

The Hebrew University of Jerusalem

Syllabus

A Graph is Worth a Thousand Numbers - 67140

Last update 08-10-2024

HU Credits: 2

Degree/Cycle: 1st degree (Bachelor)

Responsible Department: Computer Sciences

Academic year: 0

Semester: 2nd Semester

Teaching Languages: Hebrew

Campus: Mt. Scopus

Course/Module Coordinator: Prof Dror Feitelson

Coordinator Email: feit@cs.huji.ac.il

Coordinator Office Hours: By email

Teaching Staff:

Prof. Dror Feitelson

Course/Module description:

Understanding and utilizing numerical data is important in all walks of life. A central tool in this context is drawing graphs that present the data. This course will teach you the principles and techniques for doing this effectively.

Course/Module aims:

To introduce students to the world of statistical graphics, and develop skills for understanding and presenting data using graphs

Learning outcomes - On successful completion of this module, students should be able to:

1. Explain why graphs are needed when discussing numerical data
2. Understand the information presented in different types of graphs
3. Design high-quality simple graphs
4. Criticize graphs published in the media

Attendance requirements(%):

93%

Teaching arrangement and method of instruction: Lectures, exercises, and individual work

Course/Module Content:

1. Importance and history of graphical representation of data
2. Exploratory graphs and exhibitory graphs
3. Basic rules for clear and reliable graphs
4. Data normalization and logarithmic scale
5. Graph types for different needs
6. Elaborate graphs and advanced methods
7. Statistical graphics vs. infographics
8. Misleading graphs

Required Reading:

None

Additional Reading Material:

See course web site

Grading Scheme:

Written / Oral / Practical Exam 70 %

*Submission assignments during the semester: Exercises / Essays / Audits / Reports
/ Forum / Simulation / others 30 %*

Additional information: