

Module Specification

Research Design and Analysis 1

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Part 1: Information

Module title: Research Design and Analysis 1

Module code: USPJL7-30-1

Level: Level 4

For implementation from: 2020-21

UWE credit rating: 30

ECTS credit rating: 15

Faculty: Faculty of Health & Applied Sciences

Department: HAS Dept of Social Sciences

Partner institutions: None

Delivery locations: Frenchay Campus

Field: Psychology

Module type: Standard

Pre-requisites: None

Excluded combinations: None

Co-requisites: None

Continuing professional development: No

Professional, statutory or regulatory body requirements: None

Part 2: Description

Overview: Not applicable

Features: Not applicable

Educational aims: This module will enable students to engage with research methods and statistics.

Outline syllabus: The syllabus includes:

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.

Approaches to qualitative data collection and analysis: observation and questionnaire development.

Use of spreadsheet, statistical and graphics software to obtain descriptive statistics and to construct tables and graphs.

Data summary and presentation: tables, bar charts, pictograms, histograms, cumulative charts, and scatter plots.

Types of data: Inductive and deductive approaches and their relationship to qualitative and quantitative data; obtaining nominal, ordinal, interval and ratio data.

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.

Part 3: Teaching and learning methods

Teaching and learning methods: A variety of pedagogical approaches are used to ensure the active engagement of students. Scheduled learning includes lectures, seminars, practical classes and workshops. Independent learning includes hours engaged with essential reading, assignment preparation and completion.

The module will use videos, pdfs, and self-directed on-line learning to establish basic knowledge and understanding, followed by group seminars/practicals 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 (for example, blogs, journals, audio, video, discussion boards, wikis). Moreover, students will be able to communicate with their instructors using university sponsored tools (such as Office 365).

Contact Hours:

Students are typically expected to have 3 hours of contact time per week over a 24 week period of study. Contact time comprises of a mixed model of instruction that includes lectures, seminars/practicals and online activities/sessions delivered within a virtual learning environment (for example, online lectures, asynchronous discussions, virtual classrooms).

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 workshop based sessions.

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Module Learning outcomes: On successful completion of this module students will achieve the following learning outcomes.

MO1 Understand the basic principles of experimental design (quantitative and qualitative) and its relationship to statistical analysis (Component A and B).

MO2 Distinguish and summarise different types of information and data using appropriate information technology (Component B).

MO3 Understand the principles of descriptive and inferential statistical analysis (Component A and B).

MO4 Recognise and demonstrate an understanding for the ethical issues involved in research (Component A and B).

MO5 Demonstrate an understanding of the perspective of the participant in research (Component B).

Hours to be allocated: 300

Contact hours:

Independent study/self-guided study = 228 hours

Face-to-face learning = 72 hours

Total = 300

Reading list: The reading list for this module can be accessed at

readinglists.uwe.ac.uk via the following link <u>https://uwe.rl.talis.com/modules/uspjl7-</u> <u>30-1.html</u>

Part 4: Assessment

Assessment strategy: Exam (Component A):

The exam will provide the opportunity for students to evidence their understanding of the basic principles of research methods and statistics. Such evidence may be made up of exam questions under timed conditions in order to cover the broad range of material associated with research methods and statistics.

Coursework (Component B):

Through coursework, students will be able to evidence their understanding of the basic principles of research ethics, experimental design and its relationship to descriptive and statistical analysis using appropriate information technology. Evidence will be submitted as part of a portfolio in semester 1 and a second portfolio in semester 2. Each portfolio will include evidence from a range of learning activities. As examples, these may include participation in research studies through the UWE Participant Pool, interactive computer marked multiple choice questions, short written assignments and research reports.

Resit (Component B):

Students will have the opportunity to submit a resit portfolio. The evidence from activities would be similar to the range used throughout the academic year.

Assessment components:

Portfolio - Component B (First Sit)

Description: Portfolio (Semester 1) Weighting: 35 % Final assessment: No Group work: No Learning outcomes tested: MO1, MO2, MO3, MO4, MO5

Portfolio - Component B (First Sit)

Description: Portfolio (Semester 2) Weighting: 35 % Final assessment: No Group work: No Learning outcomes tested: MO1, MO2, MO3, MO4, MO5

Examination - Component A (First Sit)

Description: Timed Exam (1 hour) Weighting: 30 % Final assessment: Yes

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Group work: No Learning outcomes tested: MO1, MO3, MO4

Portfolio - Component B (Resit)

Description: Portfolio (Resit) Weighting: 70 % Final assessment: No Group work: No Learning outcomes tested: MO1, MO2, MO3, MO4, MO5

Examination - Component A (Resit)

Description: Timed Exam (1 hour) Weighting: 30 % Final assessment: Yes Group work: No Learning outcomes tested: MO1, MO3, MO4

Part 5: Contributes towards

This module contributes towards the following programmes of study: Law with Psychology [Sep][SW][Frenchay][4yrs] LLB (Hons) 2020-21 Law with Psychology [Sep][FT][Frenchay][3yrs] LLB (Hons) 2020-21