

MSc course Research Skills winter term 2016/17 – course overview

| | DE_0.135 | DE_1.129, DE_0.135 | DE_1.127, DE_0.135 | DE_1.129, DE_0.135 | DE_0.135 |
|------------------------|---|---|---|--|---|
| | Monday 09.01. | Tuesday 10.01. | Wednesday 11.01. | Thursday 12.01. | Friday 13.01. |
| 10:00 till 13:00 | 10:00 RS starts in E4_2.310 Science and the scientific method Finding a question Previous work Novelty | On the shoulder of giants: dealing with the scientific literature Searching, Literat. DB, Jabref etc. Morning practicals | Question rev. Intro to statistics Regression, NHST Design of Experiments Planning Statistical power | Scientific Ethics and Culture Organizing your Research Misconduct, good scientific practice, reproducibility, scripting, archiving | Field day Data collection |
| | Monday 16.01. | Tuesday 17.01. | Wednesday 18.01. | Thursday 19.01. | Friday 20.01. |
| 10:00 till 13:00 | Introduction to Graphics in R <i>Morning practical: graphics with R</i> <i>Afternoon exercise: visual data analysis</i> | LaTeX <i>Morning practical: LaTeX</i> <i>Afternoon exercise: your document in LaTeX</i> | Regression analysis in R <i>Afternoon tutorial: help with analyzing your data in R</i> | Writing 1 Article types, Publication Process Structure of a research article | Practice day Data analysis |
| | Monday 23.01. | Tuesday 24.01. | Wednesday 25.01. | Thursday 26.01. | Friday 27.01. |
| 10:00 till 13:00 | Practice day Writing | Writing 2 Style Paragraph structures Choice of wording and common mistakes Logic | Communication Ends and means, Social media intercultural communication Poster What makes a good poster | Reviewing Peer review Presentation Tips Conference presentation Choosing a career in science | Presentation |

Morning schedule: lectures start at 10 s.t. (this means: 10:00 sharp) and typically end around 13:00. CIP room DE_0.135 is reserved for us throughout the course and can be used for exercises. Rooms for lectures will be announced in class.

Afternoon schedule: By default, assume that afternoons are reserved for unsupervised homework, i.e. you work in your own time and at your place of choice. However, as 1) you are working in groups, 2) we have computers and software here, it is highly recommended to work at the university if you can manage. **Exceptions** where we have supervised exercises in the afternoon marked in the timetable, notably at the beginning of week 2. Please block the afternoons for those, these practicals cover subjects that are essential for the final paper. Also, you should block Friday of the first week for your group data collection.

The **main course homepage**, which contains **course material and further links** is here <http://florianhartig.github.io/ResearchSkills/>. **Lecture notes and assignments** will be posted on GRIPS, the online system of the university.

All other organizational issues will be explained on the first day of the course. See you there! / Florian Hartig