



## Syllabus

# THE DATA REVOLUTION: INFORMATION AND ORGANIZATION - 56527

*Last update 10-10-2013*

HU Credits: 4

Responsible Department: Political Science

Academic year: 1

Semester: Yearly

Teaching Languages: Hebrew

Campus: Mt. Scopus

Course/Module Coordinator: Alon Peled

Coordinator Email: [Alon.Peled@post.harvard.edu](mailto:Alon.Peled@post.harvard.edu)

Coordinator Office Hours: Mon. 0700-0800  
Wed. 1200-1300

Teaching Staff:  
Dr. Alon Peled

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Course/Module description:

The course surveys the emergence of information as the most important organizational resource since the late 20th century. The course examines how public sector and private sector organizations collect, store, analyze, and use information. The course's topics include: the information revolution as the 3rd industrial revolution; the role of information systems in re-designing the corporation and the public agency; the competitive advantage of knowledge-based organizations; the conversion of data to information and information to knowledge; The challenge of improving electronic information sharing among governmental organizations; the concept of erecting a Public Sector Information Exchange (PSIE) inside government.

Course/Module aims:

Provide the students with a deep understanding of the historical processes through which information as a resource grew to become the most important organizational resource today.

Examine through theoretical discussion and case study analysis how public, private, and not-for-profit organizations collect, analyze, and use information.

Understand the main challenges that organizations encounter while working with information. Specifically discuss the difficulty of electronic information sharing among different organizations.

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

Define the differences between data, information, and knowledge

Classify organizations into different categories based on "sociability" and "openness" scales

Demonstrate the rise of the new knowledge based organization

Present the principles of data modeling and explain how they are used to build organizational information systems

Discuss the challenge of electronic information sharing in the public sector

Attendance requirements(%):

100

Teaching arrangement and method of instruction: Class presentations based on a discussion of the reading materials

Course/Module Content:

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Age

*The Information Revolution: Past, Present, and Future*

*The Rise of the Knowledge Based Organization*

-Organizations: Open vs. Closed, Rational vs. Social

*The Competitive Advantage of Information*

*Reengineering the Corporation with Information Technology*

*Crazy Organizations*

*From Data to Information*

*On the Difference Between Data and Information*

*Data Modeling*

*The Display and Manipulation of Information*

*Visualizing Data*

*Manipulating Data*

*How to Lie with Power Point*

*How to Lie with Maps*

*The Public Sector Electronic Information Sharing Challenge*

*The "Open Data" Approach and its Critics*

*Electronic Babel: How to Nudge Public Sector Organizations to Improve Information Sharing*

*Required Reading:*

Age

*Information as the 3rd Industrial Revolution*

-- Jeremy Rifkin, *The End of Work*, pp. 59-68

*The Rise of the Knowledge Based Organization*

-Organizations: Open vs. Closed, Rational vs. Social

---- Tom Peters, *In Search of Excellence*, pp. 89-118.

*The Competitive Advantage of Information*

Michael Porter, *Competitive Advantage*, pp. 164-197

*Reengineering the Corporation with Information Technology*

Hammer & Champy, *Reengineering the Corporation*, pp. 7-49

*From Data to Information*

*On the Difference Between Data and Information*

*Data Modeling*

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*The Display and Manipulation of Information  
Data Visualizing  
Edward Tufte, Envisioning Information, pp. 12-37*

*Manipulating Data*

*How to Lie with Power Point*

*How to Lie with Maps  
pp. 87-122 Monmonier, How to Lie With Maps*

*The Public Sector Electronic Information Sharing Challenge  
The "Open Data" Approach and its Critics  
Noveck, "Wiki Government," pp. 146-190*

*The Information Sharing Problem in the Public Sector  
Peled, "Traversing Digital Babel"  
Radin, "Contested Commodities," pp. 1-45*

*Additional Reading Material:*

*Course/Module evaluation:*

*End of year written/oral examination 70 %*

*Presentation 0 %*

*Participation in Tutorials 10 %*

*Project work 0 %*

*Assignments 0 %*

*Reports 0 %*

*Research project 0 %*

*Quizzes 20 %*

*Other 0 %*

*Additional information:*

*Course Requirements*

*Midterm Exam: 20% of final grade.*

*Final exam: 70% of final grade.*

*Participation: 10% (A student who will miss more than three classes without a satisfactory explanation will not get a grade for the course).*