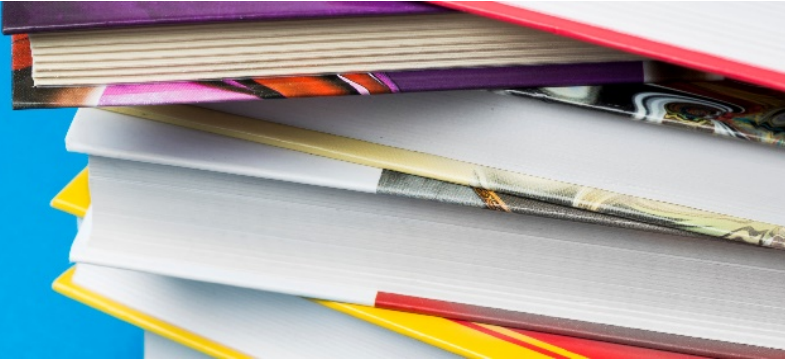
TEL AVIV UNIVERSITY אוניברסיטת תל אביב

Full Syllabus



Course Title

0349-1606 Introduction to Geoinformatics – A: Principles of cartography and remote sensing

Lecturer

Prof. Alexandra Chudnovsky

Semester

2020/1 Alef

Course requirements

Lectures, individual homework assignments, and a one lab/practicum work (printing a map using GIS)

Final grade components

Homework/labs- 30%, Exam 70%

Course schedule

Class no. / Date	Subject and Requirements (assignments, reading materials, tasks, etc.)
19/10/20	What is Geoinformatics, the concept of a spatial query
26/10/20	GIS principles: the concept of a layer, table and graphical information, raster vs vector
2/11/20	The structure of the earth
9/11/20	Geographical coordinates
16/11/20	Map components, types of maps
23/11/20	What map shall contain?
30/11/20	Generation of a first map
7/12/20	Basic principles of remote sensing: electromagnetic radiation, radiation laws, passive and active sensing
14/12/20	Electromagnetic spectrum: applications
21/12/20	Remote sensing concepts: types of resolution and satellite scanning
28/12/20	Major satellite systems
4/1/21	Remote sensing applications- vegetation and urban mapping
11/1/21	GIS and Remote sensing major data sources- introducing worldwide data library

Required course reading

Elements of cartography, Sixth edition, Robinson, Morrison, Muehrcke, Kimerling, Guptill (eds), Wiley and Sons Publisher
Heywood I., Cornelius S. and Carver S. (2006) An Introduction to Geographical Information Systems, Prentice Hall, 3rd edition.
Jensen J.R. (2000) Remote Sensing of the Environment: An Earth Resource Perspective, Prentice Hall.

Optional course reading

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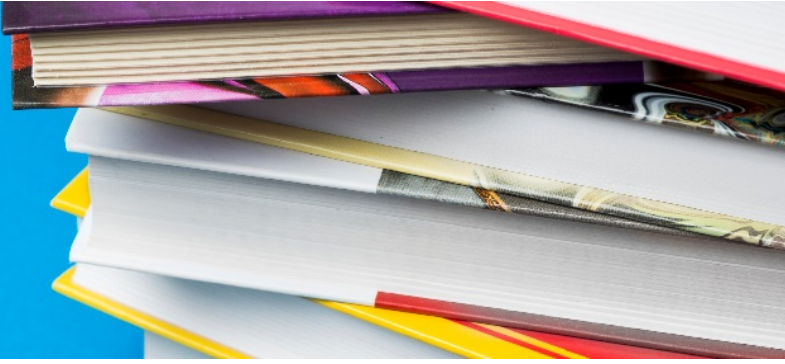

Comments