AP Calculus AB
Course Number: 155251-155252
1 credit (2 semesters)
Pre-requisites: Precalculus

Instructor: Keely Baker
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Conference Periods: 1st block and B4
Phone: 940-369-1139
Tutorials/Study Sessions: Mondays and Wednesday before school or by appointment

Course Objectives and Goals: To facilitate student learning equivalent to one semester of college Calculus. In addition, students should learn strategies for college success in many different disciplines and be prepared to take the Advanced Placement Calculus AB test with the goal of earning college credit.

Approved resources: *Calculus of a Single Variable;* Larson, et al., Graphing Calculator **Textbook** (provided)

Rules/Class Procedures: Please be Courteous at all times!

We will have an assignment every day, even on test days. These will be counted as homework grades and will be graded based on the following scale:

Quizzes will count as two homework grades, and we will have at least one quiz each week.

Tests will be the biggest part of your six weeks average; please see the grading policy below. Projects will also count as Test grades.

Supplies/Materials: A 3-ring binder, paper for notes and homework; a pencil is recommended, but pen is acceptable; a graphing calculator (if you do not own one, one will be checked out to you)

**** It is strongly recommended that each student obtain his or her own calculator. The College Board expects students to be able to use the graphing calculator for specific skills on the AP Test, and students will be able to use the same calculator throughout their high school careers and into college. The TI-84 Plus (from Texas Instruments) is the calculator used in class and is effective for the AP test; however, many students prefer the TI-89, and that is also fine. If you buy a calculator, make sure it is one that you are comfortable with and can use with ease.*

Grading Policy: (*As listed in the Student Code of Conduct*) Grades will be on a sliding scale. They will start the first six weeks at 50% minor (homework) and 50% major (tests) grades. Each six weeks, major grades will become ten percent higher through the fourth six weeks. Grades will be 20% minor and 80% major the entire second semester. (On a more comforting note, by the end of the fifth six weeks almost all assignments will be tests, some take home, some in class.)

Important Dates:

Wednesday Practice Exam: April 16, 2014 from 5-9 PM
AP Testing dates: AB and BC Calculus take the AP exam on May 7th

Scope and Sequence:

I. Functions, Graphs, and Limits
- *Analysis of graphs*
- *Limits of functions*
- *Asymptotic and unbounded behavior*
- *Continuity as a property of functions*

II. Derivatives
- *Concept of the derivative*
- *Derivative at a point*
- *Derivative as a function*
- *Second derivatives*
- *Applications of derivatives*
- *Computation of derivatives*

III. Integrals
- *Interpretations & props of definite integrals*
- *Fundamental Theorem of Calculus*
- *Techniques of antidifferentiation*
- *Applications of antidifferentiation*
- *Numerical approximations to definite integral*

This is what the College Board deems essential to the first semester of a college sequence. Our course covers additional items and not necessarily in the order above. For an idea of how we are headed chronologically, I refer you to the table of contents.

Also Recommended:** I recommend that each student purchase an AP Review book (Princeton, Barrons, Arco, Kaplan, etc.) that they can use for extra practice. ***Practicing problems for the AP test should begin immediately for the greatest success on the AP test in May***.

New Information about taking the AP Test/Final Exemptions: Students that take the AP Calculus AB test in May **and** have a second semester average of 85% or better will be able to be exempt from the Final for the course.

Please sign, detach, and return the bottom portion of this form.

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"I, _____, *parent/guardian* of _____ have read

and understand the syllabus for AB Calculus. "

Student:_____ _____
Signature Date

Parent/Guardian:_____ _____
Signature Date

Parent's email address:_____