

Advanced Placement Statistics

What is Statistics?

Statistics is a collection of methods for planning experiments, obtaining data, and then organizing, summarizing, presenting, analyzing, interpreting, and drawing conclusions based on the data. It is a powerful analytical tool that you can use to develop more generalized and meaningful conclusions about data.

Who should take statistics? Applications of statistics are found in many areas including economics, psychology, sociology, chemistry, medicine, political science, biology, marine biology, geophysical science, physics, engineering, education and astronomy. Statistics, in the form of decision analysis, is used in business decision-making, and marketing uses statistics to analyze consumer preferences. Even the law is beginning to depend and rely on statistical analyses as evidence in trials.

Taking AP Stats can lead to 106 career areas and 32 different college majors

<https://apstudent.collegeboard.org/apcourse/ap-statistics>

Curriculum

The purpose of the AP course in statistics is to introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. They will be exposed to four broad conceptual themes. Students will be prepared to take the AP Statistics Examination in May.

1. Exploring Data: Describing patterns and departures from patterns. Chapters 1- 4
2. Sampling and Experimentation: Planning and conducting a study. Chapter 5
3. Anticipating Patterns: Exploring random phenomena using probability and simulation. Chapters 6 - 9
4. Statistical Inference: Estimating population parameters and testing hypotheses. Chapters 10 - 14

Chapters 1-8 will be covered in semester 1 while chapters 9-14 will be covered in semester 2

Course Materials

-Yates, Moore, and Starnes. *The Practice of Statistics 3rd ed...* W.H. Freeman and Company.

-TI83/83+/84/84+/89 calculators

- <http://bcs.whfreeman.com/tps3e>

- <http://apcentral.collegeboard.com/apc/Controller.jpf>

We will strive for quality in four areas this year:

1. Mathematical skills--the use of appropriate concepts, diagrams, and methods, which result in a connect solution to a problem.
2. Communication skills--written and verbal explanations that are clear and to the point.
3. Calculator skills--creating visual representations of data and using the functions available for calculating statistical information.
4. Social skills--accepting responsibility, cooperation, and showing respect for self and others in the classroom.

Top 10 Best Jobs in America

Identifying the best jobs for an individual is inherently subjective as people can have a wide range of interests and abilities. However, by accounting for certain objective factors, such as pay and job security, certain jobs stand out as better than others. Job database website CareerCast provided 24/7 Wall St. with its 2018 list of the 10 best jobs in the country.

10. Actuary
9. Operations research analyst
8. Information security analyst
7. Data scientist
6. Medical services manager
5. Statistician
4. Occupational therapist
3. University professor (tenured)
2. Mathematician
1. Genetic Counselor

Top 5 Ways to be Successful in AP Stats

5. Read the textbook.
4. Take notes in class.
3. Complete practice problems when they're assigned.
2. Take exam preparation serious.
1. Read the textbook.

- The AP Statistics Exam is 351 days away!
- There is **NO** summer work for AP Statistics. 😊
- However, you will be asked to read 25 pages the night you get your book and take a quiz the following day.