

Approved, 2022.02

# Summary Information

Module Code	4104SPOSCI
Formal Module Title	Research Methods 1
Owning School	Sport and Exercise Sciences
Career	Undergraduate
Credits	20
Academic level	FHEQ Level 4
Grading Schema	40

# **Module Contacts**

### Module Leader

Contact Name	Applies to all offerings	Offerings
Theodoros Bampouras	Yes	N/A

### Module Team Member

Contact Name	Applies to all offerings Offerings	
Milly Blundell	Yes	N/A
Sally-Ann Starkey	Yes	N/A
Mark Scott	Yes	N/A

#### Partner Module Team

Contact Name	Applies to all offerings	Offerings
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# **Teaching Responsibility**

LJMU Schools involved in Delivery	
Sport and Exercise Sciences	

# Learning Methods

Learning Method Type	Hours
Lecture	40
Practical	7

# Module Offering(s)

Offering Code	Location	Start Month	Duration
JAN-CTY	CTY	January	12 Weeks

### **Aims and Outcomes**

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

### **Learning Outcomes**

#### After completing the module the student should be able to:

Code	Description
MLO1	Describe and identify various aspects of the different types of research design
MLO2	Apply, interpret and report a variety of analysis techniques.

# **Module Content**

### **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 dataPercentiles and standard scores (e.g. Z scores)Confidence intervalsDifference testsCorrelation and RegressionChi-squared and RiskQualitative interview design Thematic content analysisCredibility and quality

### Module Overview

This module introduces you to the fundamental concepts of research methods, along with covering the basic application and interpretation of statistics that are relevant to research conducted in sport and exercise sciences.

#### Additional Information

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: CC11 - 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 methodologies4.1.4 Use of appropriate data analysis & visualisation techniques

### Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Learning Outcome Mapping
Report	Research Design & Analysis 1	33	1	MLO2, MLO1
Centralised Exam	Research Design & Analysis 2	67	2	MLO2, MLO1