

Writing Evaluation and Tips

One of the universal goals in higher education is to promote effectiveness in written and oral communication. My philosophy is that writing skills are important, even in science courses. Poor writing can be thought of as static on the radio - no matter how good the song, the message gets lost and your audience loses interest.

Evaluation

Written assignments will be graded on both content and writing effectiveness. You will have the opportunity to revise assignments and papers, but not take-home exams. If you revise your work within 1 week of when I return it to you, you will receive the higher of the two grades noted on your first draft. This system is designed to encourage you to turn in a final draft in the first place, and also to encourage you to continually work to improve your writing. When I read and grade your assignments, I am looking for the following attributes:

1. Did you understand the material?
2. Did you answer the question?
3. Does your essay show independent thought?
4. Are your thoughts well-organized? (There should be an introduction, body and conclusion)
5. Are the transitions between paragraphs or topics logical?
6. Are you able to summarize your position or composition?
7. Are your mechanics and grammar correct or acceptable?
8. Is your writing style appropriate for the assignment?
9. Is your word choice appropriate and illustrate a grasp of vocabulary?
10. Have you avoided redundancy?
11. Are you able to paraphrase the work of others?
12. Have you included citations where appropriate? Citations are required whenever you include or refer to the ideas or work of others. Citations usually take the following form:

If you are citing from a book:

In the text:

Nearly 14,000 children die from malnourishment or hunger-related disease every day (Miller, 1999).

At the end of the text:

Miller, G.T. 1999. Living in the Environment. Brooks/Cole Publishing Company, Albany, NY, 815p.

If you are citing from an edited book (such as *Taking Sides*):

In the text:

Harrison (1994) argues that the combination of population growth, materialistic consumption and technology are degrading the global environment.

At the end of the text:

Harrison, P. 1994. Sex and the single planet: Need, greed and earthly limits. The Amicus Journal (Winter 1994), p. 78-84 in: Taking Sides: Clashing views on controversial environmental issues, 1999, edited by T.D. Goldfarb. Dushkin/McGraw-Hill, Guilford, CT.

If you are citing from a journal article:

In the text:

There is a concern that introduction of the Chinese leaf-eating beetle to control salt cedar expansion will further endanger the willow flycatcher (Malakoff, 1999).

At the end of the text:

Malakoff, D. 1999. Plan to import exotic beetle drives some scientists wild. *Science* 284: 1255.

If you are citing from the web:

In the text:

Students from Trinity College are testing whether four plant species are effective at removing lead from a contaminated urban neighborhood (Environmental News Network, 1999).

At the end of the text:

Environmental News Network, August 19, 1999.
http://www.enn.com/news/enn-stories/1999/08/081999/mustard_5015.asp

Tips

The following tips are designed to help you improve your writing effectiveness. You should also take advantage of the Writing Center, where both student and faculty mentors are available to assist you with writing assignments.

1. Formulate your thoughts in outline form; write the essay to communicate them.
2. Invest yourself in your writing; take pride in your work. If you think about the assignment analytically and make notes on your own thoughts, you will be better able to separate your thoughts from the ideas of others. This, in turn, will lead to a better understanding of where citations are appropriate.
3. Use argumentation; it will lead to more effective and convincing essays. It's okay to acknowledge the validity of both sides of an issue, and then argue from one position.
4. Be conscious of your audience. Do not write your essays as if the professor is the only one who is going to read them. Make sure the writing assignment can stand as an independent piece of work. For the purposes of this course, assume the audience includes people with a college education, but only a limited background in science or environmental issues.
5. Revise your work. Revision is central to the process of writing, and is separate from the initial expression of thought. Check your writing for grammar, punctuation, spelling and clarity. Do not rely on spell-checkers. Read your work aloud to yourself. Insert commas where you pause in speech, and rewrite sentences that you stumble over. A rule of thumb is that ~25% of the writing effort should be spent on editing and revision. If you procrastinate on an assignment until the last minute, and deprive yourself of the time for this important step, you will probably get a C grade on the paper; having only completed 75% of the assignment.

21 Grammatical Points to Remember

Some of the points below are specific to science. Others are commonly encountered errors. Be succinct, and spell correctly.

