

# Announcement SoSe 2018 Lecture in Statistics

## 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