



ADA University
School of Business

1. Course Information

- MIDS 4700 Business analytics, 6 credits
- Fall Semester 2022,
- Instructor Name and E-mail: Professor of Information Systems Hulusi 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

Business intelligence and analytics technology is causing a paradigm shift in the way organizations convert raw data into actionable information and making data-driven business decisions based on those insight. Moreover, these tools are at the forefront of the “self-service analytics” architectures which are decentralizing analytics and breaking down IT bottlenecks for business experts. Therefore, this course will provide students with a formal grounding in data manipulation and preparation, data visualization and analytics with hands-on experience using Tableau, SQL and Python.

This course is designed to introduce data visualization as an analytical tool, a medium of communication, and the basis for interactive information dashboards. Students will learn best practices in data visualization, sharpen analytical skills, and learn how to design dashboards for use by stakeholders.

3. Course Learning objectives

- Describe the process of business intelligence and visualization.
- Distinguish between the various data types and produce actionable insights based on information derived on these data.
- Construct interactive dashboards with KPI (Key Performance Indicators) and visual reports.
- Solve a data driven problem by analyzing business analytics and making data-driven business decisions.

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% (Online attendance will not be counted)

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.

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+ All About Data – Joins, Blends, and Data Structures | Mastering Tableau - Chapter 4 |
| 6 | | Table Calculations + Level of Detail Calculations | Mastering Tableau - Chapter 5 & 7 |
| 7 | | All About Data – Data Densification, Cubes and Big Data | Mastering Tableau - Chapter 6 |
| 8 | | Review+ Midterm | |
| 9 | | Beyond the Basic Chart Types +Mapping | Mastering Tableau - Chapter 8 & 9 |
| 10 | | Visualization Best Practices and Dashboard Design | Mastering Tableau - Chapter 11 |
| 11 | | Advanced Analytics | Mastering Tableau - Chapter 12 |
| 12 | | Python Introduction and Basics | Lecture Notes |
| 13 | | Data Analysis with Python | Lecture Notes |
| 14 | | Python+Tableau Integration | Mastering Tableau - Chapter 15 |
| 15 | | Review | |