

505-973 Study Design in Epidemiology

Credit Points:	12.500
Level:	Graduate/Postgraduate
Dates & Locations:	2008, This subject commences in the following study period/s: Semester 1, - Taught on campus. Block
Time Commitment:	Contact Hours: 5 contact days over semester weeks 8 to 12. Total Time Commitment: Students will be expected to undertake additional study averaging 80 hours in total through to end of assessment.
Prerequisites:	505-969 Epidemiology & Analytic Methods I, or equivalent 505-970 Epidemiology & Analytic Methods II, or equivalent or 505-104 Introductory Epidemiology and 505-101 Introductory Statistics
Corequisites:	None
Recommended Background Knowledge:	None
Non Allowed Subjects:	None
Core Participation Requirements:	Special computer skills required: Students are expected to have experience using the Stata statistical package for multivariate analytic methods.
Coordinator:	Centre for MEGA Epidemiology, Pop Hlth
Subject Overview:	<p>This subject covers the main epidemiological study designs in detail. Methodological issues in study design will be illustrated using practical examples and critical appraisal of key studies. The following topics will be covered, building upon Epidemiology & Analytic Method subjects I and II: causation, design of case-control, cohort studies and trials including selection of participants, measurement of exposure and outcome and overview of analytical techniques.</p> <p>Subject Objectives: On completion of the subject, students are expected to:</p> <ul style="list-style-type: none"> # Understand in detail the design of case control and cohort studies # Understand the design and reporting of randomised controlled trials, including cluster randomised trials # Identify potential biases and limitations of each study design # Understand the strategies to minimise measurement error. # Be able to design an appropriate epidemiological study to address questions of public health or clinical significance # Be able to critically appraise the design of an epidemiological study # Be familiar with the statistical methods used to analyse different study designs # Apply ethical principles in the design and appraisal of epidemiological studies
Assessment:	One 1500 word assignment due on the third contact day (20%), a 10 minute presentation (10%) on the last contact day, one assignment of up to 2000 words (40%) due a few weeks after the teaching block and a two hour examination (30%) to be held in the University examination period.
Prescribed Texts:	None
Recommended Texts:	<p>Rothman KJ, Greenland S, <i>Modern Epidemiology</i> Lippincott-Raven, 1998.</p> <p>Kelsey JL et al, <i>Methods in Observational Epidemiology</i>, OUP NY.</p> <p>Elwood JM: <i>Critical appraisal of epidemiological studies and clinical trials</i>. Oxford University Press, 1998. (new edition expected early 2007).</p>

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:	Level: 500
Links to further information:	http://www.sph.unimelb.edu.au
Notes:	This subject is a group 1 elective in the Master of Public Health. Subject Coordinator: Prof Dallas English 8344 0637
Related Course(s):	Master of Epidemiology Master of Public Health