

## **ACADEMIC SERVICES**

## **MODULE SPECIFICATION**

Part 1: Basic Data					
Module Title	Research Design	n and Analysis 1			
Module Code	USPJL7-30-1 Leve		Level	1	Version 1.1
Owning Faculty	Health and Applied Sciences		Field	Psychology	
Contributes towards	BSc (Hons) Psychology + Psychology combinations				
UWE Credit Rating	30	ECTS Credit Rating	15	Module Type	Standard
Pre-requisites	None		Co- requisites	None	
Excluded Combinations	N/A		Module Entry requirements	N/A	
Valid From	September 2014		Valid to	September 2020	

CAP Approval Date	20/11/2014

Part 2: Learning and Teaching		
Learning Outcomes	<ul> <li>Understand the basic principles of experimental design (quantitative and qualitative) and its relationship to statistical analysis (Component A, B)</li> <li>Distinguish and summarise different types of information and data using appropriate information technology (Component B)</li> <li>Understand the principles of descriptive and inferential statistical analysis (Component A, B)</li> <li>Recognise and demonstrate an understanding for the ethical issues involved in research (Component A, B)</li> <li>Demonstrate an understanding of the perspective of the participant in research (Component B)</li> </ul>	
Syllabus Outline	<ul> <li>Students have the opportunity to engage with research methods and statistics at a number of levels (see below). For example, they may have the opportunity to learn about:         <ul> <li>An introduction to experimental design: independent and dependent variables, confounding variables, extraneous variables and control of these variables through methods such as randomisation and counter balancing. Comparison of between subjects, within subjects, matched pairs and mixed designs</li> <li>Approaches to qualitative data collection and analysis: observation and questionnaire development</li> </ul> </li> <li>Use of spreadsheet, statistical and graphics software to obtain descriptive statistics and to construct tables and graphs</li> <li>Data summary and presentation: tables, bar charts, pictograms, histograms, cumulative charts, and scatter plots</li> </ul>	

Types of data: Inductive and deductive approaches and their relationship to qualitative and quantitative data; obtaining nominal, ordinal, interval and ratio Descriptive statistics: frequency distributions, measures of central tendency and dispersion. The normal and binomial distribution: rationale and use. Theories of measurement and psychological testing: Measurement error, validity, reliability and generalizability Parametric and non-parametric tests for within and between subjects designs t tests, Wilcoxon and Mann-Whitney tests, chi square test for contingency tables and one way Anova Measures of association – Pearson's and Spearman's correlation coefficients. simple linear regression Ethical issues in research Contact Hours Students are typically expected to have 3 hours of contact time per week over a 24week period of study. Contact time comprises of a mixed model of instruction that includes lectures, seminars/practical's and online activities/sessions delivered within a virtual learning environment (e.g., online lectures, asynchronous discussions, virtual classrooms, etc.). Contact time is primarily based on in-class sessions with half of the time being based on lecture-based sessions and the other half on seminar/practical-based sessions. Teaching and A variety of pedagogical approaches are used to ensure the active engagement of Learning Methods students. Scheduled learning includes lectures, seminars, practical classes and workshops. Independent learning includes hours engaged with essential reading, assignment preparation and completion etc. The module will use videos, pdfs, and self-directed on-line learning to establish basic knowledge and understanding, followed by group seminars/practical's to gain handson experience constructing, organising, and analysing information. Discussion and feedback is a continuous aspect of the module occurring at the group level and on individual assignments where appropriate. Students will be enabled to use Blackboard the university supported virtual learning environment to organise and communicate their learning material. Students will be able to engage with the material, other students and members of staff through this system and make use of the various functionalities built into the Blackboard (e.g., blogs, journals, audio, video, discussion boards, wikis, etc.). Moreover, students will be able to communicate with their instructors using university sponsored tools (such as Lync). **Key Information** Key Information Sets (KIS) are produced at programme level for all programmes that Sets Information this module contributes to, which a requirement is set by HESA/HEFCE. KIS are comparable sets of standardised information about undergraduate courses allowing prospective students to compare and contrast between programmes they are interested in applying for.

