

CE 06015
Lecture 3
Grammar and Scientific Writing

WRITING PRINCIPLES

1. Use precise and simple words, avoid unnecessary phrases and too many abbreviations
2. Use correct prepositions, articles, plural and singular verb forms
3. Use transitions to indicate logical relationships between sentences
4. Avoid writing in the negative
5. Set yourself some deadlines
6. Know how to paraphrase and ensure you are not plagiarizing when citing references
7. Figures and tables should be able to stand on their own
8. Use the fewest figures and tables needed to tell a story
9. Prepare tables rather than graphs when it is important to give precise numbers
10. Follow the “funnel” structure in writing an Introduction
11. Provide enough details and references to enable a trained scientist to evaluate or repeat your work, but do not include unnecessary detail
12. Passive voice is often preferred in Materials and Methods section
13. Use past tense for Results, but present tense for descriptive papers
14. Organize Results into different sections chronologically or from most to least important
15. Organize Discussion in a pyramid structure and provide generalization where possible:
First paragraph: Answer based on key findings
Supporting evidence
Subsequent paragraphs: Comparisons/Contrasts to previous studies
Limitations of your study
Unexpected findings
Hypothesis or models
Last paragraph: Summary
Significance/Implication
16. Abstracts include the question/purpose, experimental approach, results and conclusion. If useful, also include background and significance
17. Use a strong, clear, complete but succinct title that attracts readers, state the main topic of your study, and separates your article from others in the field
18. Let some time elapse between revisions. Count on ≥ 6 drafts
19. Give complete copies to your co-authors and colleagues for comments and constructive criticism. Be prepared to accept the criticism
20. First impression is very important. Be persistent. Try, try again

ONLINE REFERENCES

For grammar, punctuation, capitalization, and practice (Last accessed September 2015)

<http://owl.english.purdue.edu/owl>

<http://www.englisch-hilfen.de/en>

<http://www.englishpage.com>

<http://grammar.ccc.commnet.edu/grammar>

<http://www.chompchomp.com>