



Course program and reading list

Semester 1 Year 2023

School: Arison School of Business MBA

Data Management

Lecturer:

Dr. Ofrit Lesser olesser@runi.ac.il

Tutors:

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Course No.:	Course Type :	Weekly Hours :	Credit:
25209	Lecture	4	2

Course Requirements :	Group Code :	Language:
Final Exam	1202235	English



Course Description

Data is an essential asset for every organization in today's complex, information-driven economy. The need for decision-making that relies on information obtained from large volumes of data can be found in both the private and the public sectors. Therefore, the management of data as a precious asset is crucial for every organization.

The primary goal of this course is to develop knowledge and required of data management skills within business organizations. It starts by examining concepts, tools, and practices of data management for structured and unstructured large data sets from the business perspective. This is followed by introducing the role of database systems which includes mass record keeping and retrieving in organized, scalable, and efficient ways while maintaining data integrity. The course continues by exploring data quality and data governance challenges. Furthermore, the implications of data management from an

organizational perspective are discussed. The use of relational databases and SQL in business environments is explained. Throughout the course, particular emphasis is put on the role of business objectives setting when making data management decisions.



Course Goals

The goal of the course is to provide participants with the most important concepts, tools, and methods for managing large and heterogeneous data in companies, allowing them to make valuable use of data in the organization.

The course aims to enable the participant to:

1. Recognize the importance and challenges of data management in the current business environment.
 2. Understand the fundamentals of data types, metadata, database, and data Integration concepts.
 3. Acquire the fundamentals of relational databases principles and SQL (Structured Query Language) programming skills for business analytics tasks usage.
 4. Recognize the use of Data Warehouse and Business Intelligence methods. Identify related data integration problems.
 5. Recognize the challenge of handling big data volume and the concepts behind NoSQL databases, NoSQL tools and products.
 6. Develop a managerial perspective of data quality and data governance challenges as well as other organizational aspects of data management.
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Grading

- 10% SQL weekly personal assignments
 - 30% Team assignment (team grade)
 - 60% Written exam
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Reading List

- Wilfried Lemahieu, Seppe vanden Broucke, Bart Baesens (2018): **Principles of Database Management: The Practical Guide to Storing, Managing and Analyzing Big and Small Data**, Cambridge University Press
- Bas van Gils (2020): **Data Management: a gentle introduction: balancing theory and practice**, Van Haren Publishing

- Cases:
 - Srikumar Krishnamoorthy (2014): **Data Warehousing and Multi-Dimensional Data Modelling** (No. A00181)
 - Murat Kristal, Glenda Crisp, Connie Bonello, and Katherine Heighington (2018): **TD Bank Group - Building an Effective Enterprise Data Management Policy** (No. W18159)