Trigonometry and Pre – Calculus CP
Mercyhurst Preparatory School
2015 - 2016

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I will also be posting things on eBackpack.

Course Description

In this class we will build on to what you have learned about functions in Algebra II. We will learn about a special group of functions which are among the basic and indispensable tools to scientists and engineers: the trigonometric functions (including the wave functions), the exponential function, the logarithmic functions, the polynomial and the rational functions. We will learn their algebraic properties, graphs and applications and learn to manipulate them.

Topic List: We will cover about ten topics with about eight lessons per topic.

Topic 1: Introduction to Trigonometric Functions
Topic 2: Graphs and Properties of Wave Functions
Topic 3: Application of Wave Functions, Graphs of Other Trigonometric Functions
Topic 4: Triangle Trigonometry, Inverse Trig Functions and Analytic Trigonometry
Topic 5: Functions and their properties. (polynomial, radical, absolute value, rational functions.) Introduction to Exponential Functions and their properties.
Topic 6: Logarithms and the Logarithmic Functions
Topic 7: Application of Exponential Functions and Logarithmic Functions
Topic 8: Introduction to Descriptive Statistics. (if time allows)

Class Notes: For the most part, we will take notes by the "guided note-taking" method. I will provide you with outlines of the notes and we will fill them in during lecture. You can either get a hardcopy or a pdf to use in notability. Make sure you keep the notes all together either in a binder or in one folder in Notability. Please also create a folder in iBooks for pdf material sent or downloaded.

Homework:
Homework will be assigned almost every class. You will have a bit class time to complete the homework assignment. I will either check the homework on the spot or collect the homework assignment. Please make sure to seek out help if you do not understand something, **before** the assignment is due.

Tests: At the end of each topic we will have a test. We might also have mid-unit quizzes. I will review briefly for the test and quizzes. You can prepare for both by looking over the homeworks and examples in the notes. I will not let you use any cheat sheets for the test. If there are particularly extensive and involved formulas, I will include them with the assessment. You **may** use a calculator on some tests, I will let you know which ones. Missed tests and quizzes need to be made up in a timely manner.

Midterm and Final Exam: Since the course is divided into two parts, Trigonometry and Pre-calculus, we will have a midterm and a final. The midterm will happen at the end of Topic 4. The final will take place on May 19, 2015 (A day) or May 20, 2015 (B Day). The final will be only on the topics covered since the Midterm Exam. If you're a senior and have an A in gradebook by May 11th 3:00 pm, then you do not have to take the final, in all other cases, you do.

Grades

You and your parents can view your grades online live, right after I enter them. If you notice a mistake, see me right away. There are three terms in a school year and at the end of the year you will take a cumulative final exam. Your final grade will be determined by using the following formula:

Final Grade = (2*T1 + 2*T2 + 2*T3 + F) / 7

The letter grade break down at MPS is as follows:

	General/College Prep
A = 93 - 100%	4.0
B+ = 90 - 92%	3.5
B = 85 - 89%	3.0
C+ = 82 - 84%	2.5
C = 75 - 81%	2.0
D = 70 - 74%	1.0
F = 69 - Below	0.0

Special Help Night and Math Lab

If you need extra help with the material, you can come see me individually for special help. I will be in my classroom after school most days. You can also come to Math Lab which is in Room 120 and will be staffed by a math teacher. The hours are below.

Math Lab
Room 120
Tuesdays 3:15 pm – 4:00 pm
Wednesday 7:30 am – 8:15 am
Thursdays 3:15 pm – 4:00 pm

A note on Classroom Behavior

I expect you to treat your teacher and your fellow students with respect. I will not tolerate rude classroom behavior and disruptions. Let us create a safe, friendly environment conducive to learning, personal growth and building rapport with one another. I want this class to be a positive experience for everyone.

LET'S HAVE A GREAT YEAR!