505-938 Clinical Biostatistics

Credit Points:	12.50
Level:	9 (Graduate/Postgraduate)
Dates & Locations:	Distance
Time Commitment:	Total Time Commitment: 8-12 hours total study time per week
Prerequisites:	505-105 Mathematics Background for Biostatistics (MMB) 505-106 Epidemiology (EPI) 505-975 Probability and Distribution Theory (PDT) 505-107 Principles of Statistical Inference (PSI) (maybe taken concurrently)
Corequisites:	None
Recommended Background Knowledge:	None
Non Allowed Subjects:	None
Core Participation Requirements:	For the purposes of considering request for Reasonable Adjustments under the Disability Standards for Education (Cwth 2005), and Student Support and Engagement Policy, academic requirements for this subject are articulated in the Subject Overview, Learning Outcomes, Assessment and Generic Skills sections of this entry. It is University policy to take all reasonable steps to minimise the impact of disability upon academic study, and reasonable adjustments will be made to enhance a student's participation in the University's programs. Students who feel their disability may impact on meeting the requirements of this subject are encouraged to discuss this matter with a Faculty Student Adviser and Student Equity and Disability Support: http://services.unimelb.edu.au/disability
Contact:	Professor Annette Dobson, University of Queensland Biostatistics Collaboration of Australia School of Population Health, University of Melbourne
Subject Overview:	Clinical agreement (kappa statistics, Bland-Altman agreement method, intraclass correlation); diagnostic tests (sensitivity, specificity, predictive values, ROC curves, likelihood ratio); statistical process control (special and common causes of variation, Shewhart, CUSUM and EMWA charts); and systematic reviews (process, estimating treatment effect, assessing heterogeneity, publication bias).
Objectives:	To enable students to use correctly statistical methods of particular relevance to evidence-based health care and to advise clinicians on the application of these methods and interpretation of the results.
Assessment:	Four written assignments to be submitted during the semester worth 20%, 25%, 20% 25% respectively (approx 8 hours of work each). Contribution to online discussions, worth 10% (approx 6 hrs work).
Prescribed Texts:	None Resources Provided to Students: Printed course notes and assignment material by mail, email, and online interaction facilities Special Computer Requirements: Stata statistical software.
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:	Independent problem solving, critical appraisal of research literature, clarity of written expression, sound communication of technical concepts

Links to further information:	http://www.sph.unimelb.edu.au
Notes:	This subject is not available in the Master of Public Health.
Related Course(s):	Master of Biostatistics Postgraduate Certificate in Biostatistics Postgraduate Diploma in Biostatistics