# POPH90013 Biostatistics

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| **Credit Points:** | 12.50 |
| **Level:** | 9 (Graduate/Postgraduate) |
| **Dates & Locations:** | 2012, Parkville<br>This subject commences in the following study period/s:<br>Semester 1, Parkville - Taught on campus.<br>Classroom |
| **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: 120 hours |
| **Prerequisites:** | None |
| **Corequisites:** | None |
| **Recommended Background Knowledge:** | None |
| **Non Allowed Subjects:** | - |

| Subject | Study Period Commencement: | Credit Points: |
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| POPH90142 Epidemiology & Analytic Methods 1 | Not offered 2012 | 12.50 |
| POPH90143 Epidemiology & Analytic Methods 2 | Not offered 2012 | 12.50 |

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| **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:** | Assoc Prof Lyle Gurrin |
| **Contact:** | EMAIL: **lgurrin@unimelb.edu.au (mailto:lgurrin@unimelb.edu.au)**<br>PH: 8344 0731 |
| **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.<br>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. |
| **Objectives:** | At the completion of the subject, students should be able to:<br># Distinguish basic data types (categorical, continuous) and summarise them appropriately using tables and graphs;<br># Calculate and interpret:<br>- Summary measures of statistical distributions<br>- Confidence intervals for means and proportions<br>- Confidence intervals for comparison of means, comparison of proportions, risk ratio and odds ratio<br>- P-values for comparison of means and proportions;<br># Explain the central role of sampling variability in statistical inference; |

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| | # Distinguish between statistical significance and clinical or public health relevance;<br># Use Mantel-Haenszel methods to control for confounding in statistical analyses;<br># Describe the importance of statistical power and perform simple sample size calculations;<br># 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 10 pages due in the 11th week of the subject (40%) and a 1.5-hour open-book examination (administered by the School) 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 11, Stata Press, 2009 |
| **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:** | Upon completion of this subject students will have developed skills in:<br># Critical thinking and analysis,<br># Finding, evaluating and using relevant information,<br># Problem-solving,<br># Written communication,<br># Using computers. |
| **Links to further information:** | http://www.sph.unimelb.edu.au |
| **Notes:** | |
| **Related Course(s):** | Master of Adolescent Health & Welfare<br>Master of Epidemiology<br>Master of Genetic Counselling<br>Master of Public Health<br>Master of Science (Epidemiology) |
| **Related Majors/Minors/ Specialisations:** | Epidemiology and Biostatistics<br>Gender & Women's Health<br>Global Health<br>Health Economics & Economic Evaluation<br>Health Program Evaluation<br>Indigenous Health<br>Primary Care<br>Public Health<br>Sexual Health<br>Social Health |