

Syllabus for “Introduction to Science Writing and Communication”, Spring Semester 2024

Course Information

Time: Thursdays 13:00-14:50

Start: 2024.02.22

End: Last class on 2024.06.06, Final assignment due during exam period

Location: 地学 205

Course description

Writing is arguably one of the most important skills for any scientist. After all, what good is it for a scientist to discover something profound, if he or she cannot explain it to anybody else? Similarly, most of modern science is conducted in English, be it in high-profile scientific journals, conferences, or international collaborations. The goal of this course is to teach physics undergraduates at Peking University how to present scientific results in English.

Course prerequisites

This course will be completely taught in English. That means you need to understand the lectures, participate in class discussions, and do all assignments using English. There are no other prerequisites.

Course format

This class will be taught differently than a typical lecture course. Becoming a good writer takes practice, practice, practice, which cannot be taught via lecturing.

About half of class time is therefore devoted to individual reading/writing exercises or editing pieces of text submitted by members of the class. All students are required to actively participate, and these activities determine 20% of the final grade.

Active participation includes coming to lecture prepared, having done all reading and weekly assignments beforehand, as well as speaking up in class.

Professor

Daniel Koll

Office: 物理楼北 557

Email: dkoll@pku.edu.cn

Teaching Assistant

Samuel Sklar

Email: sjsklar@stu.pku.edu.cn

Course announcements

Join the Wechat course group in the first lecture.

Grades (note: the weighting might still change)

In-class participation	20%
Other assignments	30%
Final paper assignment	50%

Textbooks and Materials

Main textbook:

Hilary Glasman-Deal, "Science Research Writing for Native and Non-native Speakers of English", Second edition.

Additional materials:

Strunk & White, "The Elements of Style".

Tufte, "The Visual Display of Quantitative Information".

Gopen & Swan (2018), "The Science of Scientific Writing", published in American Scientist.

Hofmann "Scientific Writing and Communication: Papers, Proposals, and Presentations".

Alon (2009), "How to give a good talk", published in Molecular Cell.

Kristin Sainani, "Writing In the Sciences", online course, www.coursera.org/learn/sciwrite

Policies

Academic Honesty

"Academic Honesty" means students perform all academic work without plagiarism, cheating, lying, tampering, stealing, receiving unauthorized or illegitimate assistance from any other person, or using any source of information that is not common knowledge. For example, if you copy text from a website (e.g., Wikipedia), book, or research paper, you need to cite where the text is from. At this point, students are only allowed to use Chat-GPT or similar AI systems with permission from the professor.

How to submit your assignments

Assignments are to be handed in via email to the TA, with the Professor cc'ed on each email. Every assignment needs to include your student number, your name in Chinese characters, and your name in pinyin.

For example:

000012345_姓名_YourName-assignment_1.pdf

Extensions

If you need an extension, you need to request one from the TA or Professor **before** the deadline. All late homework without an extension will be graded fail.

Topics

Note, the timeline might be adjusted as necessary.

Week 1:

Introduction

Weeks 2-8:

We work through the basic elements of a scientific paper, following the approach in Glasman-Deal "Science Research Writing for Native and Non-native Speakers of English".

How to write an Introduction. How to write about Methods. How to write about Results. How to write a Discussion. How to write a Conclusion. How to write an Abstract. How to write a Title.

Weeks ~6-9: Large Assignment #1

You will cumulatively write a midterm paper about a fictional science experiment or a new scientific method.

Weeks 9-10:

How to edit a paper.

~Week 12:

Students start working on their final papers.

Weeks 11-13:

How to make scientific figures.

How to make a scientific presentation.

How to use AI for scientific writing.

Weeks ~12-13: Large Assignment #2

You will give a presentation on a scientific topic of your choice.

Week 14:

Conclusion. Individual or group work on editing final papers.

Exam Period:

Final papers are due.