You will each have one peer paper you evaluate for structure, and a second you evaluate for language. If you notice any problems with the science, feel free to make a note, but that is not the main objective of this review process.

You should spend about a half hour on each paper, and certainly no more than an hour. If you don’t make detailed comments for the whole paper, that is fine. The goal is to review whether or not the criteria below are being met: not to correct them.

You will receive 5 points towards your final paper grade for turning in a photocopy of substantive comments you made on your two assigned papers.

**Evaluating Structure**

**Document-level:** Does the paper have an abstract, introduction, and conclusion in the expected locations? Does the paper have an hourglass shape: start general, become specific, then return to general?

**Paragraph-level:** Can you identify a single purpose for each paragraph of the paper? (if so, you should be able to jot a few words in the margin)

**Sentence-level:** Within a single paragraph (choose just 1 or 2 to evaluate), are the sentences in the right order to support the purpose of the paragraph? Some possible shapes: hourglass, temporal progression, logical progression, list of examples, etc.

**Completeness:** Does the paper contain each of the required elements listed on the assignment handout?

- significance of the research
- connection to some course topics (but not to all topics ...)
- summary of current state of knowledge (must include some papers within the past 5 years)
- outlook for future work in the field
- more than just one of theory, simulation, experiment, and observation (although it can focus on one over the others)
Evaluating Language

Mechanics: Do the spelling, punctuation, and grammar conform to standard written English?

Language precision: Does the language provide only one, clear interpretation? Some common sources of ambiguity in scientific writing:

- dangerous use of adjectives (‘d is small’ is less informative than ‘d is small compared to L’ or ‘d/L ≪ 1’)
- obscuring the responsible party through the use of passive voice (‘mistakes were made’ vs. ‘I messed up’)
- failing to define technical terms or variables at first usage
- spurious synonyms: if you call a property by a particular name once, stick with that name throughout

Language accuracy: Is the use of scientific terminology accurate? Are causality and logic appropriately applied?

Sentence length: Do the sentences tend to run on (too long) or chop ideas up into tiny bits (too short)?