

Course Name: Fall 10-Calculus (which is the continuation of Spring 09 PreCal class)

Objectives: This course provides students with the following topics:

- Introduction to calculus
 - (1) Limits
 - (2) Continuous Functions
 - (3) Instantaneous rate
 - (4) Slope of a tangent line
 - (5) Definition of the derivative of a function
- Derivatives
 - (1) The power Rule
 - (2) The product and quotient rules
 - (3) The Chain rule
- Applications of derivatives
 - (1) The relative maximum and minimum
 - (2) The concavity of a curve
 - (3) The first and the second derivative test
 - (4) The curve sketch
 - (5) The absolute maximum and minimum
 - (6) Optimization problems

Attendance Policy: Students are expected to attend each scheduled class meeting. Regular attendance is essential to your success in this course. If you are not in class, you are responsible for the material covered.

Lecture Notes: Well written lecture notes will be posted online before or after each class. Students are required to read them before doing homework.

Homework: Homework will be posted online after each class and must be submitted it online before the next class. It will be graded and the results will be posted online. It is the essential for the students to do the homework as exercises in order to digest the material covered in the class.

Quizzes: A weekly-quiz will be given at the end of each class except the first and the last class. Each quiz is worth of 10 points. Quiz questions will be similar to the questions in the previous homework assignment. Each quiz will be graded and its score will be posted online afterward.

Makeup Quizzes: If a student misses a class, he/she can make it up within two days by printing out the quiz, work it out at home with parent's supervision, and then email it to the teacher for grading with parent's signature on the top of the quiz.

Awards: The students' grades will be evaluated based on their performance in homework assignments, quizzes, and the final exam. The course grade will be calculated as follows:

Homework assignments: 30%

Quizzes: 70%

Top three scored students will be awarded at the end of the semester.