

ENSC 320 WRITING FOR SCIENCE

The papers you will be preparing for this course cover a range of styles, from formal presentations of research (e.g., Case Study) to comparatively informal public presentations (Council Letter). Science papers usually differ from English essays in a number of ways, for example footnotes and personal opinions are rarely used; however, both still require proper grammatical style and good organization of ideas. The best science papers flow in a logical manner, are free of spelling and grammatical errors, and provide ample research support for presented fact and concepts. If this is your first exposure to science writing, you may be surprised by the amount of effort necessary to achieve a high grade. However, "experience is the best teacher" (oh yes, clichés and hyperbole are taboo in a science paper).

READ THE FOLLOWING INFORMATION CAREFULLY:

1. **Assignments:** If you are unsure about your choice of topic or approach, please see your TA or instructor for clarification.
2. **Due Dates:** Your papers must be handed in on the due date indicated; otherwise *late papers will be penalized at 4% per day.*
3. **References:** Your papers must follow proper referencing and citation protocols. Primary references will receive the highest grade. Please follow a consistent protocol for citations (see below):

Primary references examples:

- i. Research papers from recognized science journals. The authors listed are those that wrote the paper.
- ii. Single topic books written by the primary investigators.
- iii. Compendiums of papers presented in book form with an editor.

Secondary references examples:

- i. Material from authors cited by the primary investigator, but whose original paper was not reviewed.
- ii. General topic books in which material is presented as a review of a number of cited sources.

Unacceptable References

- i. Textbooks of any kind. Textbooks are merely generalized interpretations of other people's work. If you use them you are essentially reinterpreting an interpretation. However, textbooks are excellent for familiarizing yourself with the topics and accumulating a list of potential references.
- ii. Popular magazines (Cosmo, Rolling Stone, etc.) and newspapers. Material from these sources is often rife with biases, misinterpretations, and outright sensationalistic drivel.

Exceptions

1. Excerpts from popular magazines, newspapers etc. used specifically to make a point concerning public perceptions.
2. Material from popular science periodicals such as Scientific American, New Scientist, Natural History, etc. are acceptable provided the original researcher is noted.

3. Government publications (not subject to peer review!). Use at own risk!!

MARKING:

1. **Content:** The content of the paper will be graded at a level of detail consistent with a third year science course. The logical flow of ideas and organization of material is of primary concern.

2. **Style and Grammar:** WE highly recommend that you have a friend proof-read your material before handing it in. Spell Check and Grammar Check programs typically find only about 50% of your errors!!

3. **Citing and Referencing:** You should follow a consistent, recognized protocol for citing and referencing papers as in major science journals. See below for examples:

Journal Paper Citation:

Students who write essays the day before they are due display a lack of enthusiasm for obtaining high grades (Doodle and Scribble, 1988).

Corresponding Reference Format:

Doodle, Dave and Sam Scribble. 1988. Writing for Fun. *J. Sci. Gobbledygook*. 32(5):221–225.

Book Citation:

Clams have the ability to sing operatic arias in D minor (Egbert, et al. 1990).

Corresponding Reference:

Egbert, Harold, Gilbert Frazzel and Mary Littlelamb. 1990. *Molluscs Are My Life*. Pp 26-32. Wile E. Coyote Press. New York.

Indirect Author Citation

Female marbled murrelets select mates based on plumage characteristics (Smith and Jones, 2000 in Brown, et al. 2002).

Corresponding Reference:

Brown, George M. 2002. Sexual selection in the Marbled Murrelet, *Brachyramphus marmoratus*. *Ecology* 22(3):1502-150.

Additional Point to Remember!! You did not conduct any research. All factual information and corresponding theoretical concepts must be cited appropriately and referenced. However, you are free to organize and summarize research data to exemplify your point. You are also free to present “commonly accepted” ideas without citation, provided that they are indeed, common! Furthermore, you do not need to cite every sentence in a paragraph if it is clear that it is from the same research paper – do it at the beginning of the paragraph with a clear statement attributing the material to a specific author.