

Mixed Models in R

Monday 12th, Wednesday, 14th and Friday, 16th February 2024

Enrolment form for fee-paying participants



Title:		Full Name:	
Employer:			
Department:			
Address:			
Suburb:		Postcode:	
Email:			
Telephone:		Mobile:	

Signature:		Date:	
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Course fees	Full	\$660		
	UoM Staff	\$440		
	UoM GR student	\$275	Student ID	

Internal billing:

<input type="checkbox"/>	Internal transfer of funds	Staff \$400	<input type="checkbox"/>	UoM Student \$250	<input type="checkbox"/>
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Full Themis account string								
Finance person:		Finance email:						

External billing:

<input type="checkbox"/>	Tax invoice	External party fee includes GST \$660
	Name/Company	
	Address	

<input type="checkbox"/>	Pay by Credit card go here:	https://ecommerce.unimelb.edu.au/mixed-models-in-r
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Cancellation fee applies \$30

Mixed Models in R

*A course of the Melbourne Statistical Consulting Platform, The University of Melbourne
in conjunction with Statistical Consulting Centre*

Monday 12th, Wednesday, 14th and Friday, 16th February 2024 online mornings only

This course covers the fitting and interpretation of mixed models in R. Topics covered include

- Fixed and random effects;
- Variance components;
- Nested and crossed factors;
- Comparison and adjustment of means;
- Models with categorical and continuous predictors;
- Using R to fit mixed models;
- Interpretation of R output;
- Where mixed models fit in.

The course is focused on examples, and there is no mathematical theory. The course will use R Markdown, but you don't have to be familiar with it to benefit from the course. RStudio will be used in the course as a front end.

Prerequisites:

Some familiarity with R is necessary. One way of obtaining such familiarity, and learning useful statistics along the way, would be to take one of the following courses offered by the Statistical Consulting Centre:

- Statistics for Research Workers using R and R Markdown;
- Introduction to R and Reproducible Research

Who should take this course?

This course is suitable for researchers who need to fit mixed models to their data. Mixed models are also known as multi-level models or hierarchical models, and arise in most disciplines, in both designed experiments and observational studies. Some examples are cluster randomised trials in medicine, incomplete block designs in agriculture, hierarchical structures in education, repeated measures in the social sciences, and nested factors in ecology.

Course structure

All days will commence at 9:00am and finish at 12:30pm. The sessions will mix lecture presentations with practical work.

Mode of delivery:

Online over three mornings

Cost:

This course is offered to the public, University of Melbourne staff and Graduate Researchers.

External to the university: \$660 including GST

University of Melbourne staff: \$440 (including \$40 GST).

Graduate researcher student: \$275 (including \$25 GST).

Note that GST does not apply if you are paying through your School or Department.

Cancellation fee \$30.

The fee includes a set of notes from the lecture slides.

Course presenters:

Graham Hepworth is a senior consultant with the Statistical Consulting Centre in the School of Mathematics & Statistics. He has had extensive experience over three decades in using mixed models, in a wide range of fields and studies.

Cameron Patrick is a consultant with the Statistical Consulting Centre, supporting University staff and graduate researchers. He has had extensive experience in R, and developed the course "Introduction to R and Reproducible Research".