**AP Calculus Course Syllabus 2018/2019**

Teacher: Sharron Gibson

E-Mail: [sharron.gibson@sccboe.org](mailto:sharron.gibson@sccboe.org)

Phone #: 205-594-7943

Planning Period: Club Period 1:33 – 1:58 p.m.

6th Period: M - F

AP Exam Date: May 14, 2019

AP Exam Cost:

Study Sessions: TBA

AP Mock Exam: March 15, 2019

**AP Calculus AB:**

* This is a college level course that covers the material in a college Calculus 1 class and more. The goal of this course is to prepare students for success in post-secondary mathematics classes by achieving a thorough understanding of Calculus concepts.

**Resources and Materials:**

* Textbooks, Larson Calculus and Rogawski’s Calculus for AP
* mastermathmentor.com (Stu Schwartz’s notes for AB Calculus)
* TI-84 Graphing Calculator
* Organized Notebook with Dividers
* Pencils, Highlighters, etc.
* Paper (Notebook paper and graphing paper)

**Course Outline for AP Calculus:**

* **1st 9 weeks**
* Limits (2 weeks)
* Mechanics of Derivatives, f, f’, f”, PVA, AROC and IROC, L’Hopital’s Rule (6 weeks)
* **2nd 9 weeks**
* Implicit Differentiation, Related Rates, Inverse Derivatives (2 weeks)
* Tangent Line Approx., f, f’, f”, IVT, MVT, EVT, 1st and 2nd Derivative Test Optimization (5 weeks)
* Mechanics of Integration (3 weeks)
* **3rd 9 weeks**
* Area, Riemann Sums and Trapezoidal Rule, FTC (2 weeks)
* Accumulator Functions, Theorems about Definite Integrals (3 weeks)
* Area Between Curves, Volumes by Revolution, Volumes of Cross Sections (2 weeks)
* Differential Equations and Slope Fields ( 3 weeks)
* **4th 9 weeks**
* Mock Exam
* Review for AP Exam
* AP Calculus Exam

**Grades:**

* Grades will be calculated as follows:
  + Test/Projects – 85%
  + Homework/Classwork/Quizzes/Notebooks/etc. – 15%

**Course Policies and Expectations:**

1. You need to spend at least 30 minutes a day outside of class studying and doing homework.
2. Exams will be given about every 2 weeks. Exams will include multiple choice and free response questions. You will be required to finish the test in the time frame. You will not be allowed to work after class ends or come back and finish a test. The AP Exam is a timed test. Therefore, you are expected to finish all exams in a timely manner.
3. At the end of each nine weeks, you will be taking a nine-week test and it will be comprehensive. Remember that the AP Exam is a comprehensive test on material from the entire year. The nine- weeks will help prepare you for the AP Exam.
4. I will call on you occasionally to present a problem to the class. Everyone should be prepared to participate in class.
5. You are required to use a graphing calculator in this course and on the AP Exam. Each of you need to have one that you can use at all times. We will not rely on them heavily but being able to use them proficiently is required.
6. A mock exam will be given on March 15, 2019. It is imperative that you take this exam. It helps immensely in your final preparation for the AP Exam. Again, taking this practice test is NOT optional. (100 point grade)
7. Make-up work will be accepted for excused absences only. It is your responsibility to get the missed work and to make-up the work within the two days that are allowed.
8. Please sign up to receive text messages via the REMIND app. To receive messages via text, text @bgbc4d to 81010 or to (334)649-3941. I use this as a tool to communicate on a regular basis.
9. You are required to take the AP Exam in order to receive the extra quality point and the 10 points added on to the end of year numerical average.
10. Tutoring will be offered twice a week - please do not hesitate to attend. I do not want you falling behind with any concept. It is imperative that you do your homework and stay on top of everything.
11. During the fourth nine-weeks, I will be encouraging everyone to come for tutoring on a regular basis. At this point, we will be preparing for the AP Exam and the extra study sessions have proven to be very helpful to students in the past. These extra sessions will also earn you some extra credit.
12. I am very excited about our upcoming year! We are on a Path to a “5”!!!!!!!!

Student signature:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Parent signature:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Parent E-mail: (Please place one letter/symbol per box.)

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |