Name: _____ Date: _____

WEST MICHIGAN
AVIATION ACADEMY

Trigonometry and Pre-Calculus

Course Description

Calculus is a powerful, useful, and versatile branch of mathematics. While the core ideas of calculus (derivatives and integrals) are not hard to understand, calculus is a demanding subject because it requires a broad and thorough background of algebra and functions. Study of the topics, concepts, and procedures of precalculus is very strongly recommended for all college-bound students. These topics, concepts, and procedures are prerequisites for many college programs in science, engineering, medicine, and business.

Precalculus is the preparation for calculus. The study of the topics, concepts, and procedures of precalculus deepens students' understanding of algebra and extends their ability to apply algebra concepts and procedures at higher conceptual levels, as a tool, and in the study of other subjects. The theory and applications of trigonometry and functions are developed in depth. New mathematical tools, such as vectors, matrices, and polar coordinates, are introduced, with an eye toward modeling and solving real-world problems.

Course Objectives

By the end of this course, WMAA students will have experience in the following topics:

- Functions and their Graphs
- Polynomial and Rational Functions
- Exponential and Logarithmic Functions
- Trigonometry
- Systems of Equations and Inequalities
- Matrices and Determinants
- Sequences, Series, and Probability
- Topics in Analytic Geometry
- Limits and an Introduction to Calculus

Textbooks

Trig/Pre-Calc will be using the following textbook:

Larson: Precalculus with Limits

WMAA will only have a classroom set of this textbook. Therefore, a PDF of the textbook will be made available to all students as an at-home resource. Students may have the option to check out a textbook to take home if possible.

Grades

A percentage system is used to calculate your grade for Trig/Pre-Calc. Listed below are the different ways you will be assessed throughout each semester.

Chapter Tests – Tests will be given at the end of most chapters, and may include vocabulary, short answer, multiple choice, and algebraic reasoning.

Quizzes – Quizzes will be given periodically throughout the semester, and may include vocabulary, short answer, multiple choice, and algebraic reasoning.

Projects – At least one project will be assigned during the year. Students will be given ample advance warning, clear and concise directions and time both in and out of classtime to work.

Writings – At least one writing assignment will be assigned during the year. Students will be given ample advance warning, clear and concise directions and time both in and out of classtime to work.

Homework Assignments – Homework will be assigned when a sufficient amount of material has been covered. Homework is a neccessary step in the process to mastery and success is not guaranteed without quality, independent practice on the students' part. Homework will be collected for a grade based on correctness. It is expected students complete homework when it is assigned.

Chapter tests, projects, and papers will comprise 75% of your coursework grade. Quizzes, and homework assignments will comprise the other 25% of your coursework grade. Both of those grades will then be combined and will count for 80% of your semester grade. The semester exam will count for the final 20% of your semester grade. Please contact Mrs. Walker if you have any questions regarding this structure.

The final semester grade will be used in determining a student's grade point average (GPA).

West Michigan Aviation Academy Grading Scale		
Letter Grade	**Percentage**	**Grade Point**
A	95-100%	4.0
A-	90-94%	3.7
B+	87-89%	3.3
B	83-86%	3.0
B-	80-82%	2.7
C+	77-79%	2.3
C	73-76%	2.0
C-	70-72%	1.7
F	0-69%	0.0
INC	Incomplete Coursework	N/A

Character

Additionally, students will be evaluated on their character choices for each course. The character evaluation will reflect student mastery of WMAA's critical character expectations: be respectful, be responsible and do your personal best.

3 – Exceeding Expectations
2 – Meeting Expectations
1 – Currently Not Meeting Expectations

Gradebook – Available Online

Powerschool: http://ps.westmichiganaviation.org/public/

Necessary Materials

1. A college-lined notebook (at least 200 pages)
2. A folder or three-ring binder to hold any notes, handouts or assignments.
3. Pen or pencil
4. A TI-83 or TI-83+ or TI-84 Graphing Calculator

Attendance and Tardies

Absence: It is very important to be in class, as each day's content builds on the previous day's work. When absent, it is the student's responsibility to get all missed work and set up a time to meet with Mrs. Walker if necessary in order to clear up any confusion. For each day of class missed, students are allowed one day to make up the missed work. All work turned in late must be accompanied by a note explaining why it is late (so that I know that it is late due to absence). Any time a student misses class, it is encouraged that they check the course website to see what was done in class that day so that they are aware of what will need to be done to catch up.
Tardiness: All students are expected to be in their assigned classroom before the final bell sounds. Any student that comes to class after the bell, but within the first 10 minutes of class will be marked tardy for that class period. Any student arrives more than 10 minutes late to a class will be considered absent for that class period. Habitual tardiness will be dealt with between the teacher, the student, and his or her family. If the problem persists, further conversations will occur between Mr. Fisher, the student, and his or her family to determine a plan of action to correct the behavior.
Academic Dishonesty: Academic dishonesty including, but not limited to, cheating and plagiarism will result in the student receiving no credit for the assessment. Restoration will be at teacher discretion.

Coursework

Communication will occur frequently between teachers, students, and their families to determine an action plan for missing work.

