

**Westminster School at Oak Mountain**  
**Calculus 1: 2017-2018**

**Mr. Chambless**      [jchambless@westminsterknights.org](mailto:jchambless@westminsterknights.org)

This year, we will be studying the following concepts and skills:

- Limits, Differentiation, and Integration
- Application of the above skills (solving word problems and real-world problems)
- General problem solving techniques and approaches.
- Relevant topics from the history of mathematics.
- Ways the study of math teaches us about the wisdom of God revealed in His creation.

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

|                 |   |
|-----------------|---|
| First quarter:  | Limits, Functions, and Calculus Foundations   |
| Second quarter: | Differentiation, Applications, and Techniques |
| Third Quarter:  | Integration, Application, and Techniques      |
| Fourth Quarter: | The AP perspective, review, application       |

**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**

|                 |                               |                       |  |
|-----------------|-------------------------------|-----------------------|--|
| <b>Grading:</b> | 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 <sup>th</sup> quarter |
|                 | Midterm:                      |                       | 10% of 1st semester grade                        |
|                 | Final:                        |                       | 10% of 2nd semester grade                        |

**Advanced Placement Testing:** Calculus 1 students are free to take the AP Calculus AB test, but this is optional and they are not required to. There will be an AP preparation aspect to our class to serve those who choose to take the test. Due to the fact that this preparation is review of and extension of our textbook-based study, we feel this approach serves all students.

### **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.

### **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.