



# **Advance Placement Calculus BC**

Grand Haven High School Math Department Mr. Mousseau

# **Description of the Course:**

This course is taught both as a new field of math study and as a culmination of secondary math track. Previous skills are synthesizing into the mathematics of motion, curves and solid. A strong historical narrative is woven through the course and reinforced by student writings. Preparation for the national Advanced Placement test given in May is a prime focus of this course.

## **Standards taught:**

The standardized Advanced Placement curriculum is emphasized in the text and teaching of this course. Topics taught in BC Calculus meet that which is taught in most first AND second semester college calculus courses. The first semester of AP Calculus BC covers all of the material from two semesters of AP Calculus AB.

## **Second Semester Topics**

Chapter 8: Sequences, l'Hopital's Rule, and Improper Integrals Chapter 9: Infinite Series Chapter 10: Parametric, Vector, and Polar Functions

Review for the AP Calculus BC test given in early May: four to six weeks

Introduction to Hyperbolic functions with calculus

Semester Grade: 80% of grade Semester Exam: Covers Chapters 1-10 (20% of grade)

### Materials needed for class:

- Writing utensil of your choosing. This will not be provided
- A calculator should be brought to class every day. A graphing calculator (such as a TI-84) is strongly recommended. If this is a financial hardship, please see the teacher for other arrangements.
- A spiral notebook for notes, another for homework and a three-ring binder is recommended but not required.

## Testing (60%)

Beta Test	20% of Semester Grade - test taken in the space of one class period $*a$ score of 95% or higher on the $\beta$ - test can be used in lieu of Gamma Test			
Gamma Test	% of Semester Grade - test taken in the space of one class period two days after the Beta t.			
Quizzes (25%)				
Alpha Test	10% of Semester Grade - take home test given at or near the beginning of each chapter. Due on Beta Test Day.			
Quizzes	5% of Semester Grade – One quiz will be given every two weeks or so, usually on Tuesdays These are normally announced (but do not have to be) a day or two in advance.			
Projects	10% of Semester Grade – These can include group work, writings, or other projects assigned during the semester.			

#### Homework and Notes (15%)

Notes	5% of Semester Grade - handed in as a unit the day the Gamma Test is given		
Homework	10% of Semester Grade - handed in as a unit the day the Beta Test is given. These assignments will be graded on completion, not correctness. Answers for homework are available in class and online. Homework Volume will be and graded as follows: $3$ = all done, $2$ = mostly done, $1$ = some done, $0$ = little or none done.		
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#### **Grading Scale:**

100 - 93 A		76 - 73	С	
92 - 90	A-	7	2 - 70	C-
89 - 87	B+	6	i9 - 67	D+
86 - 83	В	6	6 - 63	D
82 - 80	B-	6	62 - 60	D-
79 - 77	C+	E	Below 60	F

I grade on total percent on tests, homework and notes for total grades. Therefore, you should strive for every point possible on all assignments and tests because an 'F' score of 42% will drop your grade much more than an 'F' score of 58%

#### Deadlines for turning in homework, alpha tests, AP review homework, and notes

- due at **BEGINNING** of the test hour for full credit
- three assignment points deducted if handed in before 3:00 p.m. on test day
- half credit if turned in before 3:00 p.m. the day after initial due date
- no credit given for notes or homework turned in more than two days late without prior approval from the teacher

#### Making up a test from an excused or exempt absence

- If the student is absent on the day of the test, they will be required to take the test within 2 days as stated in the school handbook. If special circumstances have occurred, the student should meet with the teacher to arrange appropriate times for make-up.
- The make-up test may be given during class time or outside of class at the discretion of the teacher. If deemed necessary, the student will need come in before, lunch or after school to make up the test.