Language research from conception to publication

NTNU LingPhill

SPRÅK8861

**Introduction to R (Dr. Laurel Brehm)**  
In this course, students will be introduced to the statistical software R which has become increasingly popular in the language sciences over the last couple of years. Topics covered in the hands-on sessions include importing, processing and visualizing data as well as fundamentals of the R language including its basic syntax

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| **ime** | **Thursday** |
| 9.00 – 10.30 | Intro to R: (90 minutes)  -syntax basics  -base R vs libraries  -reading data in/out  -basic functions  -restructuring data with tidyverse |
| 10.30 – 10.45 | Break |
| 10.45 – 12.15 | -Data viz basics (60 minutes)  -Taxonomy of data visualizations  -Implementation in ggplot (lexdec)  -Implementing models I (30 minutes):  -t-tests & correlations (lexdec) |

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| **Time** | **Friday** |
| 9.00 – 10.30 | Implementing models II: (90 minutes)  -linear fixed-effects regression (lexdec)  -logistic fixed-effects regression (Titanic)  -setting contrasts for categorical predictors (Titanic) |
| 10.30 – 10.45 | Break |
| 10.45 – 12.15 | Implementing models III: (90 minutes)  -Mixed models (lexdec)  -Interpreting interactions (cake) |
| 12.15 – 13.15 | Lunch |
| 13.15 – 14.45 | In-class assignment: Analyze & plot data from your choice of:  cake  Titanic  lexdec |
| 14.45 – 15.15 | Break |
| 15.00 – 16.30 | Advanced topics preview:  -Avoiding post-hoc tests with contrast coding  -Power analyses  -Bayesian models |