

ST308: Assessed Coursework - Project

You will undertake a project that will determine your final mark of the course by 20 per cent. The project will require you to analyse a real-world dataset of your choice. You can use the Open ML website, the UCI repository or any other **publicly available dataset** that was not analysed during the course and is suitable for the analyses described below.

The project will consist of analysing the data based on the **following techniques** covered in the course

1. Regression (linear) or Classification (logistic regression): where the problem consists of a continuous or a binary response variable.
2. Hierarchical / Multi-level models.

The above tasks should be implemented with Markov Chain Monte Carlo methods. **Material from the computer classes** can be used for loading the data and doing the analysis.

You will be expected to present the empirical problem, consider and implement competing methods to use the available data to address it. The output from these techniques should be described in non-technical language targeting people with a minimal quantitative background.

The results of the project should be presented in an 8-page article in A4 format. The 8-page limit includes figures and tables but excludes the title page, table of contents and references. In addition to the 8-page article, which should be submitted via a soft copy, your R code should also be submitted with appropriate comments and description via a R markdown notebook.

The project is due **Wednesday, May 7th noon.**