



Module Descriptor

Title	Quantitative Research Skills in Psychology		
Session	2025/26	Status	Validated
Code	PSYC08014	SCQF Level	8
Credit Points	20	ECTS (European Credit Transfer Scheme)	10
School	Education and Social Sciences		
Module Co-ordinator	L Calderwood		

Summary of Module

This module will introduce and develop the key skills required to carry out quantitative research within the field of psychology. The theoretical underpinnings and methodologies of quantitative approaches will be discussed, and students will gain experience in how to collect, analyse and interpret data using experimental and correlational methods. The module will cover the principles of research design, measurement issues, sampling techniques, and statistical analysis. Students will learn how to input data and how to carry out and interpret descriptive statistics using appropriate statistical software. The module will then introduce students to inferential statistics, and they will learn how to perform and interpret basic tests such as t-tests, chi-square and correlation. The module will also consider the ethical issues associated with carrying out quantitative research.

At the end of the module, students will have become inquiring, research-minded, analytical and collaborative. In addition, they will have become ethically minded, creative problem solvers and effective communicators.

- Quantitative research design
- Quantitative data analysis
- Research ethics

Module Delivery Method	On-Campus ¹	Hybrid ²	Online ³	Work -Based Learning ⁴
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

¹ Where contact hours are synchronous/ live and take place fully on campus. Campus-based learning is focused on providing an interactive learning experience supported by a range of digitally-enabled asynchronous learning opportunities including learning materials, resources, and opportunities provided via the virtual learning environment. On-campus contact hours will be clearly articulated to students.

² The module includes a combination of synchronous/ live on-campus and online learning events. These will be supported by a range of digitally-enabled asynchronous learning opportunities including learning materials, resources, and opportunities provided via the virtual learning environment. On-campus and online contact hours will be clearly articulated to students.

³ Where all learning is solely delivered by web-based or internet-based technologies and the participants can engage in all learning activities through these means. All required contact hours will be clearly articulated to students.

⁴ Learning activities where the main location for the learning experience is in the workplace. All required contact hours, whether online or on campus, will be clearly articulated to students

Campuses for Module Delivery	<input type="checkbox"/> Ayr		<input type="checkbox"/> Lanarkshire		<input type="checkbox"/> Online / Distance Learning	
	<input type="checkbox"/> Dumfries		<input type="checkbox"/> London		<input type="checkbox"/> Other (specify)	
		<input checked="" type="checkbox"/> Paisley				
Terms for Module Delivery	Term 1	<input checked="" type="checkbox"/>	Term 2	<input type="checkbox"/>	Term 3	<input type="checkbox"/>
Long-thin Delivery over more than one Term	Term 1 – Term 2	<input type="checkbox"/>	Term 2 – Term 3	<input type="checkbox"/>	Term 3 – Term 1	<input type="checkbox"/>

Learning Outcomes	
L1	Demonstrate knowledge of the nature and structure of quantitative psychological research design.
L2	Show an understanding of different quantitative methods of data collection.
L3	Show an ability to process, interpret, evaluate, and communicate the analysis of quantitative data
L4	Demonstrate an awareness of the ethical issues involved in conducting psychological research.
L5	

Employability Skills and Personal Development Planning (PDP) Skills	
SCQF Headings	During completion of this module, there will be an opportunity to achieve core skills in:
Knowledge and Understanding (K and U)	SCQF 8 Demonstrate a critical understanding of quantitative research methodologies in relation to their theoretical principles
Practice: Applied Knowledge and Understanding	SCQF 8 Using acquired knowledge to perform and interpret an appropriate analysis on a quantitative data set.
Generic Cognitive skills	SCQF 8 The communication of complex ideas and issues both in written and verbal form. The ability to identify and analyse aspects of quantitative methodological issues.
Communication, ICT and Numeracy Skills	SCQF 8 The use of computer statistical software to interpret and analyse quantitative data. Communicate the interpretation of the output in written form using the conventional APA standards for psychology.
Autonomy, Accountability and Working with Others	SCQF 8 Take responsibility for the completion of their own continuous assessment, meeting rolling deadlines

Prerequisites	Module Code	Module Title
	Other	
Co-requisites	Module Code	Module Title

Learning and Teaching

In line with current learning and teaching principles, a 20-credit module includes 200 learning hours, normally including a minimum of 36 contact hours and maximum of 48 contact hours.

Teaching activities will use a student- focused, blended approach. Weekly lectures will recap previous learning and cover theory of new research methods covered. Small group teaching in the form of workshops will involve practical laboratory instruction and flexible self-paced learning. Additionally self-paced exercises and demonstration will be utilised via the VLE, examples of these are using instructional videos, demonstrations, and formative quizzes. The assessment strategy will encompass a flexible programme that allows the student to show proficiency in the subject.

The workshops and lectures will blend the theoretical and practical elements of research design, methodology, analysis, interpretation, and reporting. Some of the allocated contact hours will include ICT led laboratory practicals which will be used to instruct data coding and analysis techniques by using demonstration and student collaboration. The assessment strategy allows for continuous development towards assessment through guided practical and self-study.

