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

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**Grading**

Composition of your final grade:

1. **Class participation** (*active in person working with excel in class*) - 15% of the final 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

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**Learning Outcomes**

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<thead>
<tr>
<th>Class name</th>
<th>Profession</th>
<th>Data types we will analyze</th>
<th>Techniques and tools</th>
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<tbody>
<tr>
<td><strong>“Without Data, You’re just another person with an opinion”</strong></td>
<td>Finance</td>
<td>Stock returns, Financial reports (Netflix &amp; Disney)</td>
<td>Market models, Merging datasets, rolling correlations, linear regression</td>
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<td><strong>“Ceteris Paribus”</strong></td>
<td>Economics, Law, Policy</td>
<td>Legislation effects (Minimum Wage, Judge decisions, NBA Rookies, HOV)</td>
<td>Causal inference (Analyzing human behavior), Interaction effects</td>
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“Without an opinion, you’re just another person with data”

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<th>Product Management</th>
<th>Funnels, User Behavior</th>
<th>Key metrics and OKRs, Hypothesis formation</th>
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“A great chart is not an illustration, but a visual argument”

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<th>Marketing</th>
<th>Recommendation Systems (Spotify)</th>
<th>Clustering and Segmentation, Visualization</th>
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“If you can define and detect similarity - you can do pretty much anything”

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<tr>
<th>Data Science</th>
<th>Many..</th>
<th>Introduction to Machine Learning (supervised and unsupervised learning)</th>
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**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.

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**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.