



# AP Statistics Math Elective

WBHS

This course is equivalent to an introductory, non-calculus based, college course in statistics which is typically required for college majors such as engineering, psychology, sociology, health science, and business. The purpose of this course is to introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Topics included in the course are the organization of data, numerical descriptive measures, probability, discrete random variables and their probability distribution, continuous random variables and their normal distribution, sampling distributions, estimation of the mean and proportion, hypothesis tests about the mean and proportion, estimation and hypothesis for two populations, chi-square tests, analysis of variance, and simple linear regression. The TI-84 Plus graphing calculator will be used throughout the course. Fun statistic labs will also be completed through out the year, i.e. Spring Break Flight Trends, Probability on Fair Coins and Tacks, Simulations of disease, and many more great activities!

Course Title and Text: AP Statistics: The Practice of Statistics  
Students' Resources

- Student Text
- Activities and Projects Book
- Student CD-ROM
- Interactive Website
- Prep for AP Exam

CHECK OUT the Online Text Resource: <http://bcs.whfreeman.com/yates2e>

## First Semester

Unit 1: Test Chapters 1 Exploring Data & 2 The Normal Distribution

Unit 2: Test Chapters 3 Examining & 4 More on Two-Variable Data

Unit 3: Test Chapter 5 Producing Data

Unit 4: Test Chapters 6 Probability: The Study of Randomness & 7 Random Variable

Unit 5: Test Chapters 8 The Binomial and Geometric Distributions & 9 Sampling Distributions

## Second Semester

Test Chapter 10 Introduction to Inference

Unit 6: Test Chapter 11 Inference for Distributions & 12 Inference for Proportions

Test Chapter 13 Inference for Tables: Chi-Square Procedures

Test Chapter 14 Inference fro Regression

AP EXAM

Unit 7: Final Power Point Presentations