SCIENTIFIC WRITING: Nine Major Rules for Preparing a First Draft

1) **Work to understand your sources.** Good scientific writing begins here. Take notes from your sources in your own words and as you do, make note of the section in your paper that information pertains to. It is important to clearly distinguish your thoughts from those of the author.

2) **Do not directly quote from your sources.** Describe what others have done and what they have found, but in your own words and without the use of quotation marks. And always remember to cite those sources!

3) **Don’t plagiarize.** When you restate another’s ideas or interpretations, do so in your own words and credit your source explicitly. Simply changing a few words here or there or changing the order of the sentence or paragraph is still considered plagiarism.

4) **Support all statements of fact and opinion with evidence.** Statements can be supported by a reference to a primary source or by referencing your results of statistical analysis. Use the appropriate documentation style as indicated by your class.

5) **Think about where you are going before you begin to write.** Think first, then write; thoughtful revision follows. Preparing an outline can help organize your thoughts, but even if you do not outline, you must have some plan in mind when you begin your first draft.

6) **Practice summarizing information.** Resist the temptation copy your source’s words verbatim, or to simply highlight them. Try to summarize chunks of material as you read, which will help you process the information.

7) **Write to illuminate, not impress.** Use the simplest words and the simplest phrasing consistent with that goal. Define all specialized terminology and avoid acronyms. Don’t try to impress readers with big words and a technical vocabulary; focus instead on getting your point across.

8) **Always distinguish fact from possibility.** You must be careful not to state your opinion as though it were fact. “The members of species X lack the ability to respond to sucrose” is a statement of fact and must be supported with a reference. “Our data suggest that species X members seem unable to respond to sucrose” expresses your opinion in the proper phrasing. The addition of that one phrase, “the data suggest,” makes all the difference.

9) **Allow time for revision.** It takes thoughtful revision to make any argument fully convincing. It is important to step away from the work and reread it with a fresh eye.
before making revisions. It is helpful to revise in sections and to read out loud in order to catch any typos and grammatical errors.