

A Problem of Your Own

In this assignment the task is to investigate a problem or a process that is of interest to you. It could be something that you came across in your studies or work, something related to a hobby of yours or a 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 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) Analyze the data and draw conclusions
- 8) If appropriate, give suggestions for further experiments

Estimate the effects and decide whether they are significant or not by appropriate significance test method(s). Verify your model (where you include the significance effects) by plotting the residuals. Your report should be written in such a way that other groups are able to reproduce your experiment and verify your results. Do NOT use any statistical software packages. The report should be written in English and handed in no later than **24 February** at four o'clock.