

DATX 5803 - Data Visualization

Fall 2026 Syllabus, Section 01, CRN 42007,

Credit hours: 3

Instructor

Lucy Kerns

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Public Instructor Information

Instructor Title: Professor

Instructor Professional Qualifications: Ph. D., Mathematics, Bowling Green State University, 2006

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Course Description

5803. Data Visualization. Data visualization refers to the graphical representation of information revealed through data analysis. With the assistance of various visualization elements, we can present data in a clear and effective manner. More importantly, turning data into impactful images, we are able to gain valuable insights and intelligence that help improve our decision-making processes. This course introduces students to various types of visualization techniques like charts, tables, graphs, maps, infographics and dashboards. It emphasizes applying appropriate visualization techniques in uncovering information from data. Moreover, it will help students develop skills of data storytelling, i.e. effectively communicating actionable insights through the combination of data visualization and narratives. Prereq.: Junior standing or higher and GPA of 2.5 or higher. 3 s.h.

Course Readings

Group	Title	Author	ISBN
Optional			

No textbook is required.

The course readings are subject to change in the event of extenuating circumstances, research developments, current events, and/or to ensure better learning.

Schedule of Topics and Assignments

Week of	Reading(s)	Proposed Topic	Due/To Prepare for Class
8/24	Module 1	Introduction to data visualization	Quiz 1
8/31	Module 2	Introduction to Tableau	Assignment 1
9/7	Module 3	Data visualization best practices and data preparation	Quiz 2
9/14	Module 4	Discrete vs continuous data in Tableau	
9/21	Module 5	Basic charts	Quiz 3
9/28	Module 6	Basic charts in Tableau	Assignment 2
10/5	Module 7	Visual perception	Quiz 4
10/12	Module 8	Dashboard & stories and formatting basics in Tableau	Mid-term exam
10/19	Module 9	Visualization design	Quiz 5
10/26	Module 10	Interactive visualization	Assignment 3
11/2	Module 11	Mapping data	
11/9	Module 12	Introduction to maps in Tableau	Assignment 4
11/16	Module 13	Storytelling with data	
11/23	Module 14		Term Project

11/30	Module 14	Term Project
12/7	Finals Week	Final exam

The course schedule, policies, procedures, and assignments in this course are subject to change in the event of extenuating circumstances, by mutual agreement, and/or to ensure better learning.