

Cross-over Trials 29.–31.3. (TILB15 Ristikkäiskaaviokokeet 4 op (TILA3484))

Lectures will be held in the seminar room of Statistics (Room 469, Publicum, 4th floor).
Practicals will take place in it-lab 409 (Publicum, 4th floor).

The teacher of the course is professor Mike Kenward (London School of Hygiene & Tropical Medicine, UK).

Previous studies: A course on linear mixed models. Statistical program SAS will be used in practicals.

Participants are asked to sign up for the course on the list found in the Statistics unit (Publicum, 4th floor) or send an e-mail to *seppanen@utu.fi* before 22nd March.

Timetable

Monday 29 March

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|---------------|----------------------------|
| 10.15 - 11.45 | Lecture (Seminar room 469) |
| 13.15 - 14.00 | Lecture (Seminar room 469) |
| 14.15 - 15.45 | Practical (It-lab 409) |

Tuesday 30 March

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|---------------|----------------------------|
| 10.15 - 11.45 | Lecture (Seminar room 469) |
| 13.15 - 14.00 | Lecture (Seminar room 469) |
| 14.15 - 15.45 | Practical (It-lab 409) |

Wednesday 31 March

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|---------------|----------------------------|
| 10.15 - 11.45 | Lecture (Seminar room 469) |
| 13.15 - 14.00 | Lecture (Seminar room 469) |
| 14.15 - 15.45 | Practical (It-lab 409) |

Content

1. Scene setting and context
2. The two-period two-treatment design
 - Simple analysis and power calculations.
 - Issues including carry-over and the so-called two-stage procedure.
3. Higher-order designs
 - Designs with more than two periods and/or more than two treatments.
 - Common types of design, eg the Williams square.
 - Methods for choosing designs and their properties.
 - Special cases, such as dose-escalation designs.
4. Analysis
 - The use of fixed and random subject effects
 - The appropriate role of baseline covariates.
 - Analyses for non-normal outcomes, such as binary, count, and ordinal.

Text Book: Jones B and Kenward MG (2003) The design and Analysis of Cross-over Trials. Second Edition. Chapman & Hall/CRC.

More information:

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