ADA University
School of Business

1. Course Information

- MIDS 4700 Business analytics, 6 credits
- Fall Semester 2022,
- Instructor Name and E-mail: Dr. Hulisi Ogut, hogut@ada.edu.az
- Office, Phone and Office Hour: D313, 489, After Class or get appointment via email.
- Position in curriculum: Technical Elective for 4th year Bachelor of Business Administration (BBA) students.

2. Course Description

This course is designed to provide students with a comprehensive understanding of business analytics using SQL, Tableau, and Python. Through a combination of lectures, hands-on exercises, and case studies, students will learn how to use these tools to analyze and visualize data, identify trends and make data-driven decisions. The course will also cover best practices for data management, data visualization and data analysis.

3. Learning Objectives:

Upon completion of this course, students will be able to:

1. Use SQL to extract, filter and manipulate data from relational databases.
2. Use Tableau to create interactive dashboards and visualizations that communicate insights effectively.
3. Learn how to combine SQL and Tableau to create end-to-end report analytics that can be used to solve business problems.
4. Understand the basics of Python programming, including how to write scripts, manipulate data structures, and use libraries such as NumPy, Pandas, and Matplotlib.
5. Learn how to use Python for data analysis, including cleaning, transforming, and visualizing data.
6. Develop critical thinking skills necessary to effectively interpret and communicate data insights to decision-makers.

Course Text:

Mastering Tableau 2021: Implement advanced business intelligence techniques and analytics with Tableau, 3rd Edition by Marleen Meier and David Baldwin

4. Assessment

Homework, Projects and Cases 30%
Midterm Exam :30% (Part of the midterm will be computer based)
Final Exam :37% (Part of the midterm will be computer based)
Attendance: 3%

5. Student code of ethics

All students are required to uphold and embody the requirements and principles stated in the ADA Honor Code. You are responsible for reading the Honor Code in detail and obey it at all times during the course of your studies at ADA, as it is an institutional document which applies to all classes and other activities at ADA University.

6. Course Material

You can find course materials in Blackboard and my GitHub account.

https://github.com/ogut77/BA

7. Tentative Course Schedule

Week	Chapter	Subjects	Books
1		Course Introduction + Getting Up to the Basics- A review of the Basics	Mastering Tableau - Chapter 1
2		All About Data – Getting Your Data Ready	Mastering Tableau- Chapter 2
3		SQL	Lecture Notes
4		SQL	Lecture Notes
5		SQL	
6		+ All About Data – Joins, Blends, and Data Structures	Mastering Tableau - Chapter 4
7		Table Calculations + Level of Detail Calculations	Mastering Tableau - Chapter 7
8		Review+ Midterm	
9		All About Data – Data Densification, Cubes and Big Data	Mastering Tableau - Chapter 6
10		Beyond The Basic Chart Types, Mapping and Animation	Mastering Tableau - Chapter 8&9
11		Visualization Best Practices and Dashboard Design	Mastering Tableau - Chapter 11
12		Python Introduction and Basics	Lecture Notes
13		Data Analysis with Python	Lecture Notes
14		Data Analysis with Python	Lecture Notes
15		Review	