Learning Activities

During completion of this module, the learning activities undertaken to achieve the module learning outcomes are stated below:

Student Learning Hours

(Note: Learning hours include both contact hours and hours spent on other learning activities)

Lecture / Core Content Delivery

12

Tutorial / Synchronous Support Activity

24

Independent Study

164

n/a

n/a

n/a

TOTAL

200

Indicative Resources

The following materials form essential underpinning for the module content and ultimately for the learning outcomes:

Jhangiani, R., Chiang, I.-C. A., Cuttler, C., & Leighton, D. C. (2019). Research Methods in Psychology (4th ed.). Surrey, BC: Kwantlen Polytechnic University. Retrieved from <https://kpu.pressbooks.pub/psychmethods4e/>

Navarro, D. J., Foxcroft, D. R., Faulkenberry, T. J. (2019). Learning Statistics with JASP: A Tutorial for Psychology Students and Other Beginners.

<https://tomfaulkenberry.github.io/JASPbook/ljsj.pdf>

Bourne, V., (2017). Starting Out in Methods and Statistics for Psychology: A Hands-on Guide to Doing Research. Oxford University Press.

(N.B. Although reading lists should include current publications, students are advised (particularly for material marked with an asterisk*) to wait until the start of session for confirmation of the most up-to-date material)

Attendance and Engagement Requirements

In line with the [Student Attendance and Engagement Procedure](#), Students are academically engaged if they are regularly attending and participating in timetabled on-campus and online teaching sessions, asynchronous online learning activities, course-related learning resources, and complete assessments and submit these on time.

For the purposes of this module, academic engagement equates to the following:

The university is committed to providing a supportive learning environment that actively facilitates student success. In this module, you are considered to be academically engaged if you regularly engage with scheduled live sessions on campus (and occasionally online), including engaging with asynchronous activities online, course-related learning resources, and with timely completion of assessments.

Whilst we understand that there may be times when conflicting priorities make participation challenging, for you to gain the most from this programme, it is recommended that you participate in all scheduled live classes and complete your self-directed learning activities in a timely manner.

It may be difficult to pass the assessments associated with this programme if you are not regularly engaging with each module's work and classes. We may reach out to check how things are going and offer support if we observe that you have not been attending sessions or completing online activities..

Equality and Diversity

The University's Equality, Diversity and Human Rights Procedure can be accessed at the following link: [UWS Equality, Diversity and Human Rights Code](#).

In line with current legislation (Equality Act, 2010) and the UWS Equality, Diversity, and Human Rights Code, our modules are accessible and inclusive, with reasonable adjustment for different needs where appropriate. Module materials comply with University guidance on inclusive learning and teaching, and specialist assistive equipment, support provision and adjustment to assessment practice will be made in accordance with UWS policy and regulations. Where modules require practical and/or laboratory based learning or assessment required to meet accrediting body requirements the University will make reasonable adjustment such as adjustable height benches or assistance of a 'buddy' or helper.

(N.B. Every effort will be made by the University to accommodate any equality and diversity issues brought to the attention of the School)

Supplemental Information

Divisional Programme Board	Psychology Social Work
Overall Assessment Results	<input type="checkbox"/> Pass / Fail <input checked="" type="checkbox"/> Graded

Module Eligible for Compensation	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If this module is eligible for compensation, there may be cases where compensation is not permitted due to programme accreditation requirements. Please check the associated programme specification for details.
School Assessment Board	UG/PG Psychology
Moderator	TBC
External Examiner	L Wright
Accreditation Details	
Module Appears in CPD catalogue	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Changes / Version Number	1.04

Assessment (also refer to Assessment Outcomes Grids below)
Assessment 1
Multiple Choice Tests Students will complete a series of multiple choice tests to assess their knowledge and understanding of the key theoretical concepts covered in the module. These will make up 30% of the overall grade.
Assessment 2
Presentation outlining the analysis and interpretation of data from studies utilising psychological data to address a research question. This piece of coursework is worth 70% of the total grade.
Assessment 3
(N.B. (i) Assessment Outcomes Grids for the module (one for each component) can be found below which clearly demonstrate how the learning outcomes of the module will be assessed. (ii) An indicative schedule listing approximate times within the academic calendar when assessment is likely to feature will be provided within the Student Module Handbook.)

Component 1							
Assessment Type	LO1	LO2	LO3	LO4	LO5	Weighting of Assessment Element (%)	Timetabled Contact Hours
MCTs	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	30	

Component 2							
Assessment Type	LO1	LO2	LO3	LO4	LO5	Weighting of Assessment Element (%)	Timetabled Contact Hours
Portfolio of practical work	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	70	

Component 3

Assessment Type	LO1	LO2	LO3	LO4	LO5	Weighting of Assessment Element (%)	Timetabled Contact Hours
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Combined total for all components						100%	hours

Change Control

What	When	Who
Minor edits to fix typos following ILR	3 rd June 2025	G Hendry
Copied to new template	28 th March 2025	G Hendry