

## MODULE DESCRIPTOR

### Module Title

Understanding Psychology as a Science 2

Reference	SSM109	Version	6
Created	October 2023	SCQF Level	SCQF 11
Approved	April 2016	SCQF Points	15
Amended	November 2023	ECTS Points	7.5

### Aims of Module

To develop a critical understanding of the scientific method in applied psychology, the design of quantitative research and statistical analysis of quantitative data (including appropriate software) and how conceptual issues relate to the design and interpretation of research and to psychology in general.

### Learning Outcomes for Module

On completion of this module, students are expected to be able to:

- 1 Draw on a wide range of experimental and non-experimental research designs to test hypotheses or research questions.
- 2 Critically analyse quantitative data via a range of statistical tests commonly used in psychology, using appropriate statistical software, and critically interpret the results in terms of the hypothesis or research question.
- 3 Demonstrate a critical understanding of conceptual issues in psychology, including the scientific method as used in applied psychology and current debates that affect how research should be designed and interpreted.

### Indicative Module Content

The scientific method; psychology as empirical science. Nature of quantitative data, parametric and non-parametric tests. Null hypothesis significance testing, effect sizes. Quantitative research designs, including experimental and observational designs. Choice of method. Quantitative data collection methods. Statistical tests, e.g. t-tests, ANOVA, correlation coefficients, linear regression, and non-parametric equivalents. Interpreting results of statistical tests. Writing up and communicating results of research. Science and pseudoscience. Psychology and society. Nature vs. nurture debate, free will vs. determinism, role of gender and culture in psychology. The replication crisis and open science in psychology.

### Module Delivery

Online distance learning, with a combination of online lectures, discussion boards, online seminars, directed reading and private study

**Indicative Student Workload**

	Full Time	Part Time
Contact Hours	24	24
Non-Contact Hours	126	126
Placement/Work-Based Learning Experience [Notional] Hours	N/A	N/A
TOTAL	150	150
<i>Actual Placement hours for professional, statutory or regulatory body</i>		

**ASSESSMENT PLAN**

If a major/minor model is used and box is ticked, % weightings below are indicative only.

**Component 1**

Type:	Coursework	Weighting:	70%	Outcomes Assessed:	1, 2
Description:	The assessment will take the form of a quantitative methods coursework.				

**Component 2**

Type:	Practical Exam	Weighting:	30%	Outcomes Assessed:	3
Description:	The assessment will take the form of an oral presentation.				

**MODULE PERFORMANCE DESCRIPTOR****Explanatory Text**

Component 1 (70%) will take the form of a coursework assessment and Component 2 (30%) will take the form of an oral presentation.

Module Grade	Minimum Requirements to achieve Module Grade:
<b>A</b>	AB, AA
<b>B</b>	AC, AD, AE, BA, BB, BC, CA
<b>C</b>	BD, BE, CB, CC, CD, DA, DB
<b>D</b>	CE, DC, DD, DE, EA, EB, EC,
<b>E</b>	AF, BF, CF, DF, EF, ED, EE, FA, FB, FC, FD
<b>F</b>	FE, FF
<b>NS</b>	Non-submission of work by published deadline or non-attendance for examination

**Module Requirements**

Prerequisites for Module	None.
Corequisites for module	None.
Precluded Modules	None.

**INDICATIVE BIBLIOGRAPHY**

- 1 Dancey, C. & Reidy, J. (2021). *Statistics Without Maths for Psychology* (8th Ed.). Harlow, UK: Pearson.
- 2 Brysbaert, M. & Rastle, K. (2022). *Historical and Conceptual Issues In Psychology* (3rd ed.). Harlow, UK: Pearson.
- 3 Field, A. (2018). *Discovering Statistics Using IBM SPSS Statistics* (5th ed.). London, UK: Sage.
- 4 Gross, R. (2014). *Themes, Issues & Debates in Psychology* (4th ed.). Abingdon, UK: Hodder Education.
- 5 Howitt, D. & Cramer, D. (2021). *Introduction to Research Methods in Psychology* (6th ed.). Harlow, UK: Pearson.