Science Writing Checklist (by D. Zuckerman with help from E. Lyman and A. Mamonov, Jan 2010) Your co-authors (and/or research supervisor) may not want to see your draft unless ...

Gener	าลใ

- □ Does each paragraph focus on a single idea or point which is introduced/summarized in the paragraph's first sentence? A paragraph is like a mini-essay.
- ☐ Is the flow of logic clear from paragraph to paragraph? From your draft, you should be able to (re)write the outline of the paper in fact, just from the first sentences of the paragraphs. Check this.
- □ Did you repeat key points in several sections to emphasize them?
- □ Did you spend a lot more time on logic and clarity than grammar and sentence structure? Nevertheless, avoid complicated sentences.

Abstract

- □ Does the abstract avoid distracting technical details?
- □ Is it clear from the abstract why the work is new and worthy of publication?

Introduction

- □ Did you clearly explain the reason why the work was done the existing problem?
- □ Did you clearly and briefly explain what you did to make progress what's new?
- □ Did you cite pertinent work done before? Even by people you may not like?
- □ Did you read the introductions of <u>several</u> related papers to be sure you explained the ideas properly and cited the important work?

Methods

- □ Did you remind your readers why a new/old method was used? You can write a mini-introduction for the Methods section.
- □ Did you provide enough information so a reader could <u>exactly</u> reproduce your results? The whole procedure should be outlined, even if some details must be found in other work or Supplemental Information.

Results

- □ Did you make sure the main results are not buried? Again, use mini-introductions.
- □ Did you save commentary and speculation for the Discussion section?

Discussion

- □ Did you clearly explain what's new, as compared to previous work?
- □ Did you avoid repeating information from the Results section?
- □ Did you admit the limitations of your work?
- □ Did you describe future applications, improvements, and generalizations?

Conclusions

- □ Could a reader in a rush read just the Conclusions and learn just about everything (including acronyms)?
- □ Did you avoid exaggeration and let the data speak for itself?
- □ Did you acknowledge everyone who helped, including funding agencies?

Figures

- □ Do figure titles describe the main point of each figure?
- ☐ Have you put labels/arrows in the graphic to minimize effort for the reader?

Wait!

- □ Did you go back to the 'General' section above and double-check those paragraphs and logic even in the Results section? And is every paragraph in the right section?
- □ Did you make several revisions of the entire manuscript (after completing a first draft)?
- □ Did you check journal-specific formatting section order; figures; references?