

POPH90013 Biostatistics

| 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 on campus. | | | | | | | | | |
| Time Commitment: | Contact Hours: 32 hours: 1 hour lecture and 1 hour tutorial per week plus four blocks of 2 hour computing practicals Total Time Commitment: 170 hours | | | | | | | | | |
| Prerequisites: | None | | | | | | | | | |
| Corequisites: | None | | | | | | | | | |
| Recommended Background Knowledge: | None | | | | | | | | | |
| Non Allowed Subjects: | - <table border="1" data-bbox="387 824 1485 1025"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>POPH90142 Epidemiology & Analytic Methods 1</td> <td>Not offered 2016</td> <td>12.50</td> </tr> <tr> <td>POPH90143 Epidemiology & Analytic Methods 2</td> <td>Not offered 2016</td> <td>12.50</td> </tr> </tbody> </table> | Subject | Study Period Commencement: | Credit Points: | POPH90142 Epidemiology & Analytic Methods 1 | Not offered 2016 | 12.50 | POPH90143 Epidemiology & Analytic Methods 2 | Not offered 2016 | 12.50 |
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| POPH90142 Epidemiology & Analytic Methods 1 | Not offered 2016 | 12.50 | | | | | | | | |
| POPH90143 Epidemiology & Analytic Methods 2 | Not offered 2016 | 12.50 | | | | | | | | |
| 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: | Dr Enes Makalic | | | | | | | | | |
| Contact: | emakalic@unimelb.edu.au (mailto:emakalic@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: | This subject is compulsory for students enrolled in the Master of Public Health, Master of Epidemiology and the Master of Science (Epidemiology). Students should enrol in this subject early in their program of study. The subject introduces the fundamental concepts of statistics and the essential methods required to equip students to perform basic statistical analyses and interpret research findings in the public health setting. | | | | | | | | | |
| Learning Outcomes: | At the completion of the subject, students should be able to: | | | | | | | | | |

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| | <ul style="list-style-type: none"> # Distinguish basic data types (categorical, continuous) and summarise them appropriately using tables and graphs; # Calculate and interpret: - Summary measures of statistical distributions - Confidence intervals for means and proportions - Confidence intervals for comparison of means, comparison of proportions, risk ratio and odds ratio - P-values for comparison of means and proportions; # Explain the central role of sampling variability in statistical inference; # Distinguish between statistical significance and clinical or public health relevance; # Use Mantel-Haenszel methods to control for confounding in statistical analyses; # Describe the importance of statistical power and perform simple sample size calculations; # Use statistical software 'Stata' for basic statistical analyses. |
| Assessment: | A written assignment of not more than 8 pages due in the 7th week of the subject (30%) A written assignment of not more than 8 pages due in the 11th week of the subject (40%) and A 2-hour open-book examination (administered by the University) to be held during the examination period (30%). |
| Prescribed Texts: | BR Kirkwood and JAC Sterne, Essential Medical Statistics Second Edition, Blackwell Science, 2003. Getting Started with Stata. Release 13, Stata Press, 2013 Students need to purchase the Stata statistical software package Survey Design and Analysis Services Pty Ltd www.survey-design.com.au |
| 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: | <p>Upon completion of this subject students will have developed skills in:</p> <ul style="list-style-type: none"> # Critical thinking and analysis, # Finding, evaluating and using relevant information, # Problem-solving, # Written communication, # Using computers. |
| Links to further information: | http://www.mspgh.unimelb.edu.au |
| Notes: | |
| Related Course(s): | <p>Master of Adolescent Health & Welfare Master of Adolescent Health & Wellbeing Master of Epidemiology Master of Public Health Master of Science (Epidemiology)</p> |
| Related Majors/Minors/Specialisations: | <p>Ageing Doctor of Medicine Electives in the Master of Veterinary Public Health (Emergency Animal Disease) Environment and Public Health Epidemiology and Biostatistics Gender and Women's Health Global Health Health Economics and Economic Evaluation Health Program Evaluation Health Social Sciences Indigenous Health Primary Care</p> |

Public Health
Sexual Health
Tailored Specialisation
Tailored Specialisation