

<b>Subject Code</b>	MM604
<b>Subject Title</b>	Statistical Analysis for Management Research
<b>Credit Value</b>	3
<b>Level</b>	6
<b>Normal Duration</b>	1-semester
<b>Pre-requisite/ Co-requisite/ Exclusion</b>	None
<b>Role and Purposes</b>	<p>This subject contributes to the achievement of the DBA/DMgt outcome by sharpening students' ability to conduct original applied research and ethical awareness in business administration (Outcome 3).</p> <p>This course is designed for DBA/DMgt participants who want to learn or to refresh their understanding of basic to more advanced statistical applications that are commonly used in management research (both academic and industrial). This course will be much more practical and "hands on" than theoretical. In that sense, it is much more about data analysis than statistics, per se. Emphasis will be on such matters as inputting data, transforming and manipulating data, formulating strategies for data analysis, strategies for analyzing a database, performing statistical techniques using common software packages, interpreting results and formulating the next steps.</p> <p>The techniques covered will range from the relatively simple techniques associated with descriptive statistics using SPSS to such advanced techniques such as Factor Analysis, Correspondence Analysis, and Structural Equation Modeling. This subject will be especially useful for those who plan to conduct research that involves quantitative analysis in their dissertation as well as for those who wish to analyze data more effectively in preparing company reports and presentations.</p>
<b>Subject Learning Outcomes</b>	<p>Upon completion of the subject, students will be able to:</p> <ol style="list-style-type: none"> <li>understand when to use various statistical applications that are commonly used in management and in academic papers;</li> <li>formulate a strategy for analyzing a particular data set;</li> <li>use the SPSS and AMOS software programs to analyze different types of data to answer a broad range of research questions;</li> <li>apply statistical analysis techniques in course assignments, research and corporate reports;</li> <li>better understand relationship of theory-building and theory testing;</li> <li>read journal articles and understand the statistical methods used;</li> <li>improve presentation skills related to statistical findings.</li> </ol>
<b>Subject Synopsis/ Indicative Syllabus</b>	<ul style="list-style-type: none"> <li>• Review of the basic statistical concepts</li> <li>• Cleaning, labeling, transforming and describing data</li> <li>• Crosstabs &amp; hypothesis testing</li> <li>• Distributional assumptions and tests of two means</li> <li>• One way and two-way ANOVA</li> <li>• Correlation and bivariate regression</li> <li>• Multiple regression</li> <li>• Hierarchical Multiple Regression</li> <li>• Logistic regression</li> <li>• Exploratory factor analysis</li> <li>• Structural equation modeling using AMOS</li> </ul>

<b>Teaching/Learning Methodology</b>	The class is run as a combined lecture and lab. A "typical" class will be comprised of a powerpoint-structured lecture/discussion with participants applying the concepts using either SPSS or AMOS on actual data sets. Topics and issues related to research design are folded into the lectures and assignments. Participants will have to complete a number of assignments relating to data organization, analysis and interpretation.																																																																				
<b>Assessment Methods in Alignment with Intended Learning Outcomes</b>	<table border="1" data-bbox="424 309 1479 813"> <thead> <tr> <th data-bbox="424 309 815 477" rowspan="2">Specific assessment methods/tasks</th> <th data-bbox="823 309 975 477" rowspan="2">% weighting</th> <th colspan="7" data-bbox="983 309 1479 409">Intended subject learning outcomes to be assessed (Please tick as appropriate)</th> </tr> <tr> <th data-bbox="983 421 1046 477">a.</th> <th data-bbox="1054 421 1118 477">b.</th> <th data-bbox="1126 421 1190 477">c.</th> <th data-bbox="1198 421 1262 477">d.</th> <th data-bbox="1270 421 1334 477">e.</th> <th data-bbox="1342 421 1406 477">f.</th> <th data-bbox="1414 421 1479 477">g.</th> </tr> </thead> <tbody> <tr> <td data-bbox="424 488 815 544"><b>Continuous Assessment*</b></td> <td data-bbox="823 488 975 544"><b>60%</b></td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td data-bbox="424 555 815 611">1. Assignment 1</td> <td data-bbox="823 555 975 611">30%</td> <td data-bbox="983 555 1046 611">✓</td> <td data-bbox="1054 555 1118 611">✓</td> <td data-bbox="1126 555 1190 611">✓</td> <td data-bbox="1198 555 1262 611">✓</td> <td data-bbox="1270 555 1334 611">✓</td> <td></td> <td data-bbox="1414 555 1479 611">✓</td> </tr> <tr> <td data-bbox="424 622 815 678">2. Assignment 2</td> <td data-bbox="823 622 975 678">30%</td> <td></td><td></td><td></td> <td data-bbox="1198 622 1262 678">✓</td> <td></td> <td data-bbox="1342 622 1406 678">✓</td> <td data-bbox="1414 622 1479 678">✓</td> </tr> <tr> <td data-bbox="424 689 815 745"><b>Examination</b></td> <td data-bbox="823 689 975 745"><b>40%</b></td> <td data-bbox="983 689 1046 745">✓</td> <td data-bbox="1054 689 1118 745">✓</td> <td data-bbox="1126 689 1190 745">✓</td> <td></td> <td data-bbox="1270 689 1334 745">✓</td> <td></td> <td data-bbox="1414 689 1479 745">✓</td> </tr> <tr> <td data-bbox="424 757 815 813">Total</td> <td data-bbox="823 757 975 813">100 %</td> <td colspan="7"></td> </tr> </tbody> </table> <p data-bbox="424 835 1487 902">*Weighting of assessment methods/tasks in continuous assessment may be different, subject to each subject lecturer.</p> <p data-bbox="424 925 1487 992">To pass this subject, students are required to obtain Grade D or above in <b>both</b> the Continuous Assessment and Examination components.</p> <p data-bbox="424 1025 1487 1126"><b>Explanation of the appropriateness of the assessment methods in assessing the intended learning outcomes:</b> the various methods are designed to ensure that all students taking this subject –</p> <ul data-bbox="456 1171 1441 1339" style="list-style-type: none"> <li>• Discuss the issues brought up in the lectures/seminars;</li> <li>• Appreciate the different approaches that may be used to formulate a strategy for analyzing a particular data set;</li> <li>• Participate in discussing and analyzing data by applying various statistical applications.</li> </ul>								Specific assessment methods/tasks	% weighting	Intended subject learning outcomes to be assessed (Please tick as appropriate)							a.	b.	c.	d.	e.	f.	g.	<b>Continuous Assessment*</b>	<b>60%</b>								1. Assignment 1	30%	✓	✓	✓	✓	✓		✓	2. Assignment 2	30%				✓		✓	✓	<b>Examination</b>	<b>40%</b>	✓	✓	✓		✓		✓	Total	100 %							
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<b>Reading List and References</b>	<p data-bbox="424 1809 1487 1910"><u>Textbooks</u> Hair, J. F. Anderson, R. E. Tatham, R.L. and Black, W. C, <i>Multivariate Data Analysis</i>, Prentice-Hall International, Inc. (Latest Edition)</p> <p data-bbox="424 1933 1487 2011">Norusis, M. J. <i>SPSS Guide to Data Analysis</i>. Upper Saddle River, N.J.: Prentice-Hall (Latest Edition).</p> <p data-bbox="424 2033 1487 2136"><u>References</u> Byrne, B.M., <i>Structural Equation Modeling in AMOS</i>, latest edition. Field, A., <i>Discovering statistics using SPSS</i>, Sage Publications, latest edition.</p>																																																																				

	Levin and Rubin, D. S. <i>Statistical for Management</i> , Prentice Hall, latest edition.
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