

<b>Course title</b>	<b>Quantitative Research Methods in Psychology</b>				
<b>Course code</b>	<b>PSY1103</b>				
<b>Course type</b>	Compulsory				
<b>Level</b>	Bachelors				
<b>Year / Semester</b>	Year 1 /semester 1				
<b>Teacher's name</b>	Dr Katerina Georgalla				
<b>ECTS</b>	6	<b>Lectures / week</b>	---	<b>Laboratories / week</b>	3hrs
<b>Course purpose and objectives</b>	<p>This course introduces students to the fundamentals of quantitative research methods in psychology. It provides a foundation for understanding how psychological questions are investigated using empirical methods and statistical tools. Students will learn to formulate research questions, design basic quantitative studies, and apply descriptive and inferential statistics. Using statistical software (e.g., SPSS), students will gain hands-on experience in designing a study, collecting and analysing data and interpreting outputs. Ethical research practices and scientific reporting will be embedded throughout the course.</p>				
<b>Learning outcomes</b>	<p>On successful completion of the course and with further independent study, students will be able to:</p> <p><b>Knowledge and Understanding</b></p> <ol style="list-style-type: none"> <li>1. Demonstrate understanding of psychological research methods and associated data analysis techniques.</li> <li>2. Demonstrate understanding of research design in Psychology</li> </ol> <p><b>Competencies</b></p> <ol style="list-style-type: none"> <li>3. Demonstrate understanding on how to ask appropriate research questions and design simple studies.</li> <li>4. Interpret and evaluate statistical findings in relation to psychological research questions</li> </ol> <p><b>Transferable Skills</b></p> <ol style="list-style-type: none"> <li>5. Use statistical software (e.g., SPSS) to manage, analyse, and visualise data</li> <li>6. Communicate research findings in clear, concise, and APA-compliant scientific reports and oral presentation</li> </ol>				

<b>Prerequisites</b>	None	<b>Required</b>	PSY1105 Statistics in Psychology I
<b>Course content</b>	<p>Indicative Content</p> <p><b>Foundations of Psychological Research</b></p> <ul style="list-style-type: none"> <li>• Research questions and hypotheses</li> <li>• measurement scales</li> <li>• Qualitative vs Quantitative</li> <li>• Overview of Research Designs in Psychology</li> <li>• Hypothesis Formulation and Operationalisation (Developing clear, testable hypotheses; defining constructs and variables.)</li> </ul> <p><b>Introduction to data handling descriptive statistics</b> (Entering, cleaning, and organizing quantitative data; overview of descriptive statistics (link to PSY1105).</p> <p><b>Descriptive and Inferential Statistics</b> (Means, Standard deviations, normality testing, Probability, significance testing, p-values, and effect sizes; t-tests (independent and paired samples), Chi-square tests for categorical data; simple pearson correlation)</p> <p><b>Project based Learning:</b></p> <ul style="list-style-type: none"> <li>• Design simple studies in groups</li> <li>• Collect and analyse data</li> <li>• Run and interpret statistical analysis</li> </ul> <p><b>Scientific Reporting and Ethics</b> (APA-style structure for introduction, methods, results, and discussion, Ethical issues in data collection, storage, and reporting)</p>		
<b>Teaching methodology</b>	<p>Teaching will consist of a weekly 3-hour research methods workshop held in the computer lab offering hands-on experience with research design, hypothesis testing and practical engagement in small-scale group studies. These workshops will guide students through the full research process, including designing a study, addressing ethical considerations, collecting and analysing data, and producing APA-style research reports.</p>		
<b>Bibliography</b>	<p><b>Core Text:</b></p> <ul style="list-style-type: none"> <li>• Coolican, H. (2024). <i>Research methods and statistics in psychology</i> (8th ed.). Routledge.</li> <li>• Howitt, D., &amp; Cramer, D. (2017). <i>Introduction to SPSS in psychology</i> (7th ed.). Pearson.</li> </ul> <p><b>Recommended:</b></p> <p style="text-align: right;">135</p>		

	<ul style="list-style-type: none"> <li>British Psychological Society. (2021). <i>Code of Ethics and Conduct</i>. [Available online]</li> <li>American Psychological Association. (2017). <i>Ethical principles of psychologists and code of conduct</i> [Available online]</li> </ul> <p><b>Further reading:</b></p> <p>A reading list will accompany each lecture, highlighting relevant articles accessible through the library, as well as open-access and e-learning resources.</p>								
<b>Assessment</b>	<table border="0"> <tr> <td>Attendance and participation</td> <td style="text-align: right;">10%</td> </tr> <tr> <td>Quantitative report (1000 words)</td> <td style="text-align: right;">35%</td> </tr> <tr> <td>Quantitative report (1500 words)</td> <td style="text-align: right;">35%</td> </tr> <tr> <td>Group presentation</td> <td style="text-align: right;">20%</td> </tr> </table>	Attendance and participation	10%	Quantitative report (1000 words)	35%	Quantitative report (1500 words)	35%	Group presentation	20%
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<b>Language</b>	English								