**To Do:**

In this course, students will learn the basics of applying regression analysis in R. At the end of the course, students will be able to write an empirical paper using quantitative statistical modelling such as simple linear regression, multiple linear regression, logistic regression, mediation and prediction. The course also includes a brief introduction to fundamentals of machine learning. Examples are based on real datasets and

Requirement:

* Basic knowledge of using R
* Descriptive statistics in R
* Data cleaning

**Jakob:**

* Read jaspers weeks

**Niaz:**

* For knitting: Include one hidden block and install all packages (if it is not installed)
* Hide solutions in exercise weeks
* Check for output we don’t want to show (warnings; cleaning steps)
* For all weeks, check “functions used” and “objectives” and incorporate section at the beginning of the week.
* For all weeks, at the end, “Further resources”
* Cross-references across sections/ update references to weeks
* Add little sub section on “how to use dagitty” in week on “DAGs”,
* Formatting:
  + Variable names mentioned in text
  + Functions mentioned in text
* Add “glance” to linear regression week when we show r2
* In prediction theory week:
  + When comparing models at the end, add a model which makes the same model adjustments that Jakub makes in his week regarding log transformations, squared terms and centering variables.
  + Then compare r2 and RSME of this model with the existing models that I had previously.

**Jasper:**

* When can you interpret log variable as percentage point increase
* Draft “outlook” week
* Review text in all weeks