

## PSYC20001 Quantitative Methods for Psychology 2

<b>Credit Points:</b>	12.5
<b>Level:</b>	2 (Undergraduate)
<b>Dates &amp; Locations:</b>	This subject is not offered in 2016.
<b>Time Commitment:</b>	Contact Hours: Twenty-four hours of lectures, 12 hours of laboratory classes. [Estimated total time commitment of 120 hours.] Total Time Commitment: 120 hours
<b>Prerequisites:</b>	512-121 (or equivalent).
<b>Corequisites:</b>	None
<b>Recommended Background Knowledge:</b>	Completion of first-year undergraduate psychology.
<b>Non Allowed Subjects:</b>	None.
<b>Core Participation Requirements:</b>	It is University policy to take all reasonable steps to minimise the impact of disability upon academic study and reasonable steps will be made to enhance a student's participation in the University's programs. This subject requires all students to actively and safely participate in laboratory activities. Students who feel their disability may impact upon their participation are encouraged to discuss this with the subject coordinator and the Disability Liaison Unit.
<b>Contact:</b>	Psychological Sciences Tel: +61 3 8344 6377
<b>Subject Overview:</b>	<p>This subject comprises two units.</p> <p><i>Introduction to Design and Analysis for Psychological Research:</i> covers basic experimental and survey design for psychological research and associated methods for data analysis. The unit is intended to develop students' capabilities in a range of exploratory and hypothesis-testing data analytic techniques, including skills in creating and interpreting graphical displays, and an understanding of a range of descriptive and inferential statistics. Methods of statistical inference, interval estimation and hypothesis testing are introduced, and emphasis is given to the interpretation of data analysis. The practical classes introduce students to computer-based data analysis using the statistical package SPSS.</p> <p><i>Introduction to Psychological Measurement:</i> is an introduction to the process and purpose of psychological testing at the level of the individual. The unit covers basic concepts in psychological testing and measurement to show how individual differences are quantified. Quantitative measurement of individual behaviour serves a fundamental purpose in psychology including, for example, obtaining data for theoretical investigations, identification of abnormal behaviour in clinical settings, and identification of special skills or attributes in personnel selection or workplace settings. All applications of psychological measurement may involve evaluation of the quality or reliability and validity of measurement. Topics include the history of psychological measurement and testing; methods for new test development; evaluating the reliability and validity of measurement; validity of professional decisions; contemporary approaches to evaluating psychological measurement; and an introduction to psychological tests and testing applications.</p>
<b>Learning Outcomes:</b>	<p>Students will:</p> <ul style="list-style-type: none"> <li># develop skills in exploratory and hypothesis-testing data analytic techniques</li> <li># create and interpret graphical displays</li> <li># understand a range of descriptive and inferential statistics</li> <li># be introduced to the process of psychological testing at the level of the individual</li> </ul>
<b>Assessment:</b>	An examination of no more than three hours in duration (100%). Attendance at 80% or more of the laboratory classes is a hurdle requirement. In case of failure to meet the hurdle requirement, additional work will be required before a passing grade can be awarded. (Please note that this subject is a corequisite or prerequisite for all third-level subjects in psychology, and its

	satisfactory completion in second year is essential if students wish to complete the psychology major within the minimum time.)
<b>Prescribed Texts:</b>	None
<b>Breadth Options:</b>	This subject is not available as a breadth subject.
<b>Fees Information:</b>	Subject EFTSL, Level, Discipline & Census Date, <a href="http://enrolment.unimelb.edu.au/fees">http://enrolment.unimelb.edu.au/fees</a>
<b>Generic Skills:</b>	On completion of this subject, at an introductory level students should be able to: analyse research and measurement issues from an evidence-based perspective; evaluate critically research designs and data analytic techniques used in quantitative research; strengthen their own capabilities in data analysis, particularly using major software packages; understand the steps involved in developing and evaluating psychological tests; identify strengths and weaknesses of measurement instruments appropriate to the social and behavioural sciences.
<b>Notes:</b>	<p>This subject will not be offered after 2009.</p> <p>Students enrolled in the BSc (pre-2008), BAsc or a combined BSc course may receive science credit for the completion of this subject.</p> <p>Students undertaking psychology subjects can receive credit toward <i>either</i> the science <i>or</i> arts requirement of the BAsc or BA/BSc course. Credit for psychology cannot be split between the two components. Students should advise the Faculty of Science if they would like psychology to count toward the science requirement of their BAsc or BA/BSc course.</p>