

ES401 WRITING

This course is not formally "writing intensive" but in practice it is. In this handout I'll give you some hints for effective writing and some explanation of how we'll work together to improve your writing.

In my opinion it is best to focus on the larger aspects of writing first and then take care of the details. The most important thing is to have content; that is, something to say. This may be a new insight into a scientific question, a personal reaction to a something you've read or seen or a routine answer to a test or lab question.

Once you know what you wish to say, organize your thoughts into a logical sequence so that readers can follow your reasoning. In other words use "linear thinking" where each fact, question, idea, observation, explanation or conclusion follows in a logical way from what you've already written. An outline is indispensable for bringing order to your thoughts. Put yourself in the reader's place and pretend that you've never heard of the subject before.

Use some variation of normal scientific paper organization. That is, follow the conventional sequence of Introduction, Methods, Results, Discussion, Conclusions and References. Of course a short lab report or test question won't have all these parts but nevertheless you can use them in an informal way to organize even short answers or reports.

Once the paper is organized it's time to think about the individual sentences. Be sure to write in complete sentences. Vary the sentence structure and length. Be careful that the subject and verb agree (singular noun with singular verb form; plural with plural). Pronouns are often the source of great confusion; exactly what does "it" or "that" refer to? When there's any chance of confusion use a noun instead of a pronoun.

Some people feel that it is somehow more objective or professional to use the passive voice ("it was observed"). Others, including myself, consider the passive voice weak and evasive. After all your name will be on the paper so you might as well write as though you believe what you're saying.

Vary your vocabulary and check the spelling. Use a dictionary or thesaurus to find synonyms to avoid tedious repetition. Some writers think that long words, specialized jargon and acronyms give their writing a more professional style. They're are mistaken.

Use normal punctuation. Be sure to end all sentences with ".", "?" or "!". Be careful with your commas. You may never need to use colons, semi-colons, slashes and hyphens. Don't play games with fonts and type sizes. Do you want to advertise that you have nothing else to do with your time?

In conventional "writing process" courses great emphasis is placed on editing and rewriting draft after draft. Vergil, for example, wrote only twelve lines of carefully polished verse per day. In a science course, however, we continually move ahead dealing with new material each week so there is no time for rewrites. My expectation is that, week by week and assignment by assignment, you'll eliminate the problems that the TAs and I point out. On the job your boss is not going to fool around with rewrites; you'll have to get things right the first time!

This last reminder probably isn't needed but, just in case it is, always USE YOUR OWN WORDS!