**Bio 31: Literature Critiques**

Critique should be typed and no more than one page

Your written critique should include the following points. Please number them on your critique.

1. What are the one or two central hypotheses being evaluated? Are they clearly stated?
2. Briefly summarize the experiments or observations that were used to evaluate the hypotheses.
3. What were the central results. Do the results support, refute, or fail to resolve the hypotheses?
4. Do you agree with the author's overall conclusions? Explain.
5. What are the most interesting implications of this study?

During discussion, be prepared to identify what you regard as the most interesting single result from the paper. To help with your explanation be able to quickly sketch on the board a very simple schematic or idealized data figure and explain it so that a listener can get the gist of the paper in just 2 or 3 minutes. (Note that your graphic will almost surely have to be simpler than any figure or table in the paper. So you will have to be creative.) For results to be interesting, there has to be more than one way that a study could have turned out. Be able to sketch an alternative version of the same figure showing a different possible result that could have been obtained and explain how the conclusions would have been different if this alternative result had been obtained.

For discussion, also be prepared to address the following:

- Do the experiments and observations allow a rigorous test of the hypotheses? Explain.
- If the hypotheses were supported, were there any possible results that would have falsified the hypotheses? Explain. If the hypotheses were supported, can you suggest any alternative hypotheses that could also explain the results?
- If the hypotheses were refuted, what alternative hypotheses could explain the results?
- Do the questions addressed in this paper merit further study? If so, what would be a logical next step?

See “Literature critiques” at course web site for electronic access to papers.
http://www.dartmouth.edu/~bio31