



# CIS 310: Business Data Visualization

## Overview

In this course you will learn how to build data visualizations that provide insight into the nature of the relationships of interest within the data, as well as how to build visualizations to effectively convey the insights they discover, using contemporary tools. These techniques will enable them to create knowledge that empowers data-based decision making. Visualizations will use data drawn from business operations and business-relevant societal contexts, and include temporal and geospatial data. In many ways, it can be useful to think of this course as a data-visualization-centric communication class which leverages business, data, design, and communication concepts at their intersection.

## What You'll Learn

- Identify when and what visual communication is appropriate to convey a message
- Identify enhancer and obstructer elements of good visualizations
- Recognize the fundamental characteristics of data for visual analysis
- Recognize different techniques for visually exploring and explaining data-based observations
- Build effective data visualizations in Excel and Tableau
- Use data visualizations to facilitate and enable decision making

## How to Succeed

To be successful in this course, we recommend English language fluency and computer literacy.

**Coursework must be completed on a laptop or desktop computer.** Some course tools are not compatible with 2-in-1 or hybrid laptops (such as Google Chromebooks).

CIS 105 Computer Applications and Information Technology is strongly suggested as a prerequisite for success in this course.

**Microsoft Excel is required for this course and not provided by ASU.**

## Earn College Credit

This course appears on your transcript identically to how it appears on the transcript of an enrolled ASU student.

This course satisfies 3 credit hours at Arizona State University. It is strongly encouraged that you consult with your institution of choice to determine how these credits will be applied.

In order to receive academic credit for this course, you must earn a grade of "C" or better. You have one year to add the course to your transcript.

**This course is part of the [Applied Business Analytics Certificate](#).**

## Exams and Grading

**29%**

**Homework Assignments**

**18%**

**Reflection Questions**

**14%**

**Knowledge Quizzes**

**39%**

**Application Tests**

# CIS 310: Continued

## Materials

This course makes use of open educational resources (OERs) provided within the course, **no purchase necessary**. **Microsoft Excel is required for this course and not provided by ASU.**

## Graded Assignments

Graded assignments are required and count towards your final grade. Students must submit all assignments via the course site unless otherwise instructed.

**Homework Assignments (29%):** Assignments combine written answers, graphics/diagrams and/or logic, components covering assigned lectures for the current module as well as material from prior lectures and assignments.

**Reflective Questions (18%):** Reflective questions provide opportunities for members of the class to get to know each other. They require your individual contribution to be discussed in small groups or with the whole class.

**Knowledge Quizzes (14%):** There are seven, short webform-based knowledge quizzes. Usually the quizzes are some combination of multiple-choice, fill in the blank, and short answers, that evaluate general knowledge of the content of the course.

**Application Tests (39%):** There are three application tests that evaluate one's ability to apply what has been learned in a hands-on manner (which generally means using Excel and Tableau). In these practice tests, students are asked to do several exercises where they demonstrate their ability to pull together everything they've learned prior. You must earn 85% on all application tests to earn credit for this course.

## Course Communication

All communication will take place via the discussion forums and course announcement page. There will be a discussion forum where you can post general questions, comments, and direct inquiries for the instructor and course team. Please use these forums to ensure a timely response. Your instructor will not be able to respond to email.

## Additional Information

If you have questions about Universal Learner Courses and how they work, please visit [ea.asu.edu](http://ea.asu.edu) or contact our support team at [ulcourses@asu.edu](mailto:ulcourses@asu.edu).

## Instructor led Version

### Time Commitment

This is an asynchronous, online course. This means, while you will have deadlines, you do not need to be at your computer at specific times or participate in live activities.

To be successful in this class, you must view all course pages and complete all graded work by the deadlines indicated. Also, keep in mind that "attendance" in an online course means logging into the platform on a regular basis, checking for course announcements, and visiting and participating in the discussion forums.

This 3 credit, 8 week course requires about 135 hours of work. Therefore, expect to spend approximately 15-20 hours per week preparing for and engaging in this course.

### Assignment Deadlines

Your instructional team will provide all content and learning activities on or through your course site. It is your responsibility to review all content, fulfill all assignments on time, and ask any questions you have in the designated discussion area. It is also your responsibility to determine the due dates and times for all course assignments according to your time zone. Due to the large-scale format of Universal Learner Courses, late assignments will not be accepted at any point during the course, and we cannot make exceptions.

# CIS 310: Continued

## Self paced Version

### Time Commitment

The work in this course is equivalent to an eight week course but you have one year to complete it. Please plan your goals accordingly. During this year, you are encouraged to work through the course at a pace that suits your needs.

You have one year from the date you enrolled to complete the course, and you have one year from the date you complete the course to purchase your academic credit.

### Course Resets

Self paced courses cannot be reset. If you are not happy with your grade and want to take the course again, you have two options: you may take the course the next time it is offered in an instructor led format or wait until a new version of the self paced course opens at the beginning of every academic year on the first day of class in August.

### Transcript

You will be able to add the course to your transcript **six weeks after enrolling**. Although the course is self paced, course attendance dates will be listed on your transcript. After purchasing the credits, the course will appear on your transcript in the session you **completed** the course. If you are on the cusp of two sessions and need to confirm the date of completion or beginning/end of a session, please contact our support team at [ulcourses@asu.edu](mailto:ulcourses@asu.edu).