topics listed below. The main goal of Pre-Calculus is to help students obtain critical thinking and decision making skills that will allow them to connect concepts, develop computational skills and learn strategies needed to solve mathematical problems.

.....

#### **Evaluation:**

| Major Assignments | 60% |
|-------------------|-----|
| Minor Assignments | 40% |

**Major Assignments** consist of......Exams, Reports, Research Papers, Projects/Presentations, Essays, etc.

Minor Assignments consist of.......Daily Classwork/Practices, recommended problems, Quizzes,

- All exams are timed and are in-class closed-book exams! There will be no retests. Minor assignments will not be accepted late. Major assignments will be allowed to turn in late if absent provided that there is an excused absence.
- **Solution** Exam results will be given within one week from the exam day.
- Use of cell phones, cell phone calculators, iPod or electronics is not allowed during exam or class time. (BYOD is a privilege, not a right!)

### **Required Material:**

Your Mind!!!

College Ruled Notebook Paper

Pencils (Mechanical) - No pen allowed on any assignments!

...any other material needed for your success in this course

\*\*\*homework may be sent home and your own graphing calculator will be needed

\*These items will be used on a daily basis and are necessary for success in the classroom. The student needs to be responsible for arriving to class prepared to learn and work. Points will be deducted from that day's assignment if student arrives unprepared.

### **Classroom Rules**

- ➤ NO EDIBLES OR DRINK in the classroom
- PROFANITY will NOT be TOLERATED
- > PARTICIPATION is not an option
- ➤ No doing homework for other classes
- > RESPECT yourself and others

### **Tardiness and Attendance**

There will be independent, partner and group activities throughout the school year. So, the presence of each student is necessary. Students need to be in class on time, otherwise students will lose out on important information and an education. The student needs to be present in class at least 90% of the year to receive credit for the course; otherwise, the student may have to repeat the course, even if the student has a passing grade. If absent, the student is responsible for picking up his/her missed assignment(s), attain notes and complete assignment(s) via the teacher website or a fellow classmate.

## **Cheating or Copying**

Cheating will ABSOLUTELY NOT be tolerated. At any time you are caught cheating by ANY TEACHER, an automatic ZERO will be given for that assignment WITHOUT the opportunity to make up the grade. Consider this your WARNING. Cheating will result in a PARENT-TEACHER conference if necessary.

\*Please be aware that you will be required to use the internet and other computer software's for some of the class assignments and/or activities. If you don't have computer access at home, feel free to stop by before or after school to the library. (Hours: Monday and Wednesday 4:10 pm-5:10pm).

# **Tutorial**

I will be available as much as possible to help you be successful in this course. During this semester I will be available in the morning and afternoon, as listed in the previous page, provided that you let me know you are coming. Otherwise you can ask me during class when I have finished with instruction. I expect to see notes on the topic you need help with before approaching me for assistance. Whenever I give you time to work in class take advantage of it and ask questions if need be. If you do not understand something in class, I am more than happy to try to explain in another way. Please ask before it is too late!

#### **Homework**

Recommended problems or exercises will be assigned almost daily to prepare you for class discussions, group work, quizzes, and/or exams. These recommended problems may or may not be picked up, however, it is the students responsibility to work on them in order to be successful in the course. At times I will ask for students to turn in their recommended problems for bonus points, minor grade, or even a major grade. Failure to cooperate by turning in an assignment on the due date will result in a zero! If you are absent it is your responsibility to obtain notes from a classmate, read the section(s) missed, and still turn in recommended problems if asked to do so. You may come for tutoring if you need help. All recommended problems and class assignments will be posted on the faculty web-page.

### **Required Textbook & Resources**

# Pre-Calculus enhanced with Graphing Utilities 6th Edition-Sullivan, Michael

Students are asked to come to the board and present problems, discuss different techniques and answer questions from instructor and other students. The term project will address all the Exemplary Education Objective for the math core components.

Pre-Calculus Pre-AP
(Tentative Course Outline provided we finish with all College Algebra Material)

| Chapter 6            | SECTIONS   |
|----------------------|--|
|                      | 6.1 Angles and Their Functions                                     |
|                      | 6.2 Trigonometric Functions: Unit Circle Approach                  |
| Radian & Degree      | 6.3 Properties of the Trigonometric Functions                      |
| Measure              | 6.4 Graphs of Sine and Cosine Functions                            |
|                      | 6.5 Graphs of other Trigonometric functions                        |
| Chapter 7            | SECTIONS   |
| Transformations,     | 7.1 Inverse of Sine, Cosine, and Tangent Functions                 |
| Compositions and     | 7.3 Trigonometric Equations  |
| Inverse of Functions | 7.4 Verifying Trigonometric Identities                             |
| inverse of runctions | 7.5 Solving Trigonometric Equations by Sum and Difference Formulas |
| Chapter 8            | SECTIONS   |
| Additional Topics in | 8.1 Right Triangle Trigonometry; Applications                      |
| Trigonometry         | 8.2 Law of Sines   |
| mgonometry           | 8.3 Law of Cosines   |
| Chapter 14           | SECTIONS   |
| Limits and an        | 14.1 Finding Limits Using Tables and Graphs                        |
| Introduction to      | 14.2 Algebra Techniques for Finding Limits                         |
| Calculus             | 14.3 One-Sided Limits; Continuous Functions                        |
| Calculus             | 14.4 The Tangent Problem; The Derivative                           |

As parent/guardian and student in Mr. Gamez's class, we have read and understood the course syllabus and the expectations set in his class. (Please print clearly and return to Mr. Gamez at the beginning of the next class meeting.)

|       | Parent/Guardian Name (Print)             |                | Student Name (Print)           |
|-------|--|----------------|--------------------------------|
|       |  |                |                                |
|       | Parent/Guardian Signature                |                | Student Signature              |
|       |  |                |                                |
|       | Parent/Guardian E-mail                   |                | Student E-mail                 |
|       |  |                |                                |
|       | Parent/Guardian Phone Number             |                | Today's Date                   |
|       |  |                |                                |
|       |  |                |                                |
|       |  |                |                                |
| ase r | note any other information that is relev | ant to your c  | hild's success in this course. |
| ase r | note any other information that is relev | ant to your c  | hild's success in this course. |
| ase ı | note any other information that is relev | vant to your c | hild's success in this course. |
| ase r | note any other information that is relev | ant to your c  | hild's success in this course. |
| ase ı | note any other information that is relev | ant to your c  | hild's success in this course. |
| ase r | note any other information that is relev | ant to your c  | hild's success in this course. |