

# AP CALCULUS or AP STATISTICS

## Which Course Should You Take?

### What math courses will I take in college?

In college, most students are required to take at least one mathematics course. About half of the colleges and universities require a calculus course, and the other half require a statistics course.

### What college major do I plan to pursue?

If you plan to pursue a degree in mathematics, the sciences or engineering, you will be expected to take calculus in college. If you plan to major in English, history, the social sciences, fine arts or foreign languages, then you are more likely to need a statistics course. Business majors will probably need to take both calculus and statistics. You want to choose a course that sets you up well for your college math requirements.

#### AP Calculus

Accounting  
Economics  
Chemistry  
Physics  
Computer Science  
Engineering  
Business

#### AP Statistics

Psychology  
Nursing  
Accounting  
Economics  
Social Work  
Biology  
Computer Science  
Business

### What credit or placement will I get for my AP math class?

Each college and university has a policy about credit and/or placement awarded for specific AP exams. At most schools that give credit, earning a “passing” score on the AP Calculus or AP Statistics exams results in one (or two – see below) semester of college credit. The key might be which math course you will need in your major. Check the web sites of colleges and universities you are interested in to see the minimum AP score required for credit at that institution.

### What is the difference between AP Calculus and AP Statistics?

#### AP Calculus

Graphical, numerical and algebraic  
Builds on Pre-Calculus concepts  
Computational proficiency helps  
Emphasizes techniques and applications  
TI-83/84/89/NSpire (CAS or non-CAS)

#### AP Statistics

Collecting and analyzing data  
Computation de-emphasized  
Focus on communication and interpretation  
Writing using technical language  
Design experiments and surveys  
Computer and TI-83/84/NSpire

**ONE POSSIBILITY:** Take both calculus and statistics!

# AP Calculus – Is it for you?

We live in a technologically focused society—and a society that rewards critical thinking and problem solving skills.

So, who needs calculus? Calculus is the language of Computer Science, Medicine, and Engineering. These are fields that continue to grow and need leaders.

AP Calculus is your opportunity to study the mathematics of change and how this is applied to real-life situations. Calculus is the key that opens the door to opportunities in many technological and scientific careers.

Calculus allows you to describe and shape the world around you.

## What is AP Calculus?

AP Calc is a college-freshman level math course. You'll learn about functions, limit theory, derivatives, and integrals.

## Why Should I Take It?

Calculus is a required class for engineering, computer science, and many other career paths. It will also give you a head start in college and for any competitive programs of study.

## Who Uses Calculus?

Engineers, Physicists, and Scientists use calculus. Many major courses of study in college include a calculus course. Why not be prepared?

## How Can I be Successful in AP Calc?

Like all classes you will need to complete the practice work, take organized notes, and ask lots of questions. It incorporates all the knowledge gained in Algebra, Geometry and Trig. Run like a college course, you will be expected to stay caught up at all times.

## What are the benefits of taking AP Calc?

First, it is a full-year class for a course that in college is taught in one semester. So that means you will have plenty of time to ask questions and completely understand the concepts. You will go to college fully prepared, with the advantage of having learned in small classes with the personal attention of your teacher.

## Does This Class Count as Math Credit?

Absolutely—and you have the potential to earn college credit through the AP test.

## Okay, How Do I Get In?

You can take this class as long as you have successfully completed both semesters of Pre-Calculus. You can take this class concurrently with AP Statistics.

## What if it Conflicts With Another Class?

Think of your senior classes as pre-college classes. It is time to decide to take classes that will help your future. If you have questions about this, please ask your math teacher or counselor.

## **Need More Info?**

**Come Find Out More**

**See your counselor!**

# AP Statistics – Is it for you?

We live in a new age—the age of information—and we are bombarded with that information, often in the form of raw numbers, graphs, charts, or prediction lines. Commercial television is filled with advertisements touting the newest prescription drug. Schools change entire curriculums on the strength of one experiment. Businesses and politicians make decisions based on research. Being **data-driven** is the new catchphrase.

So, who needs statistics? All college majors and career paths are supported by statistics. AP Statistics is your opportunity to learn how to produce and use data, to recognize bad data, and to make decisions with data.

Statistics allows you to drive data, rather than being driven by it.

## What is AP Statistics?

AP Stats is an introductory college course in statistics. You'll learn how to collect, organize, analyze, and interpret data.

## Why Should I Take It?

Statistics is used by more people than any other kind of math. You will *always* be able to answer the question "When are we ever going to need this?"

## Who Uses Statistics?

Everyone uses statistics, college-bound or not. Those going to college will probably take some class, some time that uses statistics. Why not be prepared?

## What Makes Statistics Different?

Statistics class won't be problem after problem in which the answer is "4" or " $x + 3$ ." There is less memorizing and more analysis with the graphing calculator. There is also a lot more writing than most math classes: in Statistics

the interpretation of the data is written up in a clear and logical manner.

## How Can I be Successful in AP Stats?

Like all classes you will need to complete the practice work, take organized notes, and ask lots of questions. Because this is an AP course, the class moves at a faster pace and you will be held accountable for staying caught up. If you are willing to put in the hard work, you should be able to succeed.

## What are the benefits of taking AP Stats?

First, it is a full-year class for a course that in college is taught in one semester. So that means you will have plenty of time to ask questions and completely understand the concepts. You will go to college fully prepared, with the advantage of having learned in small classes with the personal attention of your teacher.

## Does This Class Count as Math Credit?

Absolutely—and you have the potential to earn college credit through the AP test.

## Okay, How Do I Get In?

You can take this class as long as you have successfully completed both semesters of Algebra II. You can take this class concurrently with Trigonometry/College Algebra, Pre-Calculus or Calculus.

## What if it Conflicts With Another Class?

Think of your senior classes as pre-college classes. It is time to decide to take classes that will help your future. If you have questions about this, please ask your math teacher or counselor.

**Need More Info?  
Come Find Out More,  
See your counselor!**