If you don't already own a copy, buy the following manual:

Strunk, W. and E.B. White. 1979. *The elements of style*, 3rd edition. Allyn and Bacon, Needham Heights, MA. (\$5.95)

1. **species names:** are underlined or italicized, with the Genus name capitalized, and the species name in lower case letters: *Homo sapiens*, *Gorilla gorilla*, *Drosophila melanogaster*. If you are only using a generic (that is, genus) name, these rules generally still apply (e.g. *Drosophila*).
Note: some species names can be transformed into adjectives by adding the suffixes -id or -an. (e.g. hominid, anuran). These are not italicized or underlined.
6. **data:** This word is plural. (The singular is datum, a single piece of information.) Information *is*..., but data *are*...
7. **affect/effect:** *Affect* is the verb, meaning to influence. *Effect* (usually) is the noun, meaning result. For example: The *effect* of the treatment was to inhibit cell division.
Or: The treatment *affected* the ability of the cells to divide.
8. **less/few:** Use *less* for quantities that are not composed of discrete bits, such as *less* water, *less* time. Use *few* for quantities that have identifiable bits or units, such as *fewer* animals, *fewer* cells.

amount/number: same as less/few, use *amount* for quantities that are not composed of discrete bits, such as the *amount* of water, *amount* of water pollution. Use *number* for quantities that have identifiable bits or units, such as the *number* of chemicals, or the *number* of organisms.
9. **this/these:** The "this" to which you are referring can be pretty vague.
Be specific: "this *conclusion*," "this *species*," "this *experiment*," etc.
10. **only:** comes right before the word that's only.... "He only died last week" means "that's all he did, he didn't do anything else last week, he only died." (from James Thurber)
11. **i.e./e.g.:** i.e. means that is (Latin: id est), and should be followed by an explanation.
e.g. means for example (Latin: exempli gratia), and is followed by an example. The confusion of these abbreviations makes a strong case for the use of the English: for example, and that is, are perfectly good.
12. **is is:** Overused, mostly in conversation.
Incorrect: The point *is, is* that nuclear war is still possible.
Correct: The point *is* that nuclear war is still possible.
13. **as/like:** like governs nouns and pronouns; as is used before phrases. For example: Cafeteria food tastes *like* cardboard, *as* you might expect.

14. **loose/lose:** lose is a verb, loose is almost always an adjective. Trees *lose* their leaves in the fall. The data indicate a *loose* correlation.
15. **there/their:** *Their* is possessive. *There* is no excuse for students making this mistake in *their* papers.
16. **its/it's:** *its* is possessive. *it's* is a contraction, short for *it is*. If you write *it's*, and you can't substitute *it is*, then *it's* likely to be wrong.
17. **comprise/compose:** These are very commonly confused. *Comprise* means embrace or include. The whole *comprises* the parts. (For example: The ecosystem *comprises* mammals, reptiles, birds, trees, and bacteria.) On the other hand, the parts *compose* the whole. (For example: Mammals, reptiles, birds, trees, and bacteria *compose* the ecosystem.)
18. **whether or not** doesn't say anything more than *whether*.
19. **verb tenses:** many scientific phrases can be confusing; be sure then verb tense agrees with the subject of the verb.
examples: the *neurons* of the brain *connect*
each cell in the heart *arises* from a precursor...
the *wolves* of the forest *forage* for food ...
20. **things:** restrict use to refer to inanimate objects, otherwise use a more specific term
21. **which/that:** *That* is the defining, or restrictive pronoun, *which* is the nondefining or restrictive pronoun.
That lawn mower *that* is broken is in the garage. (Tells which one)
The lawn mower, *which* is broken, is in the garage. (Adds a fact about the only mower in question)
22. **like:** avoid using *like* to mean *such as* or *for example*
23. **Identify an abbreviation before you use it:** spell out polychlorinated biphenyls before using PCBs, or Environmental Protection Agency before using EPA
24. **PCBs, DDTs, 1960s and 1990s:** none of these include an apostrophe (PCB's is incorrect)
25. Expressing the content of a book or article:
AVOID Smith feels/says/talks about/goes into
USE the author argues/discusses/states/reports

REFER to the author by their last name; if more than one author then use Smith et al.