

# Schedule

Friday, 4 December 2020 14:07

- Meetings:**
- Scheduling:
    - Friday 13<sup>00</sup>-16<sup>00</sup> GMT+1 (sessions end earlier in we are done earlier, of course)
    - Weekly (see **Proposed Timeline** further down)
  - Contents:
    - We follow the material noted further down under **Group Material**
    - We prepare ourselves by working through the material noted for each session in the *Preparation Column* in **Proposed Timeline**
    - At the start of each session, either me or a volunteer quickly presents a summary of the preparation material. This does not mean a presenter should have mastered the material at all – simply be able to provide a red-thread through the contents and get a discussion going. We then go into questions/challenges concerning the material, practical examples, and personal implementations.
  - Location: Zoom @ <https://aarhusuniversity.zoom.us/j/65455334420> (meetings will be recorded to make sure everyone can stay up-to-date even if they miss one or more sessions or are unable to join on-time, or stay for the entire duration).
  - Credits: I have spoken to the management at AU and PhD students are very likely to receive study credits (ECTS) for partaking in this study group. How many, I don't know yet, but I would assume around 3-5.
- Group Material:**
- Lecture Recording “**Statistical Rethinking**” by Richard McElreath; available here: <https://www.youtube.com/playlist?list=PLDcUM9U54XdNM4Edgs7weivglSToZRI>
  - Book “**Statistical Rethinking**” by Richard McElreath; available here: <https://github.com/Booleans/statistical-rethinking/blob/master/Statistical%20Rethinking%202nd%20Edition.pdf>
  - Practical Examples:
    - Course Material “**Statistical Rethinking**”: [https://github.com/rmcElreath/stat\\_rethinking\\_2020](https://github.com/rmcElreath/stat_rethinking_2020)
    - Book “**Introduction to WinBUGS for Ecologists**” by Marc Kéry; available here: <https://www.sciencedirect.com/book/9780123786050/introduction-to-winbugs-for-ecologists>
    - Book “**Bayesian Population Analysis using WinBUGS**” by Marc Kéry and Michael Schaub; available here: <https://www.sciencedirect.com/book/9780123870209/bayesian-population-analysis-using-winbugs>
  - Further Input (all prospective if I can get a hold of the people):
    - Jason Matthiopoulos (<https://www.gla.ac.uk/researchinstitutes/bahcm/staff/jasonmatthiopoulos/>)
    - Joseph Chipperfield (<https://www.nina.no/english/Contact/employees/employeeinfo.aspx?AnsattID=16057>)
    - Jörn Pagel (<https://www.uni-hohenheim.de/en/organization/person/dr-joern-pagel>)
    - Florian Hartig (<https://www.uni-regensburg.de/biologie-vorklinische-medizin/theoretische-oekologie/mitarbeiter/hartig/>)

## Proposed Timeline:

Date	Topic	Session Type	Preparation
11/12/20	Golem of Prague	Theoretical/Practical/Discussion	Chapter 1 in “ <b>Statistical Rethinking</b> ” Lecture 1 in “ <b>Statistical Rethinking</b> ”
18/12/20	The Basic of Bayesian Inference & Calculations	Theoretical/Practical/Discussion	Chapter 2 & 3 in “ <b>Statistical Rethinking</b> ” Lecture 2 in “ <b>Statistical Rethinking</b> ”
25/12/20 & 01/01/20	Holiday Break		
08/01/21	Geocentric Models	Theoretical/Practical/Discussion	Chapter 4 in “ <b>Statistical Rethinking</b> ” Lecture 3 & 4 in “ <b>Statistical Rethinking</b> ”
15/01/21	TBD	Input Talk	TBD
22/01/21	The Many Variables & The Spurious Waffles	Theoretical/Practical/Discussion	Chapter 5 in “ <b>Statistical Rethinking</b> ” Lecture 5 in “ <b>Statistical Rethinking</b> ”
29/01/21	The Haunted DAG & The Causal Terror	Theoretical/Practical/Discussion	Chapter 6 in “ <b>Statistical Rethinking</b> ” Lecture 6 in “ <b>Statistical Rethinking</b> ”
05/02/21	Ulysses' Compass	Theoretical/Practical/Discussion	Chapter 7 in “ <b>Statistical Rethinking</b> ” Lecture 7 & 8 in “ <b>Statistical Rethinking</b> ”
12/02/21	TBD	Input Talk	TBD
19/02/21	Conditional Manatees	Theoretical/Practical/Discussion	Chapter 8 in “ <b>Statistical Rethinking</b> ” Lecture 9 in “ <b>Statistical Rethinking</b> ”
26/02/21	Markov Chain Monte Carlo	Theoretical/Practical/Discussion	Chapter 9 in “ <b>Statistical Rethinking</b> ” Lecture 10 in “ <b>Statistical Rethinking</b> ”
05/03/21	Big Entropy and the Generalized Linear Model	Theoretical/Practical/Discussion	Chapter 10 in “ <b>Statistical Rethinking</b> ” Lecture 11 in “ <b>Statistical Rethinking</b> ”
12/03/21	TBD	Input Talk	TBD
19/03/21	God Spiked the Integers	Theoretical/Practical/Discussion	Chapter 11 in “ <b>Statistical Rethinking</b> ” Lecture 12 in “ <b>Statistical Rethinking</b> ”
26/03/21	Monsters and Mixtures	Theoretical/Practical/Discussion	Chapter 12 in “ <b>Statistical Rethinking</b> ” Lecture 13 & 14 in “ <b>Statistical Rethinking</b> ”
02/04/21	Easter Break		
09/04/21	Models With Memory	Theoretical/Practical/Discussion	Chapter 13 in “ <b>Statistical Rethinking</b> ” Lecture 15 & 16 in “ <b>Statistical Rethinking</b> ”
16/04/21	TBD	Input Talk	TBD
23/04/21	Adventures in Covariance	Theoretical/Practical/Discussion	Chapter 14 in “ <b>Statistical Rethinking</b> ” Lecture 17 & 18 in “ <b>Statistical Rethinking</b> ”
30/04/21	Easter Break		
07/05/21	Missing Data and Other Opportunities	Theoretical/Practical/Discussion	Chapter 15 in “ <b>Statistical Rethinking</b> ” Lecture 19 & 20 in “ <b>Statistical Rethinking</b> ”
14/05/21	Generalized Linear Madness	Theoretical/Practical/Discussion	Chapter 16 in “ <b>Statistical Rethinking</b> ”
21/05/21	Summary	Theoretical/Practical/Discussion	TBD