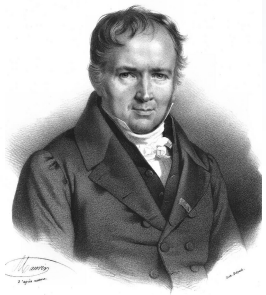
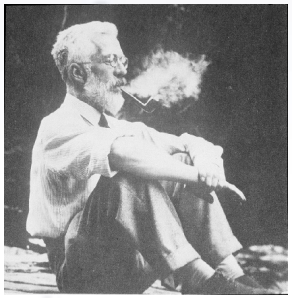
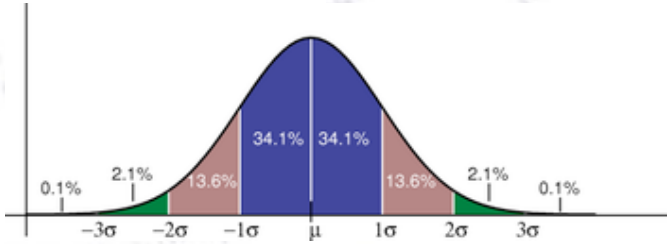
Applied Statistics

Advice for the exam




Troels C. Petersen (NBI)



"Statistics is merely a quantisation of common sense"

Good advice for the exam…

Some ideas from former students are:

- State final answers clearly, and put two lines under this (helps the grader).
- Check that the number of answers matches the number of questions (helps you).
- Wait with the long answers until you have some (basic) answer in place for all questions (we notice a "degrading" in the quality/correctness towards the end!).

If you can find the time, try to do the "test exam set" (from the 2014 exam) in about the allowed time range (perhaps allow a little more time), and see how you fare!

Also, if you know how to do something, but can't get it to work, then at least describe what you would have done, and try to get partial credit for the problem.

Finally, prepare your solutions from the entire course and a LaTeX file, and be sure that you can easily put in figures, etc.

Based on our experience…

Based on our experience from the problem sets, please consider:

Put Chi2, Ndof and p-value in figures AND in the text with COMMENTS.

Write down functions you use/fit with, and calculate Ndof yourself/correctly.

Write down what type of fit you do: Chi2 or LLH (binned or unbinned).

Mention formulae used, and show larger calculations specifically (2nd eq. best):

$$P = \sum r^n (1-r)^{N-n} \qquad P = \sum_{i=1}^{4} P_{binomial}(r, N=4, p_{succes} = 1/6)$$

State if p-values are significantly, i.e. choose a significance level, and compare.

Get significant digits right! Possibly show many digits and then shorten correctly.

When generating random numbers according to function, plot function on top.

If you forget almost everything!

Quantify!!!

Write what you do or would do!