In Summer Semester 2016, the Chair for Operations Management will be offering a master level seminar on:

**Business Forecasting**

**Seminar Description:** This seminar deals with principles and applications of forecasting methods to aide business decisions and will take place weekly on Tuesdays 15:15-16:45 in room G22A-217. The assigned students are responsible to structure the contents of a textbook chapter, include additional material taken from scientific papers, solve a small case study and be prepared to discuss and defend their results. Participants are expected to have adequate skills in Math and Statistics and interest in deepening their knowledge in the area of operations management. The seminar rests upon the textbook *Principles of Business Forecasting* by Ord and Fildes (2013). Students will work on data sets. Thus, basic abilities in spreadsheet modelling and the willingness to improve one’s skills are required.

**Credits:** This seminar will give credit towards

- **Elective Modules** for students in the ISP program Master Management and
- **BWL-Wahlpflichtmodule** *Logistics and Operations Management* Master BWL

**Language:** main seminar language will be English

**Organizational Matters:** Each week we discuss one of the subjects (see below). Depending on the number of applicants several students independently work on a topic. Participants will be responsible to deliver a Seminar Paper (length 15-20 pages) and give a presentation during one of the seminar sessions. Depending on the study program the language of the paper can be either English or German (albeit English is highly recommended). Papers must comply with the general rules of scientific writing (see the guidance at [www.prolog.ovgu.de/en/Teaching/Remarks+and+downloads.html](http://www.prolog.ovgu.de/en/Teaching/Remarks+and+downloads.html) being available both in English and German). A presentation with a length of 30 to 40 minutes preferably is held in English. Participants are expected to actively take part in the discussion. Attendance in the weekly seminar sessions is for all participants absolutely mandatory. In the first seminar week a short test is to be written on chapters 1, 2, and 7 of the textbook. In every week one (or more) participants are selected to summarize the main insights from the current topic(s) (no slides, free speech).

A **first meeting** will take place on **Feb 11 from 17:00 to 18:00** in Room G22A-217 for which **attendance is absolutely mandatory.**

Since the number of participants is strictly limited, a **non-binding early registration** is strongly recommended. Topics are distributed according to each student’s preferences in the order of early registration. You can sign in for the seminar by E-Mail providing information on your study program to rainer.kleber@ovgu.de.

If you have any **questions** regarding the seminar or language specific requirements, please **contact** me:

PD Dr. Rainer Kleber (G22E-016; rainer.kleber@ovgu.de)
In Summer Semester 2016, the Chair for Operations Management will be offering a master level seminar on:

**Business Forecasting**

**List of seminar topics** and corresponding text book chapter

**A Basics approaches**

1. Exponential Smoothing I: Level and Trend Models (ISP only) [OF3]
2. Exponential Smoothing II: Models with Seasonality (ISP only) [OF4]
3. Linear Regression and Testing (ISP only) [OF7]

**B Advanced Time Series Analysis (extrapolative methods)**

5. State-Space Models [OF5 incl. Appendices]
6. ARIMA (AKA Box-Jenkins Models) and GARCH models [OF6]

**C Advanced Regression Analysis (statistical model building)**

7. Multiple Regression and Testing [OF8]
8. Predictive Classification I: Classification Trees and Logistic Regression [10.2 & 10.3]
9. Predictive Classification II: Neural Networks and Vector Autoregressive Models [OF10 & Appendices]

**Basic source and source suggestions** (additional literature review required):


**Minimum contents of seminar papers:**

- Basic principles and requirements for application of method
- Weaknesses and strengths
- Forecasting Procedure exemplified on Minicase data
- (sketched) Application examples from additional literature

**Web Links:**

- [Data](#) and Appendices (incl. a glossary) from Ord, K., Fildes, R. (2013)
- [http://forecastingprinciples.com](http://forecastingprinciples.com)