

# What is Statistics?

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## WHAT'S COVERED

The primary goal of this course is to introduce you to common statistics concepts. It will help you to understand them in a manner that is simple and uses everyday language with familiar examples. To build a house, start with a foundation. So think of this course as the foundation for more advanced and detailed statistics material that you may choose to learn at another point in time. This lesson will cover:

1. What is Statistics?
2. What to Expect

## 1. What is Statistics?

While the mere mention of statistics, like the math that used to study them, makes many people feel uncomfortable, the goal is to break it down into understandable pieces. This way you can realize just how intuitive a lot of statistics really is. The beauty of statistics is that if any subject can be applied to the world you live in, statistics is clearly it.

You can see statistics all around you every day and nearly everywhere. Whether it's in a weather forecast, polling data, or at work, statistics are commonly used to communicate what is seen in the world around us.

The key focus of the field of statistics is the study of data and information. It also looks at how to interpret and communicate that information in useful ways. One major goal of statistics is to collect reliable information, analyze it, and interpret it to learn more about the people and the world around us.

## 2. What to Expect

The goal for this course is for you to be able to not only interpret the statistics that others present, but for you to also be able to do your own analysis, and to be able to effectively communicate it with others.

In many cases, statistical methods are used to answer questions about nature and society. However, they can be applied to many different situations and contexts. Since you are constantly encountering statistics in the world, having a sound knowledge of statistical concepts can be quite useful.

## IN CONTEXT

What does it mean when a news anchor tells us that 52% of the population disagrees with what a particular political candidate says? How do they arrive at that number? What if you read that the average person carries more than \$10,000 in credit card debt? What is an average person? How do we find out how much debt he or she has? One great aspect of understanding more about statistics, how they are generated and analyzed, is that doing so can help us in all of these situations and provide us with a greater ability to interpret the meaning of the statistics that we typically encounter.

One key goal of this course is to introduce basic statistical concepts in a way you can relate to, being able to apply them to things you encounter in everyday life. Once you complete the course, you would be better prepared to succeed in a college level statistics course.



## SUMMARY

**What is statistics?** It is a subject that can be applied to the world you live in. It is all around you every day. The main focus is the study of data and information. It is also the analysis and interpretation of that information. **What to expect** from this course is foundational knowledge of statistics. It will be broken down for you in easy-to-understand pieces. You will be able to interpret statistics, analyze them, and communicate this with others.

Source: This work is adapted from Sophia author Dan Laub.