Effective Scientific Writing

The impact of our science should not be limited by our ability to communicate ideas and findings.

Course description

Communicating research in writing is an essential skill for scientists. This course aims to provide **writing strategies and tools** to non-native English speakers. This 15-week program will navigate step-by-step manuscript development, edition, and review. The course will include lectures, publication analysis, academic writing, and peer-review feedback. Classes **will be in English** to stimulate the development of foreign language skills.

This course aims to guide students through scientific writing and publication. It will be beneficial for three kinds of students. (a) those that have concluded a scientific project in the past and want to dust it off to **write up for publication**; (b) those who want to **plan their dissertation or thesis**, and finally; (c) those who need **guidance on how to write effectively** to write up their dissertation or thesis. Here we will focus on writing a **manuscript for publishing in peer-review** journals. But the principles and strategies taught here apply to most academic writing.

The course uses an **active learning strategy**. Every class begins with a **short lecture** to prepare the students for the assignments. **Classroom assignments** provide tools and develop the skills needed for writing projects. **Project-built assignments** will help students to develop their independent writing projects. Students will be able to give and receive feedback through **student peer-review**. By the end of the course, students should have a complete **manuscript ready for submission.**

Classes & Attendance

Classes every Monday (2-4 pm, GMT-3). I understand punctuality as a sign of respect for the time of everyone in the class. I do my best to be at the class on time and I expect you all to do the same.

In-person: Room IB 19, Coordenadoria de Pós-graduação - IB / Unicamp (First floor)

Remote: https://meet.google.com/roq-gogi-idn

Classes will be as follows 20-30 minutes lecture, 1h hour break down groups/individual assignment; 20-30 minutes assignment discussion/proposal. It is advisable to bring a laptop computer to the class. Please let me know if this is an issue for you. We will do many writing assignments will in the classroom. It makes it easier to produce and give feedback on texts from word processing documents. I recommend you have Grammarly Add-in installed for language editing.

This is a hands-on course and its success relies on student presence and engagement. Please limit your absences to the necessary. Presence is mandatory in at least 75% of the classes for all students enrolled. Please note students in remote mode should join synchronous classes for computing presence. Recorded classes will be available to students upon request.

Course Goals

Upon the completion of this course, the student will be able to plan and execute an academic writing project. This includes defining the scope of the writing project and target audience, identifying manuscript needs, outlining, developing, editing, and reviewing a research manuscript in full.

Ways to Meet Course Goals

Show up to the class on time, with a rested mind and positive mindset. Every interaction is a learning opportunity. Make the most of it!

Be present during lectures. Humans only have one language processing centre. If your attention is on something else, you are missing something in one way or another.

Put your heart and soul into the assignments. They are your baseline for improvement. If you are not doing your best, the outcome will be below your full potential.

Use and give feedback with kindness and respect. We all deserve it.

Grades

Assignments will get grades after completion. Assignments completed within the class or in advance will receive a full grade. Late assignments will get 80% of the grade to be fair to the ones that handle them in time. There are no guarantees of grade, correction, or peer-review of that late assignments. Please get in touch as soon as possible if you miss or plan to miss a deadline.

The final grade will be: Training assignment (30%) + Peer-review and self-improvement (30%) + Final project (30%) + Class participation, contribution to discussions, community, and well-being (10%)

Pre-requisite, Language & Engagement

This course has no pre-requisite, but you will make the most of it if you have a solid writing project to develop during this 15-week program.

Although English will be the official language of the course for teaching and writing purposes, I recognize that not everyone has the same level of proficiency. Therefore, I kindly ask you to get in touch to discuss alternatives and strategies to improve your learning experience if you have any difficulty following the lectures, exercises, or discussions. Also, feel free to ask questions in Portuguese or ask for help.

This course is expected to be a safe space where we can improve our language and communication skills by helping each other toward that goal. Full disclosure, my language skills in English are far from perfect and you should expect to notice many mistakes. I apologize in advance for that, but I believe that we all should try to communicate the best we can and keep improving even when this means sometimes, we make mistakes.

Schedule

Class	Date	Lecture	Classroom assignments	Project-build assignments
1	Aug 15th	Intro to the course	Personal aims for the course	Writing project proposal
2	Aug 22nd	Writing as a science tool	Building an abstract model/Wishful abstract	Manuscript needs
3	Aug 29th	Report section	Outlining report	Figures and tables
	Sep 5th	**BANK HOLIDAY**		
4	Sep 12th	Precision and assertiveness	Figure captions	Report development
5	Sep 19th	Find your pitch	Abstract update	Review for introduction
6	Sep 26th	Introduction vs revision	Building an intro model	Introduction Outline
7	Oct 3rd	Hypothesis set up	Hypothesis postulation	Introduction development
8	Oct 10th	Context, background, and contribution	Paragraph edition	Review for discussion
9	Oct 17th	Discussion narratives	Summarizing your findings.	Discussion outline
10	Oct 24th	Mapping research	Highlighting contribution	Discussion development
11	Nov 7th	Abstract and title	Title & Abstract update	Editing
12	Nov 14th	Final touches	Language Editing	Proofreading
13	Nov 21st	Submission and review	Letter to the editor	Peer-Review
14	Nov 28th	Giving and receiving feedback	Review map	Response letter
15	Dec 5th	Re-submission, data archiving and post-publication.	Q&A	Final Project submission

Office hours

Mon-Fri 9 am-5 pm (Scheduled appointment only)

Preferred contact: temilio@unicamp.br (reply usually within 2 working days).

Final words

Life happens. Changes and arrangements are possible and likely. This syllabus aims to give us structure and guidance during this course. Please feel free to get in touch if needed.

Bibliography

Basic reading

Glasman-Deal, H. (2020). Science Research Writing: for native and non-native speakers of English. World Scientific.

Magnusson, W. E. (1996). How to write backwards. Bulletin of the Ecological Society of America, 77(2), 88.

Additional reading

Allen, D. (2015). Getting things done: The art of stress-free productivity. Penguin.

Cahill Jr, J. F., Lyons, D., & Karst, J. (2011). Finding the "pitch" in ecological writing. Bulletin of the Ecological Society of America, 92(2), 196-205.

Sayer, E. J. (2019). The essentials of effective scientific writing–A revised alternative guide for authors. Functional Ecology, 33(9), 1576-1579.