## Course: 02424, Advanced Dataanalysis and Statistical modelling, F18

The plan is tentative and minor changes might occur during the course. MT.c(s) refer Chapter "c", sections "s" of the course text book (Madsen and Thyregod, 2011), weekly exercises will appear on campusnet for each week.

Week	date	Main subjects	Reading
1	29/1	Introduktion to book, and R	MT.1
			r-project.org
2	5/2	Likelihood principle	MT.2
3	12/2	General Linear models I	MT.3(1-5)
4	19/2	General Linear models II	MT.3(6-12)
5	26/2	Generalized linear models I	MT.4(1-2)
6	5/3	Generalized linear models II	MT.4(3-9)
7	12/3	Generalized linear models III - Examples	MT.4
8	19/3	Mixed effect models I	MT.5(1-2)
9	9/4	Mixed effect models II	MT.5(3-5,11)
10	16/4	Mixed effect models III - Estimation and repeated measurements - Laplace approximation	MT.5(5-11)
11	23/4	General mixed effect models I	MT.5(9-11) + TMB article
12	30/4	Hierarchical models	MT.6
13	7/5	Hierarchical models Summary	MT.6

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## **Projects**

The grade of the couse is based on three reports handed in during the course. The projects will appear in campusnet. The plan for hand in is given below

Project 1: 10/3 (23:59) Project 2: 13/4 (23:59) Project 3: 11/5 (23:59)

For each of the project it is possible to work with you own data, you should discuss this with me.

Jan Kloppenborg Møller

## References

Madsen, H. and Thyregod P. (2011) Introduction to General and Generalized Linear Models,  $Chapman\ \mathcal{E}\ Hall$ 

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