

## Critiques: Required Elements

Natural Science 4 Dr. Hall

A large part of your grade in this course is based on your ability to apply the tools of critical thinking that we'll be learning over the next few weeks. As indicated in the calendar and group presentation assignments handed out in the beginning weeks, we will cover roughly one topic per week for the remainder of the semester. Note that if you are part of the presentation, then you will not have to turn in a critique for that week (that is you do not critique your own presentation topic). What follows are guidelines on how to write the critique and what I'll be looking for when I grade them.

### Critique (example outline)

- 1 Summary and Statement of Issue
- 2 Summary/Evaluation of Evidence/Reasons
- 3 Summary/Evaluation of Logic/Reasoning
- 4 Brief evaluation of presentation
- 5 Discuss omitted info, alternative hypotheses
- 6 Your conclusion with supporting argument

Each critique must include:

The identification and clear statement of the issue.

Concise discussion of:

Evaluation of evidence (on each side)

Find and identify by name any pitfalls of human perception

Evaluate strength of evidence

Evaluate credibility of sources

Evaluation of logic (on each side)

Find and identify by name any fallacies

Note form of logic used

Omitted relevant information? Alternative explanations?

Very brief evaluation of the presentation

Level of research/ organization/ presentation

**Your conclusion** with supporting argument based on above evaluations.

Additional Requirements:

- The paper must be at least 350 words, typed.
- Each critique must include an appropriate quoted citation from the textbook Hines.
- Each critique must also include *two* appropriate quoted citations from two of the web readings.
- Use of good grammar and sentence structure.

Inductive logic is the primary method of all science and critical thinking. As such we will avoid the words prove (or disprove), proven, "scientific proof", and instead focus on the credibility and reliability of the evidence and logic structure.

Don't use	Use instead
proves/ proven...	shows/ demonstrates/ demonstrated...
proof	credible evidence/ confirmed repeated observation/ unbiased experimental evidence...
disproves	evidence contradicts/ due to fallacious logic used/ evidence to contrary indicates...
no proof	lack of credible evidence...