

## MSc Research Skills winter term 2015 – course overview

	Monday 19.10.	Tuesday 20.10.	Wednesday 21.10.	Thursday 22.10.	Friday 23.10.
9.15 till 12.45	9.00 - 9.45 MSc general welcome  <b>10:00 RS starts in R100</b>  <b>Science and the scientific method</b>  <b>Finding a question</b> Previous work Novelty	<b>On the shoulder of giants: dealing with literature</b> Searching, Literat. DB, Jabref etc.  Morning practicals <b>FH, SH</b>  14.00 Intro organizational and administrative issues (R100)	<b>Question rev.</b>  <b>Intro to statistics</b> Regression, NHST  <b>Design of Experiments</b> Planning Statistical power  14.00 Wildlife 15.00 Biomaterials	Field day  CIP 3 blocked by FELIS / Sebastian Brackhane	<b>Scientific Ethics and Culture, and organizing your Research</b>  Misconduct, good scientific practice, reproducibility, scripting, archiving,  14.00 L&N 15.00 UM + GIS
	Monday 26.10.	Tuesday 27.10.	Wednesday 28.10.	Thursday 29.10.	Friday 30.11.
9.15 till 12.45	<b>Introduction to Graphics in R</b>  <i>Morning practical: graphics with R</i> <b>SH, FH</b>  <i>Afternoon exercise: visual data analysis</i> <b>SH</b>  14.00 WW 15.00 Int .For.	<b>LaTeX</b>  <i>Morning practical: LaTeX</i> <b>SH, FH</b>  <i>Afternoon exercise: your document in LaTeX</i> <b>SH</b>	<b>Regression analysis in R</b>  <i>Afternoon tutorial: help with analyzing your data in R</i> <b>SH</b>  14.00 Ökol. Klim	<b>Practice day</b> <b>Data analysis</b>  <b>FH, SH</b> available for questions	<b>Writing 1</b>  Article types, Publication Process  Structure of a research article  Hand in draft until Sunday
	Monday 2.11.	Tuesday 3.11.	Wednesday 4.11.	Thursday 5.11.	Friday 6.11.
9.15 till 12.45	<b>Writing 2</b>  Style  Paragraph structures  Choice of wording and common mistakes  Logic	<b>Communication</b>  Ends and means, Social media Intercultural communication  <b>Poster</b>  What makes a good poster	<b>Reviewing</b>  Peer review  <b>Presentation 1</b>  Presentation types  Conference presentation	<b>Presentation 2</b>  <b>FH, SH</b>  <b>Choosing a career in science</b>  Should I do a PhD?	<b>Practice day</b>  Finalize research article  R 100 blocked Fish Bowl Umpro

**FH** = Florian Hartig, **SH** = Severin Hauenstein

**Morning schedule:** lectures start at 9 c.t. (this means: 9:15!) and typically end around 12.45 in Room 100. CIP rooms 1 and 3 are reserved for exercises and the afternoons. Exception is the first day, where you will have a general introduction, so lectures start at 10.00

**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 3) you have a tutor here at the uni, it is highly recommended to work at the Uni if you can manage.

**Exceptions** where we have supervised exercises in the afternoon are 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 Thursday 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 Ilias, the online system of the university. You can join the course website directly via this [link](#), or with course password RS1516FR (U. Fr. account required).

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