**Fairchild Wheeler Interdistrict Magnet School Mission Statement**

Our mission is to create a culture for passionate investigators to develop solutions for the global community.

**Aero/Hydrospace Engineering Research High School Mission Statement**

Our mission is to educate the nation's future leaders in the science and art of the physical sciences and aerospace engineering. Further, we seek to expand the frontiers of engineering science and to encourage technological innovation while fostering academic excellence and scholarly learning in a project based learning environment.

**Course Description**

**Course Name:**  Calculus

**Prerequisites:** Successful completion of Pre-Calculus

**General Description of Course Content:** This course will cover the basic foundations of Calculus. It will prepare you to take ECE Calculus.

**Assessment:** Students are evaluated by their performance on tests, quizzes, exam, and class projects.

**Materials:**

1. Pencils
2. The preferred calculators are the **TI-Nspire** calculator because they will be used throughout your student’s educational careers. Each student will have access to a TI-Nspire while at school, however, any other calculator may be used both in school and at home..

**Notebooks:**

You will need a **notebook (preferably a graphing notebook)** or **three ring binder,** **loose leaf paper,** and **graph paper**. Your notebook should be in date order with the oldest material at the front of each section.

**Extra Help:** Extra help will be by appointment only. Prior notice is required to stay after for extra help.

**Syllabus (Tentative)**

1/30-2/2 Instantaneous Velocity Project

2/6-2/9 Limits and Continuity

2/10 Limits and Continuity Quiz

2/13-3/17 Roller Coaster Design Project

2/24 Derivatives Check-Up 1

3/8 Derivatives Check-Up 2

3/10 Derivatives Quiz

3/20-3/31 Optimization Project

3/30 Limits and Derivatives Test

4/3-4/21 Roller Coaster Structure Project

4/18 Integral Check-Up

4/24-5/4 Parametric Equations

5/5 Parametric Equations Quiz

5/8-5/19 Volume Project

5/23 Integrals Quiz

5/31 Limits, Derivatives, Integrals, and Parametrics Test

**Grading:**

* Tests and Quizzes: 40%
* Projects: 40%
* Homework and Classwork: 20%

**Tests and Quizzes:** Tests will be administered at the end of each unit while content quizzes will be given regularly throughout a unit. The quizzes are designed to motivate you to stay current with the material and seek help if needed.

**Homework Assessments:** Homework is intended as practice for you to refine your knowledge of the concepts covered in the class. Homework will be assigned each week and will be due by Monday of the following week. The penalty for not doing each week’s homework is a zero. Homework will be collected each week and the grade will be based on completeness and effort. Homework will be graded out of 10 points per week.

**Final Exam:** The final exam will be given at the end of the semester and is worth 20% of your final grade.

**Extra Credit:** There is no designated extra credit for this class. There may be chances to earn extra credit on some assignments throughout the semester.

**Make up Work:** The absent student is responsible for all work missed. This includes absences for school related activities.

* 1. Get notes from a fellow classmate or from the website
  2. Weekly homework is due each Sunday night regardless if you missed any time in class. The penalty for not doing the homework is a grade of a zero.
  3. Make-up exams and content quizzes will be given at the teacher’s discretion. There will be no retakes if they have not completed the retake within **5** school days or original test/quiz date.

**Contact:** Email: [dviesto@bridgeportedu.net](mailto:dviesto@bridgeportedu.net)

Website: dviesto.weebly.com

Please return the bottom of this page signifying that you have read and understand the syllabus.

Student Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Student Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Parent Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Parent Email: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Parent Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_