

Liverpool John Moores University

Title: RESEARCH METHODS 1
Status: Definitive
Code: **4104SPOSCI** (122875)
Version Start Date: 01-08-2021

Owning School/Faculty: Sport and Exercise Sciences
Teaching School/Faculty: Sport and Exercise Sciences

Team	Leader
Mark Scott	Y
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Academic Level: FHEQ4 **Credit Value:** 20 **Total Delivered Hours:** 49
Total Learning Hours: 200 **Private Study:** 151

Delivery Options

Course typically offered: Semester 2

Component	Contact Hours
Lecture	40
Practical	7

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Test	AS1	Research Design and Data Analysis 1 - Online Test	33	1
Exam	AS2	Research Design and Data Analysis 2 - Online Exam	67	2

Aims

The aim of this module is to introduce the fundamental concepts of research methods, along with covering the basic application and interpretation of various data analysis techniques.

Learning Outcomes

After completing the module the student should be able to:

- 1 Describe and identify various aspects of the different types of research design
- 2 Apply, interpret and report a variety of analysis techniques.

Learning Outcomes of Assessments

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

Research Design & Analysis 1	1	2
Research Design & Analysis 2	1	2

Outline Syllabus

Types of research (Descriptive, Experimental, Analytical, Qualitative)
Types of research design (including threats to internal and external validity)
Measurements and types of data (including validity, reliability and objectivity)
Exploring and summarizing data
Percentiles and standard scores (e.g. Z scores)
Confidence intervals
Difference tests
Correlation and Regression
Chi-squared and Risk
Qualitative interview design
Thematic content analysis
Credibility and quality

Learning Activities

Lectures will be used to deliver the concepts of research methods. However, to facilitate understanding, students will be asked to undertake activities and tasks as part of the lecture. A combination of lectures and computer practicals will be used to teach students how to apply, interpret and report data analysis, as part of these session students will be taught how to use a statistical software package.

Notes

This module is designed to develop the student's basic knowledge and understanding of research methods and data analysis. This will be evaluated by the completion of the relevant assessment tasks. This module will incorporate support strategies in an attempt to ensure student progression. This strategy will include the use of formative assessment tasks given as part of teaching sessions.

The Association for Nutrition (AfN) competencies covered in this module include:

CC1l - Ability to plan, conduct, analyse and report on investigations into an aspect of nutrition in a responsible, safe and ethical manner.

CC1m - Ability to carry out sample selection and to ensure validity, accuracy, calibration, precision, replicability and highlight uncertainty during collection in accordance with the basic principles of good clinical practice.

CC1n - Ability to obtain, record, collate, analyse, interpret and report nutrition-related data using appropriate qualitative and quantitative research and statistical methods in the field and/or laboratory and/or intervention studies, working individually or in a group, as is most appropriate for the discipline under study.

CC1o - Prepare, process, interpret and present data, using appropriate qualitative and quantitative techniques, statistical programmes, spreadsheets and programs for presenting data visually.

The BASES Undergraduate Endorsement (BUES) criteria covered in this module include:

4.1.3 A range of qualitative and quantitative research methodologies

4.1.4 Use of appropriate data analysis & visualisation techniques