POPH90122 Survival Analysis

Credit Points:	12.5
Level:	9 (Graduate/Postgraduate)
Dates & Locations:	2016, Parkville This subject commences in the following study period/s: Semester 1, Parkville - Taught online/distance.
Time Commitment:	Contact Hours: None Total Time Commitment: 170 hours
Prerequisites:	# POPH90014 Epidemiology 1 **OR** POPH90016 Epidemiology # POPH90148 Probability and Distribution Theory # MAST90100 Inference Methods in Biostatistics **OR** POPH90017 Principles of Statistical Inference # MAST90102 Linear Regression **OR** POPH90120 Linear Models
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.
Coordinator:	Prof John Carlin
Contact:	**john.carlin@unimelb.edu.au (mailto:john.carlin@unimelb.edu.au)** **Melbourne School of Population and Global Health** **OR** **Currently enrolled students:** # General information: **https://ask.unimelb.edu.au (https://ask.unimelb.edu.au)** # Email: **enquiries-STEM@unimelb.edu.au (mailto:enquiries-STEM@unimelb.edu.au)** **Future Students:** # Further Information: **http://mspgh.unimelb.edu.au/ (http://mspgh.unimelb.edu.au/)** # Email: **Online Form (http://mspgh.unimelb.edu.au/study/degrees/master-of-public-health/overview)**
Subject Overview:	Topics include: Kaplan-Meier life tables; logrank test to compare two or more groups; Cox's proportional hazards regression model; checking the proportional hazards assumption; time-dependent covariates; sample size calculations for survival studies.
Learning Outcomes:	To enable students to analyse data from studies in which individuals are followed up until a particular event occurs, e.g. death, cure, relapse, making use of follow-up data also for those who do not experience the event, with proper attention to underlying assumptions and a major emphasis on the practical interpretation and communication of results.
Assessment:	Three written assignments to be submitted during semester worth 22% each (approx 8 hrs work each).Online participation worth 8% (approx 6 hrs work)One at-home examination at the end of Semester (26%, approx 10 hrs)

Prescribed Texts:	Hosmer D W, Lemeshow S, May S. Applied Survival Analysis: Regression Modeling of time to event data. 2nd Edition. Wiley Interscience 2008. (ISBN 978-0-471-75499-2) Special Computer Requirements: Stata statistical software Resources Provided to Students: Printed course notes and assignment material by mail, email, and online interaction facilities.
Recommended Texts:	Cleves M, Gould W, Gutierrez R, Marchenko Y. *An Introduction to Survival Analysis Using Stata,* 3rd edition, 2010. Stata Press Stata Press - **http://survey-design.com.au/ (http://survey-design.com.au/)** (ISBN 978-1-881228-84-4)
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, facility with abstract reasoning, clarity of written expression, sound communication of technical concepts
Links to further information:	http://www.mspgh.unimelb.edu.au
Notes:	This subject is not available in the Master of Public Health.
Related Course(s):	Graduate Certificate in Biostatistics Graduate Diploma in Biostatistics Master of Biostatistics Postgraduate Diploma in Biostatistics