Scheduled learning and	Independent			
teaching study hours				
72	228	0	300	
	learning and teaching study hours	learning and teaching study hours	learning and teaching study hours study hours	learning and teaching study hours study hours Hours

The table below indicates as a percentage the total assessment of the module which constitutes a -

Written Exam: Multiple-Choice exam

Coursework: Written assignment (report/project)

Total asses	ssment of th	e module:		
Written exa	m assessm	ent percent	age	30%
Coursework assessment percentage			70%	

### Reading Strategy

All students will be encouraged to make full use of the print and electronic resources available to them through membership of the University. These include a range of electronic journals and a wide variety of resources available through web sites and information gateways. The University Library's web pages provide access to subject relevant resources and services, and to the library catalogue. Many resources can be accessed remotely. Students will be presented with opportunities within the curriculum to develop their information retrieval and evaluation skills in order to identify such resources effectively.

Any **essential reading** will be indicated clearly, along with the method for accessing it, e.g. students may be expected to purchase a set text, be given or sold a print study pack or be referred to texts that are available electronically, etc. This guidance will be available either in the module handbook, via the module information on Blackboard or through any other vehicle deemed appropriate by the module/programme leaders.

If **further reading** is expected, this will be indicated clearly. If specific texts are listed, a clear indication will be given regarding how to access them and, if appropriate, students will be given guidance on how to identify relevant sources for themselves, e.g. through use of bibliographical databases.

A detailed reading list will be made available through relevant channels, e.g. module handbooks, Blackboard, etc.

As part of the research, students will be expected to read and reference widely. Student learning will be supported through 'Blackboard' - the University's E learning space. Copies of recommended text books, scientific papers and relevant magazines are available through the library.

#### Indicative Reading List

McBride, D. (2013) The Process of Research in Psychology. London: Sage.

Brace, N., Snelgar, R. and Kemp, R. (2012) *SPSS for Psychologists.* Basingstoke: Palgrave Macmillan.

Jones, S. (2010) Statistics in Psychology: Explanations without Equations. Basingstoke: Palgrave Macmillan.

Gavin, H. (2008) *Understanding research methods and statistics in psychology*.[online].London: Sage. .

Howitt, D. & Cramer, D. (2011) *Introduction to research methods in psychology*.[online]. Prentice Hall.

Martin, W.E. & Bridgmon, K.D. (2012) *Quantitative and statistical research methods: from hypothesis to results.*[online]. Jossey-Bass.

# Part 3: Assessment Assessment Strategy Coursework (Component B) Students must provide evidence that they understand the basic principles of research ethics, experimental design and its relationship to descriptive and statistical analysis using appropriate information technology. The portfolio provides a framework for students to participate in research projects through the UWE Participant Pool and engage in a range of online activities that may include interactive computer marked multiple choice questions. Further evidence stems from performance on two set written assignments, where a partial research report is submitted in semester 1. Feedback on this assignment can then be used by students to improve performance on a full research report (on a different topic) submitted in semester 2. Final Exam (Component A) Students must provide evidence that they understand the basic principles of research methods and statistics. A timed exam which may include multiple choice questions provides an opportunity for students to evidence their understanding of a broad range of material associated with research methods

and statistics.

Identify final assessment component and element		
% weighting between components A and B (Standard modules only)		B: 70%
First Sit		
Component A (controlled conditions)  Description of each element	Element v	
1. Timed Exam	100	)%
Component B Description of each element	Element v	
Portfolio (Research Participation and Online Activities)	59	%
2. Partial Research Report	45	%
3. Full Research Report	50	%

Resit (further attendance at taught classes is not required)	
Component A (controlled conditions)	Element weighting
Description of each element	(as % of component)

1. Timed Exam	100%
Component B Description of each element	Element weighting (as % of component)
1. Full Research Report	100%

If a student is permitted an **EXCEPTIONAL RETAKE** of the module the assessment will be that indicated by the Module Description at the time that retake commences.