Scientific Writing 2017

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What is scientific writing?

https://www.youtube.com/watch?v=Soit1wG_GCQ
What is expected in scientific writing?

- Correct formatting in line with University norms and templates
- Correct spelling and grammar
- Well researched literature review with published references
- Clarity, not confusion
- Brevity, not long drawn out explanations and repetitions
- Logical flow of ideas
- Accuracy of results and findings
- Strong arguments that link the research questions to methods and conclusions
The layout of “References” is specific for a particular Faculty at the University.

- UP mainly uses Harvard and Vancouver.
- Assistance can be found on the Library website: http://www.library.up.ac.za/referencing/
- Be VERY careful of layout and punctuation as some examiners look first at the bibliography.
- More than half of your references should be from Peer Reviewed Journal articles and less than five years old.
- Many references now come from the internet.
The writing process

1. Planning,
2. Research.
3. Writing a draft
4. Editing and revising

https://www.youtube.com/watch?v=V1pnpL8295E
Writing fast?

- https://www.youtube.com/watch?v=lTjkenmpMJE
- Writing consists of putting ideas onto place
- But it can be very confused
- Rather write a roadmap of what you want to write
- Then you can fit your ideas into your roadmap
- Write and then edit
What is Editing and Proofreading?

https://www.youtube.com/watch?v=8LliK6DM4zA

EDITING = Improving quality of writing
- Deleting unneeded words and repetition
- Making stronger arguments
- Improving logical flow

PROOFREADING = finding errors
https://www.youtube.com/watch?v=Tk0x6tEWXzs
- Subject verb agreement
- Content is not an issue
Correct formatting

- Look at guidelines on how to format theses and dissertations
- For publications, use author guidelines
- Microsoft Word allows you to select page layout
- Margins are usually 2.5 cm
- Choose a default font eg Times New Roman, Arial, Calibri. Font size 10 or 12
- Line spacing single, 1.5 or double?
- Headings as required by University or Journal
- References as required by Faculty or Journal eg Harvard or Vancouver
Common mistakes

https://www.youtube.com/watch?v=pZgyY_pNyrA

- Tenses: be consistent
- Not using spell check and grammar check in Microsoft word
- Long sentences (more than 3 lines)
- Incorrect word order
- Capital letters, commas and full stops used incorrectly
- Using too many adjectives
- Non specific words: “Most”, “Many”, “Some”
- Poor logical flow
Brevity: write in plain English

https://www.youtube.com/watch?v=Mn7f5tsgjx8

- Try and write as you would speak to someone
- Observe the KISS principle
- Read your writing aloud to make it clearer where you are making mistakes
Start writing BEFORE you finish the research

- https://www.youtube.com/watch?v=g3dkRsTqdDA
- https://www.youtube.com/watch?v=Zpm6_PBa8pw
- Copy and paste Chapter 1, 2 and 3 from your research protocol and expand them
- Write a contents page while you are waiting for ethics approval
- Sketch out all your titles of tables and figures in Chapter 4 before you begin collecting data
- Insert data into tables and do data analysis while you are still in the field
- Write your discussion and conclusions at the same time as you write the article you want to publish
Writing your first paper

- Find the key words for your research paper
- Use a search engine to see if you land up with similar publications online
- Search until you find a publication similar to the one you want to write
- Check if the Journal it is published in, is on the list of accredited Journals on the UP website
- Use the publication you find as a “template“ for the publication you want to write
In a Laundromat:

- AUTOMATIC WASHING MACHINES: PLEASE REMOVE ALL YOUR CLOTHES WHEN THE LIGHT GOES OUT

In a London department store:

- BARGAIN BASEMENT UPSTAIRS

In an office:

- WOULD THE PERSON WHO TOOK THE STEP LADDER YESTERDAY PLEASE BRING IT BACK OR FURTHER STEPS WILL BE TAKEN

In an office:

- AFTER TEA BREAK STAFF SHOULD EMPTY THE TEAPOT AND STAND UPSIDE DOWN ON THE DRAINING BOARD
Sentences

How to sequence your words in a sentence

*The order is:*
1. Who (Subject)
2. What (Verb) and / or (Object)
3. Where
4. When
5. How
6. Why
An example

- John ate breakfast on the train this morning as he was late
  (WHO)-(WHAT)-(WHERE)-(WHEN)-(WHY)
- If you have different magnitudes, you order them small to large in a sentence, e.g. (WHERE)
  e.g. John lives in a house, in Pretoria, in South Africa.

(Reference: YouTube [Http://youtu.be/VPyo8-Pr55Q](http://youtu.be/VPyo8-Pr55Q) 13.14 minutes)
Predicated in writing well

Watch how you treat your verbs!

- Do not turn verbs into nouns
- Put your verb early in the sentence near to the noun

Excellent YouTube video obtainable at:

Http://Youtu.be/O-NZFSrqHB0
Sentences should be “concise” (short)

- Only use words that contribute to the meaning of a sentence.
- Eliminate opening “fillers”.
- Revise “wordy phrases” eg “this point in time” becomes “now”.
- Eliminate redundant words eg “Consensus of opinion” becomes “opinion”.
- Replace commas with full stops. So you turn a long sentence into two or more short sentences.

Reference: Http://youtu.be/dyy7FJq-J1k
Punctuation

- Capital letter at the beginning of every sentence, full stop at the end.
- Use of capital letters for other reasons (See English & v Tonder, 2012) – is quite complex.
- The comma, should be used, between every new clause or thought, in a sentence. It should always be used after “which”, but never, before “and”, unless you also put it after, “and”, continue the sentence.
- “Semi-colons” are seldom used, but useful for lists.
- Colons: usually indicate a “bullet” list
- Sentences should not start with “And”, a number (112) or an Acronym (WHO).
Cut Unnecessary Words

- Wordiness is a serious problem in academic writing.
- Long sentences, excessive use of adjectives, repetition; all result in “wordiness”.
- Read your work aloud. When you have to take a breath, put in a comma. If it is a BIG breath, put in a full stop.

Excellent YouTube video on editing extra words out of a paragraph.
Http://youtu.be/91jo4kX7Cq0
Structuring a paragraph

- What is a paragraph?
  - Always starts in a new line
  - Several related sentences
  - One main idea or concept

- Elements of a paragraph
  - “Topic Sentence” states main idea
  - “Unity” and “Coherence”. Sentences related.
  - “Development” other sentences must support the idea

Reference YouTube: Http://youtu.be/w183qB0KDFG
Logical Flow

- Logical flow starts at paragraph level
- Keep related ideas together under the same headings and subheadings
- Literature review is a summary of other’s findings
- Methods are those chosen for the thesis
- Results are new findings of the study
- Discussion is about the results of the study, new literature should not be included
- Conclusions are related to research question/hypothesis/objectives.
Plagiarism

“Plagiarism is a form of academic misconduct. It involves both appropriating someone else’s work and passing it off as one’s own work afterwards. The relevant sections of the Disciplinary Code: Students read as follows: A student shall be guilty of misconduct and may be dealt with in terms of this code, if he or she plagiarises by stating, or implying, original authorship of someone else's written or creative work (words, images, ideas, opinions, discoveries, artwork, music, recordings, computer-generated work), and/or by incorporating such work or material, in whole or in part, into his or her own work without properly acknowledging or citing the source”

(http://www.library.up.ac.za/plagiarism/Plagiarism%20PreventionPolicy.pdf)
Be prepared... Turn-it-in

Reference: copied from UP library website