

COURSE NAME AND CODE

Course	PSYC 4001/5801 Data Visualization
Instructor	Yan Liu
Term	Summer 2024
Course Delivery	In-person
Email Address	yanz.liu@carleton.ca
Office Location	B546 Loeb
Office Hours	TBA

COURSE DESCRIPTION/INSTRUCTOR'S STATEMENT

The notion that “a picture may be worth a thousand words” has made it into the statistics literature. The goal of this course is to expand your skills on statistical graphics as well as improve your understanding of conceptual graphic principles and communication skills. You will have opportunities to make graphics using different software programs, including R and Tableau. The skills that you will have gained by the end of the course include:

- Have a basic understanding of graphics perception and graphic cognition;
- Understand the basic principles for making impactful graphics;
- Be able to distinguish bad graphics from good ones;
- Be able to make basic graphics using several packages in the R language and Tableau; and
- Appreciate and create web-based interactive graphics.

EVALUATION

Students will be evaluated based on quizzes, presentation, assignments, and final project.

TEXTBOOKS

Cleveland, W. S. (1994). The elements of graphing data. Monterey, California: AT & T Bell Laboratories, Inc.

Chang, W. (2022). R graphics cookbook: Practical recipes for visualizing data. 2nd Ed. Sebastopol, CA: O'Reilly Media. Free resource: <https://r-graphics.org/>

Supplementary readings will also be provided.