

**Research Project**

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**STAT 487**

**PROJECT**

**15 points**

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Your STAT 487 project is an original piece of research, assessed by a written report.

You should identify a supervisor and a project before the trimester begins. You can ask the Statistics Graduate Coordinator (Research) or the Master of Applied Statistics programme director for assistance with identifying a supervisor and a project – or you can approach supervisors directly yourself.

The supervisor and the project must be approved by the Graduate Coordinator (Honours, Postgraduate Diploma, Masters Part 1) of the Master of Applied Statistics programme director as appropriate.

Make sure that the supervisor will be available throughout the trimester to guide you.

If you are a Master of Applied Statistics student, you may use the project that you developed in your STAT 480 (Research Methods) research proposal, or the work that you have done in your Statistics Practicum, or alternatively you can develop an entirely new project.

The assessment of the project is fully based on the report that you will write during your research period. It is due at the end of the trimester in which you are studying – usually during the examination period of that trimester.

The report will be marked by a member of the academic staff who has not been directly involved in your supervision.

## **The Research Project Report**

You are **strongly advised** to use Latex in your report. If you wish to use any other document preparation system you should be prepared to justify the reason. Other systems – in particular Microsoft Word – end up taking much more time. Even though you will need to invest the time to learn Latex (with its bibliography management system bibtex), you will find it pays off at the end.

You can use <http://www.overleaf.com> as an easy route to learning Latex if you wish.

The report should have the usual contents of a research report – broadly speaking it should have the following content:

- **Title page** (one page – stating the project title, your name, the month and year of submission, and naming the School of Mathematics and Statistics, and the University;
- **Abstract** (half a page) a short summary of your research goal, methods and findings;
- **Acknowledgements** (optional, half a page) a short statement thanking the people who have assisted you, any scholarship support, etc.
- **Table of Contents** (automatically generated)
- **List of Figures** (optional, automatically generated)
- **Introduction** Set up the background, the overall objectives, the literature review, specific research questions, and a plan of the report. Make sure all relevant technical concepts are defined here.
- **Data** Describe any data sets that you use – their source, completeness, and give some summary characteristics.
- **Methods** Give the statistical methodology you employ in the project. Make sure all notation is defined, and that there is sufficient detail for a reader to be able to follow exactly what you have done. A reader should be able to implement your method from this description.
- **Results** Present the results of applying your methodology to your data. Present tables and graphs of results. You may state conclusions in this chapter or defer until the Conclusions chapter.
- **Conclusions** State the main conclusions of your work: if you have already presented these in the results, then this is a very short chapter. Discuss the limitations of your findings, and lay out what future work might be suggested by what you have done.
- **Reference List** (automatically generated)
- **Appendices** (optional) Put material here that you want to include in your report, but which is not necessary for every reader to see: only those readers wanting to see a bit more technical detail, or to see tables of data and results that don't add to the main argument. You **can** put computer code here, but pages and pages of R code are rarely helpful to a reader.

The above is just a guide – your supervisor can give you more concrete advice. If your project is fully theoretical there will be less emphasis on data (and you won't need a Data chapter).

You can have a separate Discussion chapter between the Results and Conclusions if that seems most sensible.

The project report should be around 30 pages including the references but excluding the appendices. Longer is OK if justified, but excessive length will be penalised. Shorter is OK too – **as long as its clear**.

Proofread your report carefully – and give it to someone else to read. If English is not your first language that won't affect your grade – **but what you do write must be clear**. (Native English speakers: don't embarrass yourself!)

**Avoid plagiarism** – if you include any material in your report that **appears** to be your own because you haven't signalled it comes from somewhere else, then you are committing plagiarism. Talk to your supervisor if you're unsure. Plagiarism is the most serious academic offence: you can end up with a zero on your report, a record in the University's Academic Misconduct Register, and maybe worse (suspension or expulsion from the University).

Hand your assignment in in hard copy **and** electronically on the due date.