POPH90018 Data Management & Statistical Computing

Credit Points:	12.50
Level:	9 (Graduate/Postgraduate)
Dates & Locations:	This subject is not offered in 2013. Distance only
Time Commitment:	Contact Hours: None Total Time Commitment: 8-12 hours total study time per week
Prerequisites:	None
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 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.
Contact:	Semester 1: Dr Patrick McElduff, University of Newcastle Semester 2: Professor John Carlin, Melbourne School of Population Health, University of Melbourne Biostatistics Collaboration of Australia Email: bca@ctc.usyd.edu.au Website: www.bca.edu.au OR Academic Programs Office Melbourne School of Population Health Tel: +61 3 8344 9339 Fax: +61 3 8344 0824 Email: sph-gradinfo@unimelb.edu.au
Subject Overview:	Relational databases and how to explore them using Stata and SAS; using Stata and SAS to import, check, inspect and manipulate data, including appending, merging, using dates, transposing longitudinal data; fundamental programming skills for efficient and reproducible use of these packages, including loops, arguments and programs/macros; data display and summary presentation, including advanced graphics to produce publication-quality graphs.
Objectives:	The aim of this course is to introduce students to essential concepts and tools required for the management, manipulation, display and analysis of data using the Stata and SAS statistical software packages.
Assessment:	Three written assignments to be submitted during semester, one worth 30% (approx 10 hrs work) and two worth 35% each (approx 12 hrs work each).
Prescribed Texts:	Cody, R., Smith, J. Applied Statistics and the SAS Programming Language, 5th edition, Prentice-Hall, 2005. (ISBN 0131465325) Hills, M and De Stavola, B, A Short Introduction to Stata for Biostatistics, Timberlake, 2006. – order online at www.survey-design.com.au Resources Provided to Students: Printed course notes and assignment material provided by mail and email, and onine interaction facilities. Special Computer Requirements: SAS AND Stata software as well as Microsoft Access. For advice about purchasing these packages (education license prices); see “Study Resources” at: www.bca.edu.au/student_info.htm

Recommended Texts:	None
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, 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