Module Definition Form (MDF)

Module code: MOD007049	**Version:** 7 **Date Amended:** 20/Jun/2024

1. Module Title
Becoming a Researcher

2a. Module Leader
Suzanna Forwood

2b. School
School of Psychology, Sport and Sensory Sciences

2c. Faculty
Faculty of Science and Engineering

3a. Level
4

3b. Module Type
Standard (fine graded)

4a. Credits
30

4b. Study Hours
300

5. Restrictions

Type	Module Code	Module Name	Condition
Pre-requisites:	None		
Co-requisites:	None		
Exclusions:	None		
Courses to which this module is restricted:			

LEARNING, TEACHING AND ASSESSMENT INFORMATION

6a. Module Description

All psychologists share basic skills in understanding, designing, reporting and communicating research and this module aims to give students a grounding in these skills. As a science, Psychology is driven by the empirical analysis of human behaviour. To do so, we start with a question of interest, formulate hypotheses to test, design, and implement a study to collect data to be analysed. If numerical data from human participants is collected and used to draw conclusions as to how and why people think and behave, we need to understand how to apply statistical analyses to data in order to draw valid and reliable inferences.

In the first half of this module, students will be introduced to the principles that guide research methodology to understand human behaviours and psychological phenomena. Topics covered will include assessing published literature, the formulation of research questions and hypotheses, foundations of study design and experimental control, the development of research protocols and procedures, sampling and participant selection and ethical considerations in research.

In the second half of this module, students will be provided with a step-by-step introduction to the principles and application of psychological data analysis. The module will introduce students to the theory behind statistical analysis, the best ways to describe data and a variety of statistical tests that can be used to analyse and draw conclusions from the data. Students will get first-hand experience in conducting a variety of statistical analyses, in-class and on their own, and have an opportunity to put these skills into practice by reporting a psychological experiment.

6b. Outline Content

- Principles of empirical research
- Reviewing empirical literature
- Formulation of research questions and hypotheses
- Principles of research design and experimental control, including experimental and questionnaire methods, quantitative and qualitative research, sampling and participant selection.
- Research Ethics
- Principles of hypothesis testing using statistics (e.g., probability theory)
- Measurement scales (e.g., nominal, ordinal, interval, ratio)
- Descriptive statistics (e.g., measures of central tendency & variability)
- A range of basic statistical methods, including non-parametric data analysis techniques (e.g., Mann-Whitney, Kruskil-Wallis, Spearman's Rho), tests of difference (e.g., t-tests) and tests of relationships (e.g., correlation)
- Using computerised software to analyse data (e.g., SPSS)

6c. Key Texts/Literature

The reading list to support this module is available at: https://readinglists.aru.ac.uk/

6d. Specialist Learning Resources

None

7. Learning Outcomes (threshold standards)		
No.	**Type**	**On successful completion of this module the student will be expected to be able to:**
1	Knowledge and Understanding	Demonstrate knowledge of qualitative, experimental and questionnaire methods.
2	Knowledge and Understanding	Understand the basic principles of experimental design and control including ethical considerations and participant selection.
3	Knowledge and Understanding	Demonstrate an understanding of how to use and report descriptive, parametric and non-parametric statistical tests to draw inferences from behavioural data.
4	Intellectual, practical, affective and transferrable skills	Conduct a structured review of published research and use this as a basis for formulating a research question
5	Intellectual, practical, affective and transferrable skills	Justify and apply a range of statistical tests to data and interpret results appropriately.
6	Intellectual, practical, affective and transferrable skills	Use standard software packages for word processing, literature search, data analysis and communication.

8a. Module Occurrence to which this MDF Refers				
Year	**Occurrence**	**Period**	**Location**	**Mode of Delivery**
2024/5	ZZF	Template For Face To Face Learning Delivery		Face to Face

8b. Learning Activities for the above Module Occurrence			
Learning Activities	**Hours**	**Learning Outcomes**	**Details of Duration, frequency and other comments**
Lectures	24	1-4	24 x 1 hour lectures per week
Other teacher managed learning	22	3-6	11 x2 hour practicals
Student managed learning	254	1-6	Background reading (140 hours), assessment preparation (90 hours), in-class test preparation (24 hours)
TOTAL:	300		

9. Assessment for the above Module Occurrence					
Assessment No.	**Assessment Method**	**Learning Outcomes**	**Weighting (%)**	**Fine Grade or Pass/Fail**	**Qualifying Mark (%)**
010	Practical	1,2,3,5	50 (%)	Fine Grade	30 (%)
Assessment of research methods and engagement in practical sessions (3000 word equivalent)					
Assessment No.	**Assessment Method**	**Learning Outcomes**	**Weighting (%)**	**Fine Grade or Pass/Fail**	**Qualifying Mark (%)**
011	Coursework	3,4,6	50 (%)	Fine Grade	30 (%)
Research topic review and results (3000 words equivalent)					

Assessment components for Element 011				
Component No.	**Assessment Title**	**Submission Method**	**Weighting (%)**	**Components needed for Mark Calculation?**
011/1	Topic Review (1500 words)	Canvas	49 (%)	All
011/2	Results and Discussion (1500 words)	Canvas	49 (%)	
011/3	SONA participation	Scheduled Activity: Timetabled assessment task	2 (%)	

In order to pass this module, students are required to achieve an overall mark of 40% (for modules at levels 3, 4, 5 and 6) or 50% (for modules at level 7*).

In addition, students are required to:
(a) achieve the qualifying mark for each element of fine graded assessment as specified above
(b) pass any pass/fail elements

[* the pass mark of 50% applies for all module occurrences from the academic year 2024/25 – see Section 3a of this MDF to check the level of the module and Section 8a of this MDF to check the academic year]