

SWC 7: Writing in the Sciences

Scientific writing usually includes peer-reviewed journal articles, proposals, literature review articles, lab reports, and other discipline-specific genres. While the basic principles of good writing are the same in the sciences as in any other discipline, scientific writing does require specialized structures and wording geared toward unique needs and desired writing outcomes.

Scientific writers aim to present data or ideas with the goal of allowing the reader to evaluate the claim and the method of arriving at that claim. Therefore, the following are crucial components to successful scientific writing:

- **Precision:** To make sure language is precise and unambiguous, scientific writers are careful to use words and phrases that are as specific as possible. Part of precise scientific writing is using the correct **terminology** of the given field in a way that is both accurate and understandable to the reader.
- Clarity: Writing containing discipline-specific terminology can make a piece of writing
 confusing without clarity. Scientific writers should remember their audience when
 composing and explain complex concepts in detail, making sure that all of the data and
 discussion is presented in a comprehensible manner. Consider what background
 information your audience may know and take time to explain anything they may be
 unfamiliar with.
- **Objectivity:** Claims made in scientific writing should be fact/data-based, and scientific writers should avoid opinionated language.
- Voice: Passive voice is when you describe an action while either omitting the person completing the action or moving the person completing the action to the end of the sentence. For example, "The experiment was conducted" is passive voice because the reader does not know who conducted the experiment. While passive voice is avoided in many writing contexts and disciplines, it is not always bad, especially in scientific writing. Scientific writers often use passive voice to maintain objectivity in their writing as they discuss concepts and data. This also means avoiding beginning sentences with "I" or "we" when using the active voice in scientific writing. Doing so can insert subjective perspectives into the writing and diminishes the objectivity that scientific writers are striving for in their explanations of concrete methods and findings.