- *If an assessment is not turned in on time, a zero will be used until the assessment is submitted or the unit has ended. This zero will be accompanied in the grade book with a "missing" marker so that the reason for the zero is evident.*
- Late homework may be completed for up to 80% of the original credit.
- **After a chapter has been completed, no late work will be accepted for that chapter.**

Academic Integrity

We should each strive to live lives full of honesty and integrity. Others have worked hard for the material they create. All work in and out of class should be your own, and, when necessary, sources should be cited. Anyone involved in cheating or plagiarism may have the opportunity to redo the assignment, and other appropriate actions will be determined at the time of the offense. Academic dishonesty will always be accompanied by communication home.

2016-2017
Trig/Pre-Calc

Welcome to Trig/Pre-Calc

Daily Routine:

1. Take out your homework and notes for the day. Once a week we will have a question of the week for you to do at the beginning of the hour.
2. Spend 5-10 minutes answering questions over the homework.
3. Listen, take notes, and ask questions during the new lesson.
4. Remaining time will be used for homework and one on one questions.

Note: There may be a day we do an activity, but it will be announced in advanced.

How to know what we will be doing in class:

- I will have the weekly schedule on the board.
- You will have a paper copy of all the assignments and the lessons they correspond to.
- My class website has a calendar that lists all the assignments due dates.

Expectations of all students:

1. Be seated when the bell rings and immediately take out the necessary materials.
2. The responsibility of learning the material is yours…be prepared…ask questions…take notes…
3. Attendance is critical. When you miss a class it is YOUR responsibility to obtain the assignments and make up the reading and work missed.
4. Be POSITIVE!! I know this is really difficult material, but if you keep a positive attitude it will be easier to learn.

Homework Policy:

- Your homework must be completed WITH WORK in order to receive full credit.
- You will be given a homework portfolio that must be completed the day of review over the unit.
- If homework is turned in late, you can earn up to 80%.
- Homework turned in after a test day will NOT be accepted for credit.

Quiz/Test Policy:

- All quizzes and tests must be completed in class. (some exceptions do apply)

- There will only be RETAKES ON TESTS:
  - The retake must be done outside of class
  - You will be required to complete a retake work packet and meet with me to go over why you want to retake a test.
  - The Retake: you must redo the problems you lost points on from the original test
  - The score from the retake will replace your original score. You can earn up to 100% on a retake test.
- You will only be given **1 Retake** for the year.

Extra Help:

- My classroom EVERYDAY:
  - Before school at 7:15am
- My classroom on Tuesday, Thursday, and Friday (Room 205):
  - After school until 4:15pm

Expectations of me:

- I will put forth my best effort to provide you with instruction that allows you to learn and master the objectives.
- I will treat all students with respect.
- I will have a positive attitude.
- I will do my best to teach all learners.

Classroom website:

- I will post assignments, blank copies of notes, and any extra resources to the website. www.mrswalkerwmaa.weebly.com

There are several ways to contact me if you need help or to let me know of any concerns.

My email is ewalker@westmiciganaviation.org
My school phone is 616.446.8886 ext. 130
My website is www.mrswalkerwmaa.weebly.com

2016-2017
Trig/Pre-Calc

Trig/Pre-Calc Parent Information (for parents to keep)

My name is Elizabeth Walker and I will be your student's teacher in Trig/Pre-Calc this year. This is my second year teaching at West Michigan Aviation Academy. I earned my undergraduate degree from Central Michigan University in December of 2014. I grew up on the east side of the state and now live with my husband and two dogs in Wyoming. Working with students and teaching math is my passion. I am very excited to get to know and work with your student this year!

There are a couple of ways to contact me if you need help or to let me know of any concerns.

My school phone is 616.446.8886 ext.130. My email is ewalker@westmichiganaviation.org
You can also view any information y our student accesses via my website at www.mrswalkerwmaa.weebly.com

Options for Help:

During school hours: Questions/Homework time in class. (I try to give students time everyday.)

Before/After school hours:

- Online access to the book: Student have access to a PDF version of the text book and are allowed to check out a text book.
- I arrive by 7:15am and I leave no earlier than 4:00pm everyday. Students are welcome to come in for help.
- My office hours will be on Tuesday, Thursday, and Friday until 4:15pm. Your student has the option to set up an appointment with me if my office hours do not work for him/her.
- Students can contact me with questions via e-mail outside these hours and I will get back to them as soon as I can. I encourage students to contact each other or stop in to see me with questions when they have them so that we can obtain a complete understanding of the material prior to moving on to the new material.

2016-2017
Trig/Pre-Calc

To be completed by parent/guardian: (return with student by Friday)

Student Name:_____

Parent/Guardian Name:_____

Mrs. Elizabeth Walker,

I have read the student syllabus for Trig/Pre-Calc

_____ I have no questions at this time about the class.

_____ I have questions at this time about the class.
Please contact me about the following:

I have read through the parent information sheet.

_____ I have no questions at this time

_____ I have questions at this time.
Please contact me about the following:

Parent/Guardian signature _____

Email address_____

Phone number_____

Best time(s) for contact:_____