East Gaston High School AP Calculus AB Spring 2018



Do not worry about your difficulties in mathematics; I can assure you mine are still greater. ~Albert Einstein

**Course Overview** – Calculus is the study of the derivatives and the integrals of different types of functions and the application of each. More specifically, we will cover material per the Calculus AB topic outline provided by the AP® Calculus Course Description. More information is available at www.apcentral.collegeboard.com.

Course Goals: Students will be able to...

- 1. Use different techniques to find, communicate, and explain derivatives of functions and solve applications involving them.
- 2. Use different techniques to find, communicate, and explain integrals and solve applications involving them.
- 3. Express mastery of calculus concepts using graphical, numerical, analytical, and verbal methods in theoretical and real-world problems.
- 4. Succeed on the AP® Calculus AB or BC exam on Tuesday, May 15<sup>th</sup>!

# **Course Topics**

- 1. Limits and Continuity
- 2. Differentiation
- 3. Applications of Differentiation

### Materials

- A desire to learn, even when faced with a challenge.
- Textbook Calculus of a Single Variable, 9<sup>th</sup> ed., by Ron Larson and Robert P. Hostetler.
- TI-84 calculator.
- 3-ring binder. Keep up with all notes and assignments in chronological order.
- Lined and graphing paper, pencils

### **Classroom Expectations**

- 1. Be Prompt
- 2. Be Prepared

- 3. Be Productive
- 4. Be Respectful

# Communicating with Ms. Anthony

- You are encouraged to access my website daily (<u>www.mathwithmsanthony.weebly.com</u>) and/or Google Classroom (code: xtbsjz) for information and assignments.
- To sign up for Remind notices, text @2nd2905 to 81010 or check my website for instructions.

# **Grading Policies**

- Tests/Projects 60%
- Quizzes 20%
- Homework 20%

**Tests** – Test will be given at the culmination of each unit. In an effort to prepare students for the AP exam, tests will contain both multiple choice and short answer questions. Any student absent on test day should expect to take the test the day they return. Any student absent on the review day before the test is not excused from taking the test on the scheduled test day.

- 4. Integrals
- 5. Applications of Integrals
- 6. Transcendentals

**Quizzes** – There will generally be 1 - 2 quizzes per unit. These quizzes may be announced or unannounced. If a student is absent on the day of a quiz, they must schedule a time to take the quiz as soon as possible, either before or after school, or during lunch.

**Homework** – One must practice mathematics in order to learn mathematics. Because of this, homework will be assigned each day and will be significantly greater than in a normal class. You should expect to spend approximately 45 minutes each night on homework. It is your responsibility to ask questions in class or after school! I will do whatever I can to help you be successful, but you must take the initiative.

Your final grade will be directly affected by the amount of time you spend working on Calculus outside of class. I guarantee it!

### Homework Policy –

- Homework assignments are due 24 hours after having been assigned. Although you are encouraged to work together on assignments, copying the work of other students is unacceptable.
- Because all answers to assignments are available via the Internet, a mere answer is insufficient. All support work for the problems is to be shown clearly. No credit will be given for an answer without the supporting work.
- You will earn a minimum of three homework grades per unit.
  - o For each nightly assignment, you can earn up to 4 points for completion. A percentage grade will be calculated at the end of each unit based on your total points accumulated.
  - o You will have one cumulative problem set per unit that will be graded for accuracy. You may ask for assistance for these during after school tutoring or independent work time.
  - o Each unit you will be assigned a set of objectives to complete via Khan Academy. You will earn a percentage grade for each unit based on the number of objectives in which you achieve the practiced level.

**Tutoring** – I will be available after school for tutoring or extra help as many afternoons as possible from 3 - 4. Check each Monday for an updated list of tutoring days.

**Restroom Policy** - Because teacher directed instruction is vital to your mastery of the material, you will be allowed to use the restroom during non-instructional time. The only exception to this rule is if there is an Active Health Plan on file in the front office. Students are allowed to use the restroom during all class changes and to/from lunch. Misuse of this policy may result in revocation of privileges.