

PVB203 Report submission and writing guidelines

Title: Title of the experiment

Name: Your name, indicate your lab partners

Abstract – A concise summary (100-150 words) of the major aspects of the entire report. It should include the aim, (very) brief method and outcome.

Introduction – Establishes the context of the work being reported, typically by providing an overview of the theory and background information. The introduction should also state the aim of the study in the form of a hypothesis. This should also include the main equations used for analysis.

Materials and Methods – In this section you clearly explain how you made your observations. Enough detail should be provided about the experimental protocols so that other scientists with a similar level of knowledge to yourself can repeat your experiments. It should be written in past tense. (Length will vary depending on experiment)

Results – A description of your observations without interpretation or speculation. Data can be presented objectively in both text and illustrative examples such as summary tables and graphs. Full tables of results should only be included as appendix. All data must be accompanied by the experimental error.

Discussion – Provides a forum to interpret the experimental data in light of the pre-existing knowledge. This is where you should compare your experimental results to expected values.

Experimental error: You should include a discussion about the sources of error in the experiment – and how they impacted your results. **A full calculation of the error propagation is also required.** The length of this section will depend on your results and the experiment. Other issues that may be covered in a discussion include questions raised by the study that require further analysis or inconsistencies between the current study and other relevant publications.

Conclusions – A brief summary of your findings, with comments on the key points and suggestions on future work if required.

References - Include appropriate references to the original papers or books reporting the theory and the results of similar experiments or findings. In physics journals, references are typically progressively numbered. For more info on how to number references see

<http://www.citewrite.qut.edu.au/cite/qutcite.jsp#numbered-journal-print>

Figures: Graphs needs to be clearly labelled, with axes and scales properly marked. Prefer the sans serif, more simple fonts (Arial, Calibri, Helvetica, etc) which are more clearly readable. Data points need to be clearly visible.

Indicate the error with suitable error bars, and the fitting/theory with a continuous or dashed line.

In the schematics of the apparatus the parts need to be clearly described by appropriate labels.

Photos can be inserted, but only if they are important to the discussion.

Every figure need to be accompanied by a figure caption, with progressive numbers.