Course Title: **AP Statistics**

Course Description: A rigorous, applied course in Statistics. This course is intended to be a student's first experience with Statistics and uses many hands-on activities and learning experiences so that students "discover" sophisticated statistical concepts. Students will take the Advanced Placement examination in May, for which college credit and/or placement may be given, if a qualifying score is achieved.

Students tend to be successful in AP Statistics if:

1. They have finished Algebra 2 with at least B. (Students who have already had Precalculus or Precalculus Honors have a bit more mathematical sophistication and so, generally do better than those who have only finished through Alg.2)
2. They are proficient in English. This class is a reading and analysis class.
3. They have a willingness to work hard. This is an EASY **AP** class - ***not*** an easy class. Students should expect to spend about 5 hours a week on outside homework assignments and projects.
4. They have excellent attendance. Many of the concepts are presented in class with hands-on activities that cannot be replicated in "make-up" work.
5. They have access to a computer at home. Sometimes there are research assignments and animated activities (JAVA applets) that provide enhanced understanding of statistical concepts. Our computer software, MINITAB, can be downloaded at home on a trial basis.

It is very applied and activity oriented. It is mathematically rigorous, but concepts are expected to be learned and understood, not merely “plug and chug.”
This course is also ideal for students who have ***not*** always been very good at math, but have a strong worth ethic and a **lot of extra time** to get help from the teacher after school. AP Statistics should not be used as a *substitute* for Precalculus. However, many students take it concurrently with Precalculus, Precalculus Honors or even Calculus and are very successful.
Course Prerequisites: Algebra 2.

Course Title: **Probability and Statistics**

Course Description: This course will be a yearlong project-based introduction to statistics that emphasizes working with data and statistical ideas. **All** computational work and graphs will be done on computers, using Minitab statistical software.

Assessment will be based on projects (when possible) where students will demonstrate proficiency of the learned concepts by producing professional quality statistical analyses and documents using Minitab and Microsoft Word.
The course helps students become more discerning about the statistics they encounter in ads, economic reports, political campaigns, and elsewhere.

Course Prerequisites: Algebra 2.

Course Title: **Advanced Placement Computer Science A**

The purpose of this course is to prepare students for the Advanced Placement Computer Science A examination, for which college credit and/or placement may be given, if a qualifying score is achieved. Students will design software to solve problems and use data structures, such as classes and arrays, to represent information within a program. Skills in defining, writing, and executing programs are developed through an individual approach that allows the student to work with both mathematical and non-mathematical problems. Java will be the programming language. All students are required to take the Advanced Placement Computer Science A exam.

All students who have the prerequisite math and intend to pursue studies requiring analytical skills would benefit from this course. Students who will major in computer science, engineering, math, science, business, medicine, law, etc. would benefit from the emphasis on analysis and problem solving.

Course Prerequisites: Algebra 1 and Geometry