Resources for Writers in STEM Fields

In the Hixon Writing Center, we frequently work to connect writers with specific resources that can support their work. This handout lists a number of the books we find to be most useful to our students.

Selected guides to writing across STEM disciplines


This set of four slim volumes tackles core issues in scholarly writing, offering examples from across disciplines as well as tasks for learners to undertake. The four volumes are:

- Navigating Academia: Writing Supporting Genres
- Abstracts and the Writing of Abstracts
- Telling a Research Story: Writing a Literature Review
- Creating Contexts: Writing Introductions Across Genres


Many writing guides for English language learners are organized around basic grammar and usage. This book, in contrast, presents information about grammar, usage, and rhetoric within the context of the real texts that scientists compose. Writers learn about the conventions of scientific fields, not just the conventions of academic English.


This carefully written book offers detailed guidance on (1) composing a scientific article, (2) presenting one's work, and (3) scientific writing style.


This comprehensive volume is intended for professionals in the field, but it will be of use to advanced novices as well. It is thorough, clear, and exhaustive. Its areas of focus include scientific writing style, the writing process, research papers, review articles, grant proposals, and posters/presentations.
**Selected discipline-specific guides**


Similar in style to Hoffman’s *Scientific Writing and Communication*, this thorough book focuses on communication in the field of biology. A further difference is that this book is aimed at undergraduates and includes annotated models, examples, guidelines for revision, and exercises for this audience. It offers students instruction about working with sources, creating and using visual elements, lab reports, the writing process, critical reading, and posters/presentations.


In this accessible textbook, the authors explain technical engineering writing through a rhetorical lens, helping students grapple with the purposes of and audiences for engineering writing. The book will help students understand not just how to write, but *why* to write in that way.


While parts of this book are dated (e.g. a chapter on “Writing on a Computer”), it remains useful for carefully explaining fundamental aspects of writing in math, such as how to state and prove a theorem.


This guide for writers in engineering is divided into two parts. The first covers fundamental aspects of writing in engineering (e.g. knowing your audience, developing graphics), and the second looks specifically at the common genres in which engineers write (e.g. proposals, progress reports, documentation).


This nearly 700-page long guide offers instruction, models, and exercises for writing in chemistry. It is divided into four main sections on (1) the journal article, (2) the scientific poster, (3) the research proposal, and (4) figures, tables, and schemes.


This guideline to doing and writing about research in computer science focuses in detail on matters of style. It also attends extensively to issues related to mathematics, visual elements, and algorithms that are crucial to writing in this field.