Liverpool John Moores University

Title: RESEARCH METHODS
Status: Definitive
Code: **7008SPOSCI**   (114303)
Version Start Date: 01-08-2013

Owning School/Faculty: Sports Sciences
Teaching School/Faculty: Sports Sciences

Team		Leader
Mark Scott		Y

Academic Level:	FHEQ7	**Credit Value:**	20.00	**Total Delivered Hours:**	26.00
Total Learning Hours:	200	**Private Study:**	174		

Delivery Options
Course typically offered: Semester 1

Component	Contact Hours
Lecture	14.000
Practical	12.000

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Essay	AS1	Critical appraisal of a research design	30.0	
Test	AS2	In class test – Statistical analysis and evaluation	70.0	

Aims

This module of study is available to provide mastery and expertise in quantitative research strategies, methods and techniques, specifically focussed on quantitative data so that students can undertake postgraduate research. The module aims to encourage critical understanding of how quantitative data should be handled and analysed using a variety of approaches. The module will provide the opportunity to develop critical analysis of statistical concepts and procedures, train them to use

statistical analysis software and extend their knowledge of the experimental and research design process.

Learning Outcomes

After completing the module the student should be able to:

1   Critically evaluate the appropriateness of a research design
2   Critically evaluate data analysis procedures
3   Apply, report and interpret a range of data analysis procedures

Learning Outcomes of Assessments

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

research design critique	1	
Statistical evaluation	2	3

Outline Syllabus

Experimental design
Basic significance tests
Confidence Intervals
Effect size
ANOVA
Regression and correlation
Sample size estimation
Validity and reliability assessment

Learning Activities

This module provides two hours of direct contact per week. Students will receive stimulus lectures on topics concerned with research design and data analysis. Students will also take part in computer practicals, where they will be required to analyse data using a statistical package and interpret the statistical output. Throughout the module, students are required to bring discipline specific data to practical sessions.

References

Notes

This module is fundamental to the analysis of quantitative data. It is expected that students develop the data handling and analysis skills that they will directly use in their MSc project.