

General comments for papers:

- 1) A paper should be formulated around an argument, with a clear thesis statement that is thoroughly supported through each aspect of the paper, from organization at the paper, paragraph, and sentence level, to facts and references, explanations and examples.

<http://web.mit.edu/writing/>

If you have not written a formal research paper that is also a persuasive paper in the last month, please read through these RESOURCES FOR WRITERS:

<http://web.mit.edu/writing/Resources/Writers/index.html>

The criteria they outline will be used as a basis for grading in this class. It is difficult to assess the merit of your research and ideas if you don't master the nuts and bolts of communicating that content effectively.

No assignment for this class asks for a simply descriptive paper made up of a list of facts, or a history of policy decisions that doesn't persuade the audience of something interesting. A paper written as an argument imposes on the writer a burden of proof in amassing evidence. Empirical and logical analyses then converge on the argument. In this sense, writing in the form of argument helps the writer stay on message. All papers should be written as arguments – *persuasive* arguments.

A paper that argues a thesis should not be confused with a *biased* paper that purposefully skews the evidence. Your papers should clearly state the argument (hypothesis) you plan to explore, then array the evidence to show how it does or does not correspond to the expectations of the argument.

- 2) This argument must appear within the first couple of paragraphs of the paper. You should tell the reader that the paper is going to attempt to do (thesis statement).

The thesis statement needs to be a statement! For example, "This paper argues that there are two basic problems frames that compete to drive policy over climate change. These are (1) climate change is real, caused by human activity, and dangerous, and (2) climate change is a moderate natural phenomenon to which we can easily adjust..."

In general, do not pose the thesis as a question. What are the key policy frames regarding climate change? This is too open-ended, and doesn't tell your reader the specifics he/she needs to navigate your paper and evaluate whether or not you've convinced them of something.

- 3) Outline your paper before you start writing. Write the initial thesis statement out as a sentence, and then in a brief outline present your core arguments in a logical succession. Outlining is the most effective way to logically structure your paper and save time.
- 4) Do not assume that your reader is familiar with the details of your topic. Be specific! This applies to broad topics – the first couple of paragraphs should tell the reader the problem you are addressing and what your position is. It also applies to little things within the text, such as referring to “the war” instead of World War II, or “the Act” instead of referencing the Nuclear Waste Policy Act of 1982 formally. It is fine to use acronyms – after you introduce them: the Atomic Energy Commission (AEC)...

Be careful using words such as “they” that do not clearly point to whom you are referring.

- 5) The use of explicit quotations from sources is rarely done in the scientific literature and it is poor practice in general.

Explicit quotes should be used extremely rarely – and then only to highlight a particularly original turn of phrase that illuminates the situation more than a simple synopsis in your own words. The most frequent use of direct quotes is to illustrate an opinion by someone that is not well-supported by primary data. In other words, quote only when the specific words have special analytic meaning for your argument.

- 6) Citation formats should be standardized to be simple, but to allow the reader to track them down.

When a reference is embedded in the text, set it off by parentheses as follows:

(author last name, year; page), or author last name (year; page)

For example, “Previous research has shown that Yucca Mountain is riddled with faults (Smith, 2001; 22).” Or “Smith (2001; 22) showed that Yucca Mountain is riddled by faults.”

Then the reference is:

Smith, H.W., 2001. Faults abound at the proposed Yucca Mountain repository, *Science* 197, v. 10, 21-24.

Where *Science* is the journal, 197 is the volume number, 10 is the issue if there is one, and 21-24 is the total page range of the paper.