

## Liverpool John Moores University

Title: RESEARCH METHODS AND STATISTICS IN PSYCHOLOGY  
4: ADVANCED QUANTITATIVE RESEARCH METHODS  
Status: Definitive  
Code: **5502PSYSLI** (127496)  
Version Start Date: 01-08-2021  
Owning School/Faculty: Psychology  
Teaching School/Faculty: Sri Lanka Institute of Information Technology

Team	Leader
Simon Cooper	Y

**Academic Level:** FHEQ5  
**Credit Value:** 20  
**Total Delivered Hours:** 48  
**Total Learning Hours:** 200  
**Private Study:** 152

### Delivery Options

Course typically offered: Semester 2

Component	Contact Hours
Lecture	22
Online	4
Workshop	20

**Grading Basis:** 40 %

### Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Report	Report	Practical report	70	
Exam	Exam	Examination	30	2

### Aims

1. To examine the rationale behind and use of advanced tests of differences and relationships in psychological research.
2. To develop an understanding of factorial analysis of variance (ANOVA), multivariate analysis of variance (MANOVA), simple regression and multiple regression.

3. To analyse data using advanced statistical tests such as factorial ANOVA, MANOVA and multiple regression.
4. To provide practical experience of between participant, within participant, mixed, MANOVA and correlational designs.
5. To use SPSS to carry out statistical analyses.
6. To develop practical report writing skills.

## Learning Outcomes

After completing the module the student should be able to:

- 1 Choose appropriate methods and statistics to analyse quantitative data.
- 2 Perform appropriate advanced parametric analyses.
- 3 Interpret analysis produced by a computer-based statistical package (SPSS).
- 4 Write a practical report in APA style.

## Learning Outcomes of Assessments

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

Practical report	1	2	4
Exam	3		

## Outline Syllabus

*The module considers advanced inferential tests of difference and relationships. The tests covered include three types of factorial ANOVA (independent/repeated measures/mixed), ANCOVA, MANOVA, and multiple regression. The focus is on research designs in which there is either more than one independent/predictor variable or more than one dependent variable. The module also examines the utility of reporting effect sizes in quantitative studies and the importance of conducting ethical research.*

## Learning Activities

1. Attend lectures and workshops
2. Use SPSS statistical software
3. Complete coursework tasks
4. Complete prescribed reading

## Notes

This module covers the following core areas of psychology: research methods.