

# *AP Statistics – PHS-CC*

## *FAQs*

### **What is AP Statistics?**

AP Stats is a college level introductory course in statistics. You'll learn how to collect, analyze, and interpret data. You can earn college credit for this course.

### **Why should I take it?**

Statistics is the most widely applicable branch of mathematics, used by more people in more different areas than any other kind of math. You'll never wonder when you'll ever use this stuff!

### **Who uses statistics?**

Everyone who needs to collect and analyze data needs to understand statistics. That's every branch of science, of course. And it's also important in the social sciences (psychology, sociology, anthropology, etc.), in business and economics, in political science and government, in law, and in medicine. There's a very strong chance YOU will use statistics in college and in your career.

### **Could I take statistics when I get to college?**

Yes, and you probably will. Statistics is required for many majors, and strongly recommended for others. Many colleges now give students a choice of Statistics or Calculus to fulfill their math requirements.

### **Then why take it in high school?**

There are several advantages. Here it's a full year course so you'll have more opportunity to ask questions and really understand the concepts than at college where the course meets only 3 times a week for one semester. And you'll enter college ready to apply your skills in your first semester courses.

### **How hard is AP Stats?**

It's a college course, so the expectations are high. You'll be expected to do homework every day, and not just math problems. There is reading and writing involved. In fact, if you think math is all formulas, equations, and calculations, you'll soon find that this isn't really a math course. **It's a course in reading, analyzing, thinking, and writing clearly.**

### **Would AP Stats be my only math course?**

Probably not. Some students take Statistics as an elective, in addition to their regular math course. Others, who know that the college they will attend won't require them to take Calculus, sign up for Stats instead of PreCalc or Calculus.

### **Who can sign up?**

Anyone who has finished Algebra 2 (regular or honors) with at least a B, or PreCalc (regular or honors) with at least a C is eligible. Either you have already completed PreCalc, PreCalc H, or Calculus, or are taking one of them simultaneously. But at least as important as your math background is your willingness to do college-level work.

### **Who teaches AP Stats?**

Mrs. Bond has taught AP Statistics since it was first offered in the 2003-2004 school year and would likely be the one to teach it next year.

# STATISTICS

<http://www.amstat.org/careers/index.cfm?fuseaction=brochure>

The world is becoming more and more quantitative and data focused. Many professions depend on numerical measurements to make decisions in the face of uncertainty. Statisticians use quantitative abilities, statistical knowledge, and communication skills to work on many challenging problems.

## WHAT FIELDS EMPLOY STATISTICIANS?

One advantage of working in statistics is that you can combine your interest with almost any other field in science, technology, or business, such as:

- Agriculture
- Astronomy
- Biology
- Chemistry
- Computer Science
- Demography
- Economics
- Ecology
- Education
- Engineering
- Epidemiology
- Finance
- Forestry
- Genetics
- Health Science
- Insurance
- Law
- Manufacturing
- Marketing
- Pharmacology
- Medicine
- Physics
- Political Science
- Psychology
- Public Health
- Safety
- Sociology
- Sports
- Telecommunications
- Zoology

## WHAT JOB TITLE MIGHT I HAVE OTHER THAN “STATISTICIAN?”

- Business Analyst
- Professor
- Economist
- Software Engineer
- Mathematician
- Risk Analyst
- Quality Analyst
- Investigator
- Environmental Scientist
- Pharmaceutical Engineer
- Researcher
- Data Analyst
- Project Manager
- Manager

## HOW TO BECOME A STATISTICIAN

### In High School:

Take all of the **statistics, mathematics, science, computer,** and **English courses** you can. Many high schools now offer **Advanced Placement Statistics**, which provides college/university credit while still in high school.

You will need **mathematics** to understand the language and theory of statistics. **Scientific knowledge** will help you understand the subject matter and technical background of the problems you work on and will make you an effective problem solver. You will use the **computer** not only for calculations, but also to create visual displays of data. Command of written and spoken **English** will help you communicate the results of your analysis effectively.

## EMPLOYMENT OUTLOOK

Job opportunities in statistics are projected to remain favorable in the future. As the U.S. economy continues to produce jobs using quantitative literacy and analyses, increased numbers of statisticians are required.

The **private sector** needs statisticians in management, product quality, medicine, pharmaceutical research, medical device research, engineering, transportation, insurance, computer and data processing services, risk assessment, and marketing.

**Government agencies** employ statisticians to design, collect, analyze, and interpret data for planning and development services in agriculture, labor, education, and the census, among others.

**Colleges and universities** need statisticians for teaching, statistical research, and consulting.