Liverpool John Moores University

Title: RESEARCH METHODS AND STATISTICS 1
Status: Definitive
Code: **4004PSEN**   (119918)
Version Start Date: 01-08-2016

Owning School/Faculty: Education
Teaching School/Faculty: Education

Team	Leader
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Academic Level:	FHEQ4	**Credit Value:**	24	**Total Delivered Hours:**	46.5
Total Learning Hours:	240	**Private Study:**	193.5		

Delivery Options
Course typically offered: Semester 1

Component	Contact Hours
Lecture	45

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Exam	OB EXAM		50	1.5
Report	LabRep1		25	
Technology	LabRep2		25	

Aims

1. To introduce the tools for carrying out a literature search.
2. To develop an understanding of basic statistical concepts, descriptive statistics, correlation, chi square and
   parametric and non-parametric tests of differences.

3. To use SPSS to carry out statistical analyses.
4. To give practical experience of correlational, observational and experimental research methods.
5. To develop practical report writing skills.
6. To introduce ethical issues concerning psychological research.

Learning Outcomes

After completing the module the student should be able to:

1   Write a laboratory report
2   Conduct a literature search
3   Employ the appropriate statistical test, and interpret its outcome.
4   Demonstrate a basic knowledge of the generic principles of research design, reliability, validity and basic statistical concepts such as measures of central tendency and normality, tests of difference Kappa and chi squared.

Learning Outcomes of Assessments

The assessment item list is assessed via the learning outcomes listed:

Open book exam	4		
2000 word lab report employing	1	2	3
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Outline Syllabus

The module will explore different approaches to research design and data analysis. Research design will explore different methodologies for example, experimental, observational and survey, as well as within and between subject approaches. Data analysis will explore scales of measurement, descriptive statistics, variance and standard deviation, the normal distribution, introduction to probability and hypothesis testing, correlation and chi-square. The module will also explore literature searching, using SPSS, the ethics of psychological research and writing practical reports.

Learning Activities

1. Attend lectures and workshops
2. Use SPSS/PASW statistical software
3. Use PsychInfo and other databases
4. Use web-based support material
5. Complete coursework tasks
6. Complete prescribed reading
7. Complete formative multiple-choice tests

Notes

Introduction to Research Methods and Statistics in Psychology provides students with a practical introduction to how to design an experiment, collect data in an ethical manner, perform statistical analysis and write up findings in a manner consistent with published material. Throughout the module students will be required to use computers to conduct literature searches and to perform statistical analysis. In the first part of this module students will be introduced to the basic principles of research design and descriptive analysis. In the second part of this module students will explore tests of difference for parametric and non-parametric data. In the third part of this module students will be introduced to the principles of questionnaire design and correlational analysis. Finally students will explore observation methods and the analysis of categorical data.