

DATA SCIENCE AND ANALYTICS

DATA STORYTELLING



COURSE SYLLABUS

TABLE OF CONTENTS

TABLE OF CONTENTS	2
COURSE DETAILS	3
Duration	3
Course Description	3
Learning Goals	3
Learning Objectives	3
REQUIREMENTS	4
Course Completion Requirements	4
Software	4
GRADING	4
Assessment Scale	4
Assignment 1 Rubric	5
Assignment 2 Rubric	6
COURSE OVERVIEW	7
Class Details	7
Class Activities and Assignments	8

COURSE DETAILS

Duration

18 hours • 5 Modules

Course Description

Learners discover the power of a story and how to develop a story arc around their data goals. They will recognize that successfully communicating data insights depends on the audience of stakeholders and the story points that speak to their needs and expectations. Learners maintain a data story thread throughout their entire data analysis process as they frame their data goals with purpose.

Learning Goals

By the end of this course, you will know what makes a good data story and how to communicate data insights through a story to stakeholders.

Learning Objectives

- Examine data storytelling structure and purpose.
- Create data stories that make sense with a given data set.
- Choose the elements of a story that are the most effective for a given scenario.
- Understand the audience and how best to reach them through a story.

REQUIREMENTS

Course Completion Requirements

- Attend at least 80% of classes
- Receive a passing score (70%+) on each of the two graded assignments

Software

To complete the course, learners need the following:

- Computer with access to the internet
- Web browser
- **Excel**
- Free online accounts with **Miro** and **Tableau Public**

GRADING

Assessment Scale

Assessment	Points	% of Grade	# of Assessments	Cumulative Points
Assignment 1	60	40%	1	60
Assignment 2	90	60%	1	90
Quizzes	10	0%	3	0
			Points Possible	150

Assignment 1 Rubric

Skill	Needs Improvement	Meets Expectation	Exemplary Answer	Score
Identifying Setting	Does not contain answer, identifies the wrong setting, or identifies fewer than three setting elements correctly	Identifies at least three setting elements correctly (where more than three elements are present) or at least two elements (where three elements are present)	Identifies more than three setting elements correctly (where more than three elements are present) or all three elements (where three elements are present)	Out of 15 points (3 cases, each up to 5 points)
Identifying Rising Insights	Incomplete, undetailed, brief discussion of one focus area	Detailed discussion of one focus area with supporting details and thoughts	Detailed discussion of two or more focus areas with supporting details and thoughts	Out of 15 points (3 cases, each up to 5 points)
Identifying Aha Moment	Blank, incorrect, and unreasonable	Incorrect but reasonable	Correct	Out of 15 points (3 cases, each up to 5 points)
Identifying Solution	Does not contain an answer or incorrectly identifies the solution	Identifies solution correctly or recognizes that the materials provide no solution	Recognizes that the materials provide no explicit solution but identifies implied solution correctly	Out of 15 points (3 cases, each up to 5 points)
			Total	/60

Assignment 2 Rubric

Skill	Needs Improvement	Meets Expectation	Exemplary Answer	Score
Identifying Stakeholders and Their Types	Does not answer the question or identifies fewer than three types correctly	Identifies all three types correctly with one example of each type	Identifies all three types correctly with more than one example of each type	Out of 3 points
Identifying Amount of Time Available Based on Stakeholder Type	Provides no answer or identifies amount of time available for each type incorrectly	Identifies amount of time available for each type correctly but does not justify time estimates	Identifies amount of time available for each type correctly and justifies time estimates	Out of 3 points
Identifying Resistance Points Based on Stakeholder Type	Provides no answer or identifies resistance points incorrectly	Identifies only one logical resistance point for each stakeholder persona	Identifies multiple logical resistance points for each stakeholder persona	Out of 6 points (2 points per persona)
Identifying Stakeholder Wants Based on Stakeholder Type	Provides no answer or identifies stakeholder wants incorrectly	Identifies only one logical want for each stakeholder persona	Identifies multiple logical wants for each stakeholder persona and proposes prioritization of stakeholder desires	Out of 6 points (2 points per persona)
Planning Effective Presentations	Provides no answer, incorrectly identifies elements for communicating with each type of a stakeholder, or correctly identifies some elements but does not link these elements to solutions	Correctly identifies most elements and coherently explains how problems link to solutions	Correctly identifies all elements, coherently explains how problems link to solutions, effectively builds a story, and shows empathy and compassion for the stakeholder	Out of 72 points (24 points per persona)
			Total	/90

COURSE OVERVIEW

Class Details

#	Module Name	Lessons
01	Introduction to Data Storytelling 1	Lesson 1: Why Use Storytelling? Lesson 2: Communicating Data Insights Lesson 3: Psychology of Data Storytelling Lesson Async: Ramen Activity
02	Introduction to Data Storytelling 2	Lesson 1: Data Story Basics Lesson 2: Narrative Drives Change Lesson 3: Data Storytelling in Action Lesson Async: Finding Your Story
03	Discovering Data Insights	Lesson 1: Facts in Your Story Lesson 2: Assessing Your Data Set Lesson 3: Types of Data Insights Lesson Async: Petra's Place Activity
04	Communicating Insights to Stakeholders	Lesson 1: Developing Personas in Scenarios Lesson 2: The Charisma of Story Points Lesson 3: Reach Your Audience Lesson Async: Engaging Your Audience
05	Sharing Insights Through Reports	Lesson 1: Data Reports Lesson 2: Add a Story to a Report Lesson 3: The Infographic Story Lesson Async: Writing a Report

Class Activities and Assignments

#	Module Name	To Do Before Next Class	Canvas Assignments
DS-01	Introduction to Data Storytelling 1	Lesson 1 Activity: NASA: What Are the Chances of Another Katrina?	
DS-01	Introduction to Data Storytelling 1	Lesson 2 Activity: Two Videos	
DS-01	Introduction to Data Storytelling 1	Lesson 3 Activity: Magical Science of Storytelling	
DS-02	Introduction to Data Storytelling 2	Lesson 1 Activity: Bed Bugs	
DS-02	Introduction to Data Storytelling 2	Lesson 2 Activity: Video Game Sales	
DS-02	Introduction to Data Storytelling 2	Lesson 3 Activity: Storytelling	Submit your completed questions/answers.
DS-03	Discovering Data Insights	Lesson 1 Activity: The Saharan Solar Deal	
DS-03	Discovering Data Insights	Lesson 2 Activity: Assess Data	
DS-03	Discovering Data Insights	Lesson 3 Activity: FBI Data Set	
DS-04	Communicating Insights to Stakeholders	Lesson 1 Activity: Pet Store	
DS-04	Communicating Insights to Stakeholders	Lesson 2 Activity: Big Boss Man	
DS-04	Communicating Insights to Stakeholders	Lesson 3 Activity: Petra's Place 2	Submit your completed questions/answers.
DS-05	Sharing Insights Through Reports	Lesson 1 Activity: The Golden Blade 1	
DS-05	Sharing Insights Through Reports	Lesson 2 Activity: The Golden Blade 2	
DS-05	Sharing Insights Through Reports	Lesson 3 Activity: The Golden Blade 3	