

Dissertation Content Guidelines

1. Introduction

This is usually a one-page overview of the dissertation, including a brief description of the concepts which are being reviewed and investigated. It is in effect a slightly lengthier version of the abstract and is useful in familiarising the reader with the structure and objectives of the project. Some useful questions to ask yourself when writing this are:

- What is the problem or question you are trying to address?
- What is your hypothesis? Do you have any predictions?
- How will it contribute to existing knowledge?
- What methods will you be using to complete your project?
- What are the expected limitations of the study?

Try to be generic so as to provide an easily-understandable introduction to your project.

2. Literature Review

This section deals with providing an overview of the literature surrounding the main concept being explored in your dissertation. Usually, this involves breaking down background information about the topic in question into several sub-topics to give a gradual build-up of information crucial to the understanding of the area of focus and overall direction of the dissertation. Very often splitting this section up into logically smaller sub-sections will help the reader become more familiar with the topic.

It is important to cite several primary sources (i.e. journals not websites) and back up the review with previous examples. Ideally, you would also compare and contrast what is already present in the literature with what you intend to be doing. This section is also the ideal place to introduce some theoretical background concepts which will bring the reader up to speed with what will be discussed in the later sections.

Sometimes, the **Literature Review** is included as part of the **Introduction**.

3. Methodology/Experimental

This is where you describe what has been carried out to analyse your problem. It should include two sub-sections by default:

- *Materials* – where you list all chemicals, their purity, the brand and their source (i.e. whether they were used as purchased or purified).
- *Instrumentation* – where you list all instruments used, including their brand and specifications as well as any procedures followed during preparation of samples with these instruments.

Other experimental procedures followed should also be described clearly as separate sections. Chemical reactions and schemes should be included alongside descriptions of the method, with all quantities specified clearly.

Sometimes this section is placed after the Conclusions section and labelled as **Experimental**.

4. Results & Discussion

This is where the results of your experiments are displayed and described. It is convenient to group these two sections together as it provides instant explanation of results and also allows the freedom of comparing the data to literature as part of the discussion. It is important to focus on several aspects in the section:

- What is the quality of the results? (Linearity, Correlation, Statistical Relevance etc.)
- How do the results tie in with your initial predictions?
- How is the data similar, different or complimentary to what is available in the literature?
- What is the impact of these results?
- Where did things go wrong? What could have been done better?

5. Conclusions

Here is where you summarise the work that has been done and also highlight the main findings of your study. This section should ideally refer to your original ideas as stated in the introduction and also the literature in a general way but refer to your main discoveries in a specific way. Very often, it is useful to include a résumé of Further **Work** which is useful in setting a direction for any individuals who will be referring to your work as part of a future project they might wish to carry out.

6. References

The references section can be compiled by making use of RefWorks, accessible here:

www.um.edu.mt/library/researchtools/bms

For more information and tutorials on how to use it, please visit:

www.youtube.com/user/proquestrefworks

7. List of Chemical Structures

This is where you include any chemical structures which may have been used throughout your dissertation. Number each structure in parenthesis for easy in-text referencing.