**Course Title: Pre-Calculus/Calculus AP (AB) – Period 6 (Fall and Spring)**

 **Period 7 (Fall only)**

**Instructor: M. Chartan (mchartan@csh.k12.ny.us)**

**Textbook: Calculus: Graphical, Numerical, Algebraic ; Third Edition.**

**Finney, Demana, Waits, Kennedy.**

 **Pearson – Prentice Hall; 2007.**

**Extra Help: By Appointment**

**Course Philosophy**

This program was designed to enable more students to graduate from CSH with an AP Calculus experience, and thus provide them with a full semester college-level calculus course. Prior to enrolling in this course, these students were not participating in an accelerated math program, but over the years have been demonstrating the ability, motivation, and enthusiasm required for a more challenging and demanding math curriculum.

In order to ensure a meaningful and successful study of the calculus, from time to time, the instructor may find it necessary to include pre-calculus topics as part of the syllabus; this will be done on an “as needed” basis and students will be responsible for these concepts as well. ***Given the demands of the course, students will take two periods (back-to-back) of math in the fall semester and one period in the spring.***

**Objectives**

* To prepare students for their AP Calculus Exam in May.
* To expose students to a study of higher mathematics that will enable them to take more advanced college coursework in math, science, and engineering.
* To help students develop a sense of appreciation for the beauty and power that lies in the theories, concepts, and historical development of mathematics.
* To enhance students’ ability to use technology to explore and apply the concepts they are exposed to in class.
* To allow students time to work both independently and cooperatively in the pursuit of these goals so that they can enhance both self-reliance and the inter-personal skills that are necessary for broad success in a society and world marked by constant change .