

Business Intelligence and Reporting

ECON 4350/8316 - Fall 2020

Instructor Info —



Dusty White, PhD



Office Hrs: Mondays 3-5p



MH 332M



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Course Info —



Prereq: None



Remote



N/A



Online

Lab Info —



Remote



N/A



Your Computer!

Overview

The course will teach students to use Power BI Desktop to generate reports and information from data. BI software is used to inform decision-making in industries from transportation to medicine, from marketing to government, and is facilitated by rapidly increasing access to data in all industries. Students will learn to employ best practices in visualization, written, and verbal communication as they are trained to create valuable insights from data and convey those insights to stakeholders.

Material

Required Texts

Alda, Alan. *If I understood you, would I have this look on my face?: My adventures in the art and science of relating and communicating*. Random House Trade Paperbacks, 2018. ISBN: 1524781924

Software

Power BI Desktop

Microsoft Office

Other

Any other necessary readings will be provided on Canvas.

Grading Scheme

60% (45%*) Homework

20% (20%) Midterm Case

20% (20%) Final Case

N/A (15%) Project

*Grade scheme for graduate students in parentheses

Grades will follow the standard scale: >93%:A, 90-93%:A-, 87.5-90%:B+, 83-87.5%:B, 80-83%:B-, 77.5-80%:C+, 73-77.5%:C, 70-73%:C-, 67.5-70%:D+, 60-67.5%:D, <60%:F

Homework

Students will complete several reports in Power BI, as well as weekly reading assignments. Students will be asked to use their readings or reports to provide information as part of an assignment. These assignments will vary between Dashboards, verbal, and written assignments, depending on the week.

Students will be expected to record video of themselves to be submitted on a regular basis, since there will be exercises and presentations that would have occurred in class, and they still need to happen in our remote class. Students may also need to find someone to participate in those videos for some exercises. No video of students will be shared without the explicit consent of students (and any other individuals involved in the videos).

Midterm and Final Cases

Many projects in professional environments are expected to be presented verbally. Students will prepare and present verbal reports throughout the semester in order to practice and refine their verbal presentation skills. These verbal reports will emphasize the ability to convey technical information clearly and concisely.

FAQs

? What software will we use?

! In this class, we will primarily use Power BI Desktop and Microsoft Word. Based on feedback from local employers, we know that Power BI is used by many firms in the Omaha area. It is definitely worth knowing!

? Do I need to purchase the software?

! No! UNO provides Microsoft Office products at no cost to students, and Power BI Desktop is available at no cost, as well. You will just need to install each on your personal computer (or use them in the lab!).

? Why should I take this class?

! You probably already registered, but I'll tell you anyway: being able to use data to drive decision-making is one of the most in-demand skills today! If you master the skills in this class, you will master the job market.

? Will we have to write stuff?

! Absolutely. Good communication skills are critical in conveying the results of data analysis. In this class, you will practice both written and verbal presentation of content. Being able to stand in front of an audience and present, and to communicate clearly in writing, are two of the best ways to find yourself in leadership positions in your career.

You will be assigned to complete a project that utilizes the material covered to that point in the course. These projects will be designed to be open-ended, and to apply the material from this course to homeland security-focused problems. These problems will provide high-stakes opportunities for learning and growth, and your work will be presented to stakeholders who have provided the real-world problems you will solve!

Project - Graduate students only

Graduate students enrolled in Econ 8316 are expected to complete a final project using the communication techniques and software tools taught in this course. Each graduate student will propose a research question, collect the data to address that question, and prepare a Power BI dashboard, written report, and verbal presentation of his or her findings to share with the class. More details can be found on the project rubric in Canvas.

Late Work

Late work will not be accepted except where required by university policy. Covid-related delays or problems should be communicated by the student to the professor as soon as possible, so that accommodations can be made. I want to help, but I do not appreciate having to come up with solutions at the last minute, and will be more helpful if you are prompt in your communication.

Accommodations for Students with Disabilities

Reasonable accommodations are provided for students who are registered with Accessibility Services Center (ASC) and make their requests sufficiently in advance. For more information, contact ASC (Location: 104 H&K, Phone: 402.554.2872, Email: unoaccessibility@unomaha.edu).

Academic Integrity

UNO's requirements for Academic Integrity and Behavior All students are required to adhere to the highest standards of academic integrity and behavior and must satisfy the UNO Academic Integrity Policy and Student Code of Conduct. It is the student's responsibility to read, understand and abide by these policies. If I find that you have plagiarized, been dishonest in completing your assignments, or cheated on an exam or assignment, then I reserve the right to award you no points on the entire exam, project, or assignment and to report the behavior to the university. If this behavior is repeated, I reserve the right to award a failing grade, independent of your score on other assignments. Academic integrity is essential to education, and I take it very seriously.

Tell Me What You Think!

Yes, I have plans for what I will be teaching in this class this semester. If there is something that you think I am missing, and that is related to the subject matter, let me know! I am happy to modify the class to fit the interests and needs of my students, but I don't know what those needs and interests are until you TELL ME.

I Trust You

If you are having problems outside of class, let me know. I will trust you, and I will help you to find the right resources to get the help you need. Some valuable resources on campus are

- Student Resources Page (Lists many resources)
- Women's Center for Advancement (Violence, Abuse, Assault)
- Counseling and Psychological Services (CAPS) (Free for students)

Class Schedule

MODULE 1: Power BI and Data Reporting

Week 1	Welcome, Purpose of Reporting Intro to Power BI, Importing Data, Scatter Charts	Alda Chapter Intro & Chapter 1
Week 2	Bar Charts, Histograms, Customization Lab Time	Alda Chapters 2 & 3
Week 3	Creating a Dashboard, Exporting to Power BI Online Lab Time	Alda Chapters 4 & 5
Week 4	Mapping, Part 1 Lab Time	Alda Chapters 6 & 7
Week 5	Mapping, Part 2 Lab Time	Alda Chapters 8 & 9
Week 6	Blending Data Sources in Power BI Lab Time	Alda Chapters 10 & 11
Week 7	Choosing a Story to Tell, Midterm Case Lab Time (Midterm Case)	
Week 8	Lab Time (Midterm Case) Submit Midterm Report	

MODULE 2: Verbal and Written Reports

Week 9	Writing Clear Reports How Much Should I Say?	Alda Chapters 12 & 13 TBD
Week 10	Explaining Hard Concepts Clearly Practice Time	Alda Chapters 14 & 15
Week 11	Reading the Audience Practice Time	Alda Chapters 16 & 17
Week 12	Choosing the Appropriate Presentation Style Practice Time	Alda Chapters 18 & 19
Week 13	Dashboards and Live Presentations Practice Time	Alda Chapters 20 & 21

Week 14	Starting with a Question	
	Ending with a Report	TBD
	Practice Time	

Week 15	Final Case Introduction	
	Practice Time (Final Case)	[GRAD ONLY] Project Due

Week 16	FINAL CASE	Submit online prior to due date
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