Methodology Seminar

Winter term 2016
Syllabus

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Description

The course provides general skills in mathematical, econometric and type-setting software packages such as R, Stata, Matlab, Latex and the database Datastream which are used in the academic and business profession. The participant will be introduced into data analysis, basic programming and reproducible research techniques for each software. The student can hand in three voluntary assignments but is not able to get an overall grade for this course.

Dates

From 2016-10-24 until 2016-12-22, weekly on Mondays 08.30h - 10.00h in D324 and Thursdays 8.30h - 10.00h in E044.

Contents

1. **R**: Getting started, Matrix algebra, data management, introductory statistics, plots, basic programming.

2. **Latex**: Getting started, a simple document, mathematics, tables, graphics, Sweave/knitr.

3. **Stata**: Getting started, data management, basic programming, regression analysis, Latex and Stata.

4. **Matlab**: Getting started, matrix algebra, data management, basic programming, calculus, Latex and Matlab.

Literature

Cameron, A.C. and Pravin K. Trivedi, Microeconometrics Using Stata, Stata Press, 2010.

Kleiber, C., and Achim Zeiles, Applied Econometrics with R, Springer, 2008.

Mittelbach, F. and Michel Goossens, The Latex companion, Addison-Wesley Professional, 2nd edition, 2004.

Miranda, J.M., and Paul L. Fackler, Applied Computational Economics and Finance, MIT Press, 2008.