ITIS 5434 - Data Visualization for Business Analytics Course Syllabus

Course Title: Data Visualization for Business Analytics
Course Credit Weight: 0.25 credits
Prerequisites: None

Course Details

Course Description

This course provides an introduction as well as hands-on experience in data visualization. It introduces students to design principles for creating meaningful displays of quantitative and qualitative data to facilitate managerial decision-making.

Course Learning Objectives

After successfully completing this course, you will be able to:

CLO1: Identify data types and measurement levels of dataset variables;

CLO2: Explain key design principles associated with data visualization;

CLO3: Apply basic features of data visualization software;

CLO4: Perform visual data discovery tasks including selecting appropriate chart types and representations, and identifying trends and distributions;

CLO5: Perform visual data deployment tasks including identification and use of pre-attentive attributes, and designing and implementing dashboards;

CLO6: Use visual representations of data as a basis for effectively communicating key insights;

CLO7: Apply storytelling techniques to discover The Big Idea in a dataset;

CLO8: Apply storyboarding in planning visualizations.

Contribution to Program Learning Goals

Sample:

MBA Learning Goal	Not Covered	Introduced	Taught but not Assessed	Taught and Assessed
MB1 Leadership and Collaboration				X
MB2 Communication				X
MB3 Critical Thinking and Problem Solving				X
MB4 Functional Knowledge		X		
MB5 Global Awareness		X		
MB6 Ethics and Responsible Management		X		

Learning Materials & Tools

Textbook

Knaflic, C. N. (2015). *Storytelling with data: A data visualization guide for business professionals*. John Wiley & Sons.

This textbook is available FREE through Carleton's library. Alternatively, you can access the book through the following link:

[Storytelling with Data Book](#):

a. Log-in using your Carleton username and password

b. Select "Read Online"

Educational Technology

- Students are required to have Microsoft Excel and Microsoft PowerBI downloaded on their computers.
- Students are also required to create a free VISME account: https://www.visme.co/

Course Map

Assessment Plan

Activity	Percent of Total Grade
Quizzes	10%
Assignment 1	15%
Assignment 2	15%
Assignment 3	25%
Final Project	35%
TOTAL	100%

Grading Scheme

The Carleton University grading system will be used to determine your final course grade. Letter grades correspond to the following percentages:

Percentage	Final Grade
90-100	A+
85-89	A
80-84	A-
77-79	B+
73-76	B
70-72	B-
67-69	C+
63-66	C
60-62	C-
57-59	D+
53-56	D
50-52	D-
0-49	F

Final grades in this course are determined by the course instructor and must be approved by the Dean. Grades submitted by the instructor are subject to revision and should not be considered final until they have been approved by the Dean.