Format for Critiques of Primary Literature  
(adapted from Dr. B. W. Grant)

Objective:

The purpose of this exercise is to help you improve your critical reading skills. Primary literature is the means by which communication of scientific ideas is accomplished. As discussed in lecture, the subjectivity inherent in science (and all human endeavors) influences the presentation and interpretation of research. For your semester literature review paper, you should learn to read critically all of your sources. For this assignment, you must pick one paper (a primary literature source – an actual research report, not a book or review paper). You will then summarize the general work and then critique the work. You will do this in two formats: a written assignment due on March 21, 2007, and an 8-10 minute presentation on March 21-28. As much as possible, pick a paper with which you feel comfortable. It should be directly relevant to your topic, and you should be able to describe it readily to the class.

Instructions for Written Assignment  
(max length one page, single spaced, minimum 10 point font).

I. Citation:  
On the top of the page, provide a citation for the paper you have selected following the format used in your bibliography.

II. Summary (one paragraph of 200-500 words):  
Begin with the main research question or hypothesis as best you can determine. Many papers do not explicitly state a “big question”, so you must sometimes use some digging to figure it out. In the summary, use your own words to briefly describe the main methods (what type of experiment was carried out) and the principle results, along with the author's interpretations of the results. Was the hypothesis supported? Do not plagiarize passages from the paper. Use plain terms that people in class will understand, and define any “jargon” used in the paper that you employ in your summary.

III. Critique (one paragraph, probably shorter than summary):  
This is where you put your editorial comments. What did you think of the study? Were you convinced by the author’s arguments? Topics that you discuss here may include: Was the “big question” interesting? What is the significance of the work to other fields of study? Was the study well designed? Were the data well presented and do they support the interpretations of the author? Do you feel the author should have done more in any particular area?

We will discuss the oral presentation in class. You will be expected to speak for ~8 minutes, leaving a minute or two for questions. You should use some form of graphics (overheads, PowerPoint, etc…), including at the least an outline of your presentation and some representative graphs from the paper.

Worth 20 points for oral and written components.