POLMAR

Programming in R for data analyses

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Date & Time:	April 13 – 15, 2016	9:00-16:00
Location:	E - 4025	
Language:	English	
POLMAR credit points:	3	
Registration:	info.polmar@awi.de	

Course content:
The course will lay conceptual and technical basics to the needs for R practice, e.g., in the statistics courses offered by Dieter Wolf-Gladrow within POLMAR or your own application field of data analyses. I will focus on data input and output methods, processing and connecting data from many files, data reformatting for different applications, data transformation and usage of R packages and their structured data objects; in particular, accessing analyses results from objects is trained. Additional techniques are trained, such as loop-programming, code-optimization by "apply" functions, data organisation and processing in lists. Many coding suggestions are given to improve readability and reusability of your R programs.

Day 1: Effectively organising R projects, theory of R data structures, addressing data in large tables, Graphical data exploration, filtering subsets

Day 2: Loop and list programming, performance issues, putting many tables together

Day 3: Practical examples from your projects; bring your own data / approaches!

Please note: *This course is also open for former R-course users and post-docs with demand for more programming skills!*

Target group:
Data analysts, requiring programming basics and knowledge of advanced features to usage of R packages and data objects

More information:
You need a notebook computer, installation of R (free of charge from r-project.org) and RStudio (free of charge from rstudio.com). On day three there is time to discuss your data from existing/running projects.

Our courses are generally free of charge for all participants. However, they do have a price and can cost as much as 150 € per day per student. Please take this into account when cancelling your place on the last minute.