

CLRS90014 Applied Analysis of Clinical Trials

Credit Points:	12.50
Level:	9 (Graduate/Postgraduate)
Dates & Locations:	2014, Hawthorn This subject commences in the following study period/s: Semester 1, Hawthorn - Taught on campus. Semester 2, Hawthorn - Taught on campus. Intensive mode
Time Commitment:	Contact Hours: 36 hours of lectures/seminars/workshops Total Time Commitment: Students should expect to undertake a minimum of 120 hours lectures, research, reading, writing etc to complete this subject successfully
Prerequisites:	To enrol in this subject, you must be admitted in the Master of Clinical Research. This subject is not available for students admitted in any other courses.
Corequisites:	nil
Recommended Background Knowledge:	nil
Non Allowed Subjects:	nil
Core Participation Requirements:	For the purposes of considering requests for Reasonable Adjustments under the Disability Standards for Education (Cwth 2005), and Students Experiencing Academic Disadvantage Policy, academic requirements for this subject are articulated in the Subject Description, Subject Objectives, Generic Skills and Assessment Requirements of this entry. The University is dedicated to provide support to those with special requirements. Further details on the disability support scheme can be found at the Disability Liaison Unit website: http://www.services.unimelb.edu.au/disability/
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Subject Overview:	Topics covered include: <ul style="list-style-type: none"> # Analysis of Variance Designs <ul style="list-style-type: none"> o Factorial designs o Balanced designs o Crossover designs o Adjustment of denominators and their interpretation o ANOVA as described by general linear models, including crossed and nested effects, and repeated measures. # Repeated measures analysis <ul style="list-style-type: none"> o Between and within person and between and within treatment effects # Survival Analysis techniques <ul style="list-style-type: none"> o The life-table approach o The Kaplan-Meier estimator o Effects of censoring o Significance tests for effects, including the log-rank test # Advanced Regression techniques <ul style="list-style-type: none"> o Cox proportional hazards regression o Poisson regression o Logistic Regression

Learning Outcomes:	<p>At the end of this subject, Clinicians should be able to:</p> <ul style="list-style-type: none"> # Understand the major statistical methods used in analysing data from clinical trials # Perform analysis on such data within limitations, using an appropriate statistical package. # Understand the limitations and assumptions of such analyses # Be familiar with the statistical terms used in the literature # Interpret and explain to others in clear language the relevant information from such analyses # Understand the advantages and weaknesses of repeated measures, crossover designs, factorial and blocked designs from a statistical perspective.
Assessment:	Three data analysis assignments (30%, 30% and 40%).
Prescribed Texts:	Students will be provided with articles and references that support the teaching program as part of their course materials
Breadth Options:	This subject is not available as a breadth subject.
Fees Information:	Subject EFTSL, Level, Discipline & Census Date, http://enrolment.unimelb.edu.au/fees
Generic Skills:	Refer to the website
Links to further information:	http://www.commercial.unimelb.edu.au/courses