

Westminster School at Oak Mountain
Pre-Calculus: 2017-2018
Mr. Chambless jchambless@westminsterknights.org

This course is an exploration into the concepts needed for Calculus. The course emphasizes competency with topics including linear, polynomial, and rational functions, systems of equations, advanced trigonometry and identities, parametric equations, polar coordinates and equations, conic sections, exponential functions, sequences and series, and combinatorics and statistics. Problem solving and rigorous thinking are emphasized.

General Schedule: (subject to adjustment for the benefit of the class)

First quarter:	Unit 1: Relations, Functions, and Graphs (Chapters 1-4)
Second quarter:	Unit 2: Trigonometry (Chapters 5-8)
Third Quarter:	Units 3/4: Advanced Functions and Graphing (Chapters 9-12)
Fourth Quarter:	Units 4/5: Combinatorics, Probability, Bits of Calculus (Ch. 13-15)

Assignments and assessments:

Homework: There will be homework given between most class periods. It will be due at the *beginning* of the class after which it is assigned.

Quizzes: We will have one quiz every week (usually on Friday) as we go through each chapter. We will not have quizzes the week of a chapter test, the midterm, or the final. The quizzes will primarily cover topics from the chapter we are studying, but will include some review questions.

Reading: Throughout the year, various books will be offered as optional reading assignments. These books will explore a mathematical concept or a mathematician. With a short written report of one of the books, a student may replace a grade to be averaged in the quiz grade category. Up to two of these may be completed by each student each year.

Tests: We will usually have two to three tests per quarter. Tests will be partially cumulative, covering concepts we have covered in previous chapters and units. Tests will be announced with sufficient time for study and preparation.

Project: Each student will complete a project, taken from the textbook (exceptions only made with teacher approval). This project will involve a written

report, a verbal presentation, a well-explained math problem, a student-produced practice worksheet, and a teaching visualization. The total point value will be 150 points, and all students will have this grade split evenly and entered in the third and the fourth quarter.

Exams: Midterm (December) – cumulative for the **semester**
 Course Final (May) – cumulative for the **year**

Grading:	Quizzes:	(about 5 per quarter)	roughly 100 to 150 points per quarter
	Tests:	(about 3 per quarter)	roughly 360 points per quarter
	Homework/ Classwork/ Reading:		roughly 100 points per quarter
	Project:		75 points each – 3rd and 4 th quarter
	Midterm:		10% of 1st semester grade
	Final:		10% of 2nd semester grade

Textbooks:

Students will be issued their textbooks at the beginning of the year, and will be responsible for returning them in the condition in which they were issued. Students can choose to be able to access the textbook online. The way to do this will be detailed in class.

Classroom Expectations:

- Be on time.
- Come prepared with needed materials.
- Be respectful of the teacher. Be respectful of one another.
- Do not interrupt the teacher or one another.
- Do not do outside work in class.
- All the rules of Westminster School will be upheld.*

Plagiarism and Academic Honesty:

We do not tolerate plagiarism (taking someone else's work as your own) or cheating of any sort. Either will result in an automatic zero for the assignment. Further consequences may be deemed appropriate by the administration.

Late Work Policy:

All homework will be due at the start of the class after which it was assigned. You may turn it in the next day for half credit. Parts of the project will not be accepted late. All other assignments (except for those missed due to emergency) will be docked 11% per day.

Absences:

If you are absent for any reason, it is **your** responsibility to get information, notes, and assignments that you missed. You may ask me any questions or for help during tutorial.

