

Data Storytelling for Business

BUS 3410 · 7-Week Accelerated · 3 Credits · Undergraduate

Instructor	Eric Lacy
Title	Term Professor
Department	School of Management, Business Analytics & Information Systems
Delivery	Online / Asynchronous
Duration	7 Weeks · 3 Modules
Total Points	500 points
Designed	April 7, 2026

STAGE 1 DESIRED RESULTS — WHAT STUDENTS WILL KNOW AND DO

Course Description

Students learn to transform raw data into compelling business arguments — from selecting the right chart to building an executive presentation. The course uses a progressive three-module arc: See It, Say It, Show It. Each module produces a professional deliverable.

Course-Level Learning Outcomes

By the end of this course, students will be able to:

- 1. Select the appropriate chart type for a given data set and business question
- 2. Construct a data narrative that drives a clear, audience-specific recommendation
- 3. Design accessible, WCAG-compliant data visualizations using industry tools
- 4. Evaluate data stories for accuracy, bias, and persuasive integrity
- 5. Present data findings to a non-technical executive audience with confidence

Transferable Skills

- Data-driven argumentation for business decision-making
- Audience analysis and communication strategy
- Visual design principles for professional contexts
- Executive presentation and real-time Q&A handling

Prerequisites and Assumed Knowledge

- Basic spreadsheet proficiency (Excel or Google Sheets)
- Introductory statistics (descriptive stats, distributions)
- No prior experience with Tableau or visualization tools required

STAGE 2 ACCEPTABLE EVIDENCE — HOW LEARNING IS ASSESSED

Assessment Philosophy

Every assessment produces a professional artifact. Students are not tested on recall — they demonstrate competency by doing the work. Each deliverable maps directly to one or more course outcomes and builds toward the Module 3 capstone.

Summative Assessment Map

Assessment	Module	Points	Outcomes Addressed
Visualization Critique	1 · Week 2	100 pts	Outcomes 1, 2, 4
Narrative Memo	2 · Week 5	150 pts	Outcomes 2, 3, 4
Executive Presentation	3 · Week 7	200 pts	Outcomes 1, 2, 3, 4, 5
Discussions & Participation	All Modules	50 pts	All outcomes — formative
TOTAL		500 pts	

Grading Scale

A	B	C	D / F
90–100%	80–89%	70–79%	Below 70%

STAGE 3 LEARNING EXPERIENCE — MODULE SEQUENCE & DESIGN

Design Principle: Each module introduces a new competency, applies it through practice, and assesses it through a professional deliverable. Modules unlock sequentially — completion of Module 1 is required before Module 2 opens.

MODULE 1 · WEEKS 1–2

See It: Foundations of Data Visualization

Students develop the perceptual and analytical vocabulary to evaluate and select data visualizations. Emphasis on matching data type to chart family and applying Gestalt principles to assess clarity.

Module Objectives	Weekly Activity Sequence
<ul style="list-style-type: none"> Classify data types and select appropriate chart families Apply Gestalt principles to evaluate visual clarity Critique a published visualization using a structured rubric 	<ul style="list-style-type: none"> Week 1: Read Chart Chooser Framework (Ch. 1–2) — est. 90 min Week 1: Ungraded Chart Matching Quiz — est. 30 min Week 1: Discussion — Post a data visualization you found in the wild and evaluate it using the CLEAR rubric Week 2: Complete Visualization Critique assignment — est. 3 hrs
Summative Assessment	Point Value
Visualization Critique — Analyze a real published chart: identify the data type, evaluate design decisions against Gestalt principles, and recommend one specific improvement with rationale.	100 points
Maps to CLOs: CLO 1 (Select) · CLO 4 (Evaluate) — Students select chart types and evaluate visual decisions against established design principles.	

MODULE 2 · WEEKS 3–5

Say It: Building the Data Narrative

Students move from producing visuals to building arguments with data. The SCR framework (Situation–Complication–Resolution) provides a repeatable structure for turning findings into executive-ready recommendations.

Module Objectives	Weekly Activity Sequence
<ul style="list-style-type: none"> Apply the SCR framework to structure a data story Tailor data communication for a non-technical executive audience Construct a storyboard connecting insights to a business recommendation 	<ul style="list-style-type: none"> Week 3: Watch SCR Framework Lecture — est. 22 min Week 3: Read Executive Communication in Data Contexts (Ch. 4) — est. 60 min Week 4: Draft Data Story Storyboard — est. 2 hrs Week 4: Peer Review — evaluate two classmate storyboards using the SCR rubric Week 5: Revise and submit Narrative Memo — est. 3 hrs
Summative Assessment	Point Value
Narrative Memo — Select a provided business dataset. Apply the SCR framework to build a written data story (600–800 words) that concludes with a specific, defensible recommendation for a named executive audience.	150 points
Maps to CLOs: CLO 2 (Construct) · CLO 3 (Design) · CLO 4 (Evaluate) — Students build and evaluate data	

arguments structured for executive audiences.

MODULE 3 · WEEKS 6-7

Show It: Presenting to Decision Makers

Students deliver a capstone data presentation to a simulated executive panel. Focus shifts to real-time communication: handling questions, defending methodology, and adapting the story under pressure.

Module Objectives	Weekly Activity Sequence
<ul style="list-style-type: none"> Deliver a 10-minute data presentation using an executive briefing format Respond to panel questions about data sources, methodology, and recommendations Reflect on presentation effectiveness using a self-assessment rubric 	<ul style="list-style-type: none"> Week 6: Record Dry Run Presentation (ungraded) — est. 2 hrs Week 6: Peer Q&A Forum — watch two classmate dry runs and post two questions per video Week 7: Revise presentation based on peer Q&A feedback — est. 1.5 hrs Week 7: Deliver final Executive Presentation (recorded or live panel) — est. 30 min Week 7: Complete Self-Assessment Reflection (500 words) — est. 45 min
Summative Assessment	Point Value
<p>Executive Presentation — Deliver a 10-minute data presentation on your Module 2 dataset to a simulated executive panel. Include: opening insight, data story, recommendation, and response to at least two panel questions. Submit recording + self-assessment.</p>	<p>200 points</p>
<p>Maps to CLOs: CLO 1 (Select) · CLO 2 (Construct) · CLO 3 (Design) · CLO 4 (Evaluate) · CLO 5 (Present) — Capstone module integrates all five course-level outcomes in a single live performance task.</p>	

Weekly Pace at a Glance

Week	Module	Key Activities	Due
1	Module 1	Reading · Chart Matching Quiz · Discussion Post	Discussion
2	Module 1	Visualization Critique	Critique — 100 pts
3	Module 2	SCR Lecture · Reading · Storyboard draft begins	—
4	Module 2	Storyboard draft · Peer review	Peer reviews
5	Module 2	Narrative Memo revision & submission	Memo — 150 pts
6	Module 3	Dry Run recording · Peer Q&A Forum	Peer Q&A posts
7	Module 3	Final presentation · Self-assessment reflection	Presentation — 200 pts

GenAI Workflow Note

This Course Design Document is the input to the AI workflow demonstrated in the Symposium on AI in Higher Education. The outcomes, assessments, and module sequence on these pages were fed into Claude using the CRISP prompt framework to generate: the Canvas course home page, the Canvas welcome page, three module overview pages, a Visualization Critique assignment with rubric, a Narrative Memo assignment with rubric, and a Student Communication template. Total build time with AI assistance: under 45 minutes.