

Calculus Course Syllabus

Course Title: Calculus

Grade Level(s): 12

Instructor: Jason Dias
Plan Period: 1st hour
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Course Description:

Calculus is designed to prepare students for post-secondary education. In this course, we will study three major areas; limits, derivatives, and integrals. A solid Algebra and Geometry background is required in order to do well at this level. The course will also explore computer programs as well as graphic calculators. Calculus will move at a slower pace than Probability/Statistics because of the difficulty of the material.

Course Objectives:

- CAV5-32 The student will find the indicated limit of an expression. 3.4
- CAV5-34 The student will find limits at infinity and infinite limits in a function. 3.4
- CAV5-43 The student will find the slope of the tangent line at $x=a$, from a function. 3.4
- CAV5-44 The student will find the equation of the line tangent to the function $f(x)$ at $X=a$. 3.4
- CAV5-51 The student will differentiate a polynomial and trigonometric function or its inverse. 3.4
- CAV5-55 The student will differentiate a function that is the sum, product, and/or Quotient of several functions. 3.4
- CAV5-121 The student will evaluate, from a to b , a definite integral of $f(x)$ with respect to x . 3.4
- CAV5-3 The student will determine the range and domain of a polynomial and Trigonometric function. 3.1, A2B12

Instructional Strategies/Learning Activities:

Lectures and guided practice: Lectures will be a part of everyday class. Lectures will cover the new material along with example problems done as a class.

Cooperative Learning: Other activities done in class will be critical thinking projects as well as tedious word problems. These will be done in both groups and individual practices.

Student Grade Will be Based Upon:

Grades will be solely based upon test scores. Tests will be given according to the topics covered. The lowest test score for each quarter will be dropped. Quizzes will be given between each test and the average of those quizzes will replace the dropped test score for the quarter. A project will be given for second semester as this score will replace the lowest test score. Homework will be assigned and graded but will not count toward your overall grade.

Make-up work /NO LATE WORK!!!!

Each student is responsible for his/her own work. Missed work must be completed within 2 days of the day missed or before a chapter test or the points will not be rewarded.

Be courteous to others and always have a positive attitude.

Classroom Rules/Expectations:

1. Be in class on time
2. Respect others and be polite
3. Bring all materials to class
4. Follow directions