

Announcement SoSe 2017 Lecture in Mathematical Finance

Statistics for Business Administration

PD Dr. Aleksey Min

Area / Modulnr.: Statistics / MA9712

Course Structure: Lecture: 3h Exercise: 1h Optional exercise: 1h

Content:

- Descriptive statistics: measures of location and variation, graphical representation of uni- and bivariate data, measures of association for bivariate data, descriptive linear regression
- Probability calculus: examples of discrete and continuous probability distributions, conditional probabilities, stochastic independence, random variables and their distribution functions and moments, conditional distributions
- Statistical inference: confidence intervals, hypothesis tests, basic ideas of multiple linear regression
- Introduction to the statistical software package R and guidance on how to perform simple statistical analyses in R.

Audience: Bachelor BWL, Bachelor WI

Prerequisite: MA9711 (Mathematics in Natural and Economic Science 1)

Literature:

Caputo, A., Fahrmeir, L., Künster, R., Lang, S., Pigeot, I., Tutz, G (2009): Arbeitsbuch Statistik, Springer.
Cramer, E., Kamps, U. (2007): Grundlagen der Wahrscheinlichkeitsrechnung und Statistik, Springer.
Diesz, D., Barr, C., and Cetinkaya-Rundel, M. (2015): OpenIntro Statistics, 3rd edition, <https://www.openintro.org/stat/textbook.php>
Fahrmeir, L., Künster, R., Pigeot, I., Tutz, G. (2009): Statistik: Der Weg zur Datenanalyse, Springer.
Field, A., Miles, J. and Field, Z. (2012): Discovering Statistics Using R. SAGE.
Verzani, J. (2004): Using R for Introductory Statistics, Chapman & Hall.

Certificate: Exam, 6 CP

Location and Time: see TUMonline

Exercises: see TUMonline

