

## **Troy High School Course Profile**

**Course Title:** AP Statistics

**Course Prerequisites:** Refer To Registration Presentation

**Course Description:**

The purpose of AP Statistics is to introduce the student to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. The student is exposed to four broad conceptual themes: exploring data, planning a study, anticipating patterns, and statistical inference. The curriculum stresses the development of statistical thinking. Emphasis is placed on analysis of reliability and worth of inferences made from data.

**Students entering this course should already have a mastery of the following concepts and possess the following skills:**

- Binomial Theorem and Binomial Distribution
- Permutations and Combinations
- Pascal's Triangle
- Basic geometry formulas for area (triangle, trapezoid, rectangle, etc.)
- Number sense
- Probability of Independent and Dependent events
- Probability of Compound Events
- Normal Distributions
- Linear equations, including the meaning of slope

**Workload Expectations for this course (list typical amount of homework, projects, presentations, papers, etc.):**

- Students can expect to spend 15-30 minutes per night on homework - they will be expected to complete the homework as well as read the text in addition to the work they do in class each day
- Small projects each chapter and one large project per semester
- Students must be able to justify their answers with complete sentences, analyze situations, and form logical conclusions from data sets.
- Students should also be prepared to present a topic to the entire class
- Homework quizzes will be given 2-3 times per week