

Research Thesis Guidelines

Your research thesis should include the following elements:

Title Page: Must include the title of your thesis, your name, and the date.

Acknowledgements and Dedication (if desired)

Table of Contents

List of Tables and Figures

List of Abbreviations (if appropriate)

Abstract: (**not more than 250 words**). Briefly summarize the nature of the project, the results obtained and the relevance of the results.

Introduction: Introduce the research the problem, giving enough relevant background information that a non-specialist can understand why the problem is of interest. (Remember, your faculty reader(s) may not be as conversant with the work in your advisor's lab as are you.)

Materials and Methods: Provide sufficient details for all aspects related to how the experiments were conducted so that someone reading the thesis after your departure could replicate your work. If helpful, include figures and/or tables. (This section is often the most useful to your advisor and labmates later on.)

Results: Provide a detailed description of the experimental data, using figures and tables as necessary.

Discussion: Evaluate the results obtained including caveats where appropriate and discuss their relevance and significance to current models and other data in the field.

References: Include complete citations (authors' names, year, paper title, journal, volume, pages). See the journal *Cell* for example.

Appendix(ces) (if applicable): Here you can put in data that weren't complete enough to make sense in the body of the thesis, but you still want to include somehow.

Of course if you had multiple projects that were significantly different and/or have so much data it can't fit into one Results section, you could break your thesis up into chapters more like a Ph.D. dissertation. In this format, each chapter would have its own Intro, M&M, Results and Discussion sections. If you think you might want to do it this way, ask your advisor to show you a copy of a Ph.D. dissertation so that you can check out that format.