



TEACHING PLAN

1. IDENTIFICATION

Subject	High-Impact Scientific Writing (Graduate level: Masters and Ph.D. Students)								
Institution	Faculty of Architecture, Urban Planning and Design (FAUED)								
Code	PPGAU21	Semester	-			Class	A		
Course Hours						Type			
Theory	15	Practice	15	Total	30	Compulsory		Optional	x
Professor	André Luís de Araujo								
Notes	Form-based Information Lab: www.informa3d.xyz The Informa3D in one minute: https://www.youtube.com/watch?v=cs1OAI0Wabo								

2. SUMMARY

Principles of science. Data basis. References management. Data visualization. Scientific strategies.

3. ABOUT

Scientific articles are the units of information in scientific journals. The structure of this type of communication follows logical patterns, which are widely accepted and shared among peers. In this course, students will gain an in-depth understanding of this structure through theoretical studies and analysis of representative corpora, which are highly relevant articles selected from databases. Throughout the course, students will: understand the scientific structure used in the production of scientific articles; learn how scientific bibliometrics work; outline the state of the art of science in their area of expertise through structured searches in the Scopus, Science Direct, and Web of Science databases; organize databases in Mendeley; produce scientific texts quickly and assertively; and communicate their scientific production clearly and concisely. The main objective is to increase the likelihood of reaching the right audience through search structures and language that have been specially designed to qualify scientists, researchers, and postgraduate students in the processing and production of high-impact scientific articles.

4. GOALS

Overall:

Developing scientific writing skills based on a global understanding of the scientific method and its key components.

Specific aims:

- Develop strategies to make efficient use of databases, especially Scopus, ScienceDirect, and Web of Science and establish links between subjects to understand the state of the art.
- Automate scientific research tasks, such as managing references, data visualization and other procedures.
- Present six scientific strategies: experimental, qualitative, correlation, logic and argumentation, historical, and computer simulation and organize them in the diagrams within the framework of the scientific method and within a timetable.

5. PROGRAM

The program is based on progressive strategies for improving scientific writing (Table 1).

Table 1: Course schedule.

Lesson	Planned dates	Subject
#1	Aug, 7	Principles of science knowledge and exploring databases
#2	Aug, 14	Install apps and plugins and managing references
#3	Aug, 21	Exercise 1a: Web diagram (TP)
#4	Aug, 28	Data visualization and text structure and instructions of Exercise 1b
#5	Sep, 4	Experimental and computer simulation methods
#6	Sep, 11	Qualitative and correlational methods
#7	Sep, 18	Exercise 2: Method Diagram
#8	Sep, 25	Pitch: Exercise 1b (FT) and Exercise 2: Method Diagram

Notes: TP: Touch Point. FT: Final Text. See item 7. Assessments.

6. TEACHING METHODS

The teaching strategies to be used will seek to facilitate the learning process in a way that is compatible with the time available. We propose using teaching resources such as explanatory videos and tutorials. Software will be used as a graphical interface for learning, based on weekly practical and theoretical lectures, as well as individual practical's, with the teacher supervision, preferably carried out in the classroom. Students must have their own laptop.

7. ASSESSMENTS

Table 2: Tasks and scores.

Exercise 1a: Web diagram (Touch Point)	20%
Exercise 1b: Final text	60%
Exercise 2: Method diagram	20%
Make-up exam: Redoing the final text	60%

8. BIBLIOGRAPHY

Basics:

- [1] GROAT, L.; WANG, D. Architectural Research Methods. 2. ed. New Jersey: Wiley, 2013.
- [2] CRESSWELL, J.; CRESSWELL, D. Research Design: Qualitative, Quantitative and Mixed Methods Approaches. 5. ed. New York: SAGE Publications, 2018.
- [3] DRESCH, A.; LACERDA, D.; ANTUNES JR., J. Design Science Research: A Method for Science and Technology Advancement. Berlin: Springer, 2015.