

AP Statistics

Course Description: AP Statistics

AP* Statistics gives students hands-on experience collecting, analyzing, graphing, and interpreting real-world data. They will learn to effectively design and analyze research studies by reviewing and evaluating real research examples taken from daily life. The next time they hear the results from another poll or study, they will know whether the results are valid. As the art of drawing conclusions from imperfect data and the science of real world uncertainties, statistics plays an important role in many fields. The equivalent of an introductory college-level course, AP Statistics prepares students for the AP exam and for further study in science, sociology, medicine, engineering, political science, geography, and business.

This course has been authorized by the College Board to use the AP designation.

*AP is a registered trademark of the College Board.

Topics:

1. Describing Data
2. The Normal Distribution
3. Bivariate Data
4. Planning a Study
5. Probability
6. Binomials and Distributions
7. Introduction to Inference
8. t Distribution for Means
9. Inference for Proportions
10. Inference for Tables and Least-Squares
11. Final Preparation for the AP Statistics Exam

Prerequisites: Algebra II or Math Analysis

Length: Two semesters

Course Materials:

- TI-84 plus, TI-83, or TI-83 Plus Calculator
- *Barron's AP Statistics 2010*, 5th ed. Martin Sternstein (Barron's, 2010).
ISBN-10: 0764140892 / ISBN-13: 9780764140891
- *Introduction to Probability & Statistics*, 13th ed. William Mendenhall, Robert J. Beaver, and Barbara M. Beaver (Brooks/Cole, 2009).
ISBN-10: 0495389536 / ISBN-13: 9780495389538