



Course program and reading list

Semester 2 Year 2024

School: Arison School of Business MBA

Data Analysis for Business Applications

Lecturer:

Dr. Roy Sasson sasson.roy@runi.ac.il

Tutors:

Mr. Ophir Betser ophir.betser@post.runi.ac.il

Course No.:	Course Type :	Weekly Hours :	Credit:
2960	Lecture	4	2

Course Requirements :	Group Code :	Language:
Final Paper	1202242	English



Course Description

Learn how to make intelligent, skin-in-the-game decisions from data, learn & develop in a world dominated by uncertainty, while leveraging access to data & technology (don't worry, we will only use spreadsheets in this class. If you want to master data-driven code, use my [Data Science Survival kit](#), all content is free there).

We have only 6 classes, yet a lot to cover. Each class will focus on one profession that crucially relies on data, their goals, the analytics methods they rely on, and data structures they use.



Course Goals

Classes were built for MBA programs which combine in-class participation and practical

hands on experience with Excel

We have only 6 classes, yet a lot to cover. Each class will focus on one profession that crucially relies on data, their goals, the analytics methods they rely on, and data structures they use.

Grading

Composition of your final grade:

1. Class participation (**active in person working with excel in class**) - 15% of the final grade. Those on Reserve Duty will get a full grade
 2. **1 HW assignment in groups** - 15% of the final grade
 3. **Exam** - analyzing real data and making a projection in the lab with time limit of an exam - 70% of the final grade
-

Learning Outcomes

Class name	Profession	Data types we will analyze	Techniques and tools
Avoiding “Lies, damned Lies, and Statistics”	Business & Strategy	Time series and marketplace (Airbnb)	Actionable storytelling with data, Available online data tools, Seasonality adjustments, Forecasting with skin in the game
“Without Data, You’re just another person with an opinion”	Finance	Stock returns, Financial reports (Netflix & Disney)	Market models, Merging datasets, rolling correlations, linear regression
“Ceteris Paribus”	Economics, Law, Policy	Legislation effects (Minimum Wage, Judge decisions, NBA Rookies, HOV	Causal inference (Analyzing human behavior), Interaction effects

lanes in Israel)

“Without an opinion, you’re just another person with data”

Product Management

Funnels, User Behavior

Key metrics and OKRs, Hypothesis formation

“A great chart is not an illustration, but a visual argument”

Marketing

Recommendation Systems (Spotify)

Clustering and Segmentation, Visualization

“If you can define and detect similarity - you can do pretty much anything”

Data Science

Many..

Introduction to Machine Learning (supervised and unsupervised learning)

Class and exercise composition:

Classes with Roy are 3 hours long, broken down into 3 X 50m sessions, followed by Q&A/ Breaks:

- 50m: The technique in a nutshell - many case studies & industry examples in slides.
- 50m: Hand-On class exercise which accounts for 15% of your final grade. (you and I deep dive using a spreadsheet and challenge each other. Please come prepared to pull up your sleeves and do some work.. pls make sure to brush up on your excel and make sure to attend the exercise classes as well).
- 55m: Extensions, advanced stuff & references for personal development & learning.

Exercises with the TA are 1hr long, and are more technical:

- 60m In depth hands-on excel, usually with a new dataset/prep for next class with Roy.
- All TA sessions will be pre-recorded and published on the course’s website.



Lecturer Office Hours

A “Recommended Reception Hour” with Roy will be scheduled, as of week 2. I will send a

list of slots for students to register. Even if you do not have a specific question to ask – let's grab a chat on Zoom for 15m and get to know each other in person.



Teaching Assistant

Ophir Betser - ophir.betser@gmail.com



Additional Notes

Classes will be recorded, but will not be zoomed live and there is no guarantee that the videos would be in high quality. active class participation is mandatory for your final grade.



Reading List

A recommended reading list will be shared at the end of each lesson. Lecture notes, datasets and videos will be shared on the course's website.