

PVS0147 Linear Models in Animal Breeding, 3.0 credits

PhD course arranged by Graduate School for Veterinary Medicine and Animal Sciences (GS-VMAS) in collaboration with NOVA **University Network**

Course date: June 17-21, 2018

Location: To be decided. Probably a conference venue north of Uppsala, e.g. Orsa Grönklitt

Content

The course will be based on theoretical lectures alternating with practical computer exercises, mainly in R. Three weeks before the course starts some pre-course exercises will be given, including exercises in R and some questions on linear regression and statistical theory. Students are expected to have completed a majority of these exercises before arriving to the course. One week before the course start there will be an online meeting for those who want to ask questions on the pre-course exercises.

The course will include sections on linear regression, diagnostic tools for linear regression, linear regression using weighted least squares, maximum likelihood, a brief introduction to generalized linear models, linear mixed models, introduction to GWAS models, and genomic selection using gBLUP, short overviews of dispersion modelling, GLMM, and Bayesian alternatives.

Prerequisites

Doctoral student experience or similar, with knowledge in animal science or veterinary medicine, or participant in a residency program in veterinary science. NOVA doctoral students, and thereafter BOVA and other doctoral students will be prioritized.

Information and application: <u>www.slu.se/gs-vmas-courses</u> Course leader: Susanne Eriksson, susanne.eriksson@slu.se

Last date for application: April 1, 2018



Swedish University of Agricultural Sciences

