

Data visualization with R

(Laboratorio: METODI STATISTICI PER LA PSICOLOGIA DELLO SVILUPPO)

DATAVIS 2425 - Spring 2025

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Instructor details

Instructor:	Prof. Antonio Calcagni (University of Padova)
Office:	Via Venezia 8, Building 1, Room 03-024
	Check the official webpage https://tinyurl.com/2jmv23cz for up-to-date information.
Office hours:	Thursday, 10:30-12:30am
Contacts:	antonio.calcagni@unipd.it, +39 049 827 7007
Personal webpage:	unipd.link/acalcagni

Course website

<https://psico.elearning.unipd.it/course/view.php?id=5992>

Class materials and Textbook

All the materials used throughout the course (e.g., scripts, book excerpts) will be available on the Moodle page of the course.

Textbook (optional): Rahlf, T. (2019). *Data Visualization with R (II Edition)*. Springer.

Course outline

The following table lists a summary of the contents of this course.

<i>Date</i>	<i>Topic</i>
3/13	R basics: data manipulation, I/O operations, importing standard (e.g., csv, txt) and non-standard (e.g., json) file formats
3/20	Graphic programming in R I: The top-down approach
3/27	Graphic programming in R II: Layouts, exporting plots
4/03	Univariate graphical statistics I: Barplots, piecharts, boxplots, histograms, density plots
4/10	Case study and exercises
4/17	Univariate graphical statistics II: Pyramids, time series. Case study and exercises
4/24	Bivariate graphical statistics: Scatter plots, frequency tables. Case study and exercises
5/08	Multivariate graphical statistics: Heatmaps, Networks, Maps
5/15	Case study and exercises
5/22	Final examination (data analysis report)