

Assignment for 24 October

Analyse the data using Minitab and present your results in 15 min. Please discuss in the presentation the results, your conclusions and the difficulties encountered during the analyses.

Your presentation will include at least:

- * Descriptive statistics (variance, confidence intervals, mean, standard error)
- * An interval plot of the gene expression over time
- * An anova performed using the command general linear model
- * Conclusion
- * Discussion (biological and methodological)

Minitab has a good in-program tutorial that I would advice you to at least look through. It gives you assistance in using the program and into the statistics.

Help → Tutorials

There is also a specific stats-guide under the help function that can be useful for understanding the output of the program.

Some additional guidance for minitab:

Descriptive statistics:

Stat → Descriptive Statistics → Display Descriptive Statistics

In this window you can select the descriptives you want for your report and presentation

Plotting:

Graph → Interval Plot

Explore this window for all options. The buttons help you with the type of data you want to display.

ANOVA:

Performing an ANOVA using General Linear Model:

Stat → ANOVA → General Linear Model

Response: the variable you have measured and are testing

Model: is added using the factors (categories) and the covariates (continuous variables) in the following way: factorA+factorB..... interactions can be added using factorA*factorB

Continuous variables always need to be added as a covariate (klick the button 'covariate')

To obtain all results and coefficients, klick the button results and select 'In addition, coefficients for all terms'