

## Subject Description Form

<b>Subject Code</b>	SO3009
<b>Subject Title</b>	Applied Statistics and Research Methodology
<b>Credit Value</b>	3
<b>Level</b>	3
<b>Pre-requisite</b>	NIL
<b>Objectives</b>	<ol style="list-style-type: none"> <li>1. To describe the procedure/way on writing up a research proposal</li> <li>2. To familiarize the student with the use of various statistical methods to analysis the research data</li> </ol>
<b>Intended Learning Outcomes</b>	<p>Upon completion of the subject, students will be able to:</p> <ol style="list-style-type: none"> <li>a. show an understanding of the ethical issues which may be encountered in research.</li> <li>b. locate, critique, cite and reference journal papers.</li> <li>c. explain the principles involved in the conception, design, conduct and completion of research projects.</li> <li>d. analyse data using appropriate statistical tests, and correctly interpret and present the results.</li> </ol>
<b>Subject Synopsis/ Indicative Syllabus</b>	<p>Research ethics            Reviewing and critiquing the literature            Structuring a literature review            Generating hypotheses            Experimental design            Describing and displaying quantitative and qualitative data            Choosing and using appropriate statistical tools            Interpreting and reporting the results of statistical tests</p>
<b>Teaching/Learning Methodology</b>	<p><b>Lectures:</b> The introduction of research ethics, research method and alternative views will be covered. The various method of research statistical analysis will be discussed.</p> <p><b>Tutorials:</b> Small-group discussions on each topic will take place. Students can share problems among themselves and try to solve them together.</p> <p><b>Self-learning:</b> Web-CT and the software for statistical analysis will be provided for the student to practice.</p>

<b>Assessment Methods in Alignment with Intended Learning Outcomes</b>	Specific assessment methods/tasks	% weighting	Intended subject learning outcomes to be assessed (Please tick as appropriate)			
			a	b	c	d
	Coursework (tests)					
	<ul style="list-style-type: none"> <li>▪ MCQ class test</li> <li>▪ Statistics assignments</li> </ul>	50			✓	✓
	<ul style="list-style-type: none"> <li>▪ Literature review assignment</li> <li>▪ Class test of critical appraisal</li> </ul>	50	✓	✓	✓	✓
<b>Total</b>	<b>100</b>					
	<p>Explanation of the appropriateness of the assessment methods in assessing the intended learning outcomes:</p> <p>Statistics test and assignments will be arranged during the course to examine students' knowledge on the various topics.</p> <p>Literature view assignment and critical appraisal assessment will be adopted for students to demonstrate their understanding of all the topics covered.</p>					
<b>Student Study Effort Required</b>	Class contact:					
	<ul style="list-style-type: none"> <li>▪ Lecture</li> </ul>	23 Hrs.				
	<ul style="list-style-type: none"> <li>▪ Tutorial</li> </ul>	10 Hrs.				
	<ul style="list-style-type: none"> <li>▪ Self-learning</li> </ul>	72 Hrs.				
	<b>Total student study effort:</b>	<b>105 Hrs.</b>				
<b>Reading List and References</b>	<p><u>Prescribed Reading</u></p> <p>Polgar S and Thomas SA (2001). Introduction to Research in the Health Sciences. 4<sup>th</sup> ed. New York: Churchill Livingstone.</p> <p>Motulsky H. Intuitive Biostatistics (1995). New York: Oxford University Press.</p> <p>Altman DG (1991). Practical Statistics for Medical Research, 1<sup>st</sup> Ed. London, Boca Raton, Chapman &amp; Hall.</p>					