

A Problem of Your Own

In this assignment your task is to investigate a problem or a process that is of interest to you. It could be something you have come across in your studies or work, something related to a hobby of yours or some problem in everyday life; anything from making popcorn to waiting times in a computer system.

Plan the work according to the following list:

1. State the problem and define the goal of the experiment.
2. Collect information about the work that has been done earlier in this area.
3. Choose response variable(s).
4. Choose factors and levels.
5. Choose an appropriate design for the experiment.
6. Execute the experiment according to the design.
7. Analyse the data and make graphic presentations.
8. Draw conclusions and if appropriate give suggestions for further experiments.

Estimate effects and decide whether they are significant or not by appropriate significance test methods. Verify our model (where you include the significant effects) by plotting residuals.

Your report should be written such that other groups are able to reproduce your experiments and verify your results. The report can be written in either English or Swedish. The deadline for the report is on **Friday 15 December** at four o'clock. The reports are to be handed in in the bookshelves at the secretary office of Mathematical Statistics, 4th floor at Mathematics Centre.