

COURSE SPECIFICATION DOCUMENT

Academic School/Department:	Psychology
Programme:	Psychology
FHEQ Level:	5
Course Title:	Quantitative Methods in Psychology
Course Code:	PSY 5205
Student Engagement Hours:	160
Lectures:	20
Laboratory:	45
Independent / Guided Learning:	95
Credits:	16 UK CATS credits 8 ECTS credits 4 US credits

Course Description:

This course is designed to introduce students to the various stages of quantitative research within the psychology discipline. Students will gain experience doing research and deriving topic questions. In addition, students will learn to formally critique empirical work. The course is designed as a laboratory course; extensive student participation is required. Upon completion of this course, students will have mastered the basic steps for conducting independent research, with ethical and laboratory constraints following APA guidelines.

Prerequisites:

MTH 4120 Probability & Statistics 1

PSY 4205 Conceptual and Historical Issues in Psychology

Aims and Objectives:

This course aims to provide students with the training and experience in quantitative research methods used within psychology. It will outline the steps for conducting formal quantitative research and will deepen students' awareness of the importance of conducting good empirical research. Students will appreciate the value of rigorous scientific principles in research and will become familiar with performing statistical analyses within the context of a research question. They will be using APA standards to write a study proposal and report.

Programme Outcomes:

Psychology: 5Bi, 5Bii, 5Biii, 5Ci, 5Ciii

A detailed list of the programme outcomes are found in the Programme Specification. This is located at the archive maintained by Registry and found at: <https://www.richmond.ac.uk/programme-and-course-specifications/>

Learning Outcomes:

- By the end of this course, successful students should be able to:
- Develop a detailed understanding of the experimental methods used in psychology
- Gain insight into the best methodology to use given the phenomenon in question
- Develop the ability to design, conduct, analyze, and interpret an experimental study.
- Develop the ability to use statistical software to analyze data and being able to interpret the result tables.
- Develop the ability to write a study proposal and report according to APA standards

Indicative Content:

- Finding a good journal paper
- Writing a research proposal
- Survey methods and Questionnaire design
- Frequency distributions
- Means and SDs
- IV, DV and CV
- Normal Distribution
- Which test to use and Methodology
- Correlation tests and interpretation
- Writing a research report
- Ethics in research
- Experimental Design: t-test, ANOVA

Assessment:

This course conforms to the University Assessment Norms approved at Academic Board and located at: <https://www.richmond.ac.uk/university-policies/>

Teaching Methodology:

The course material will be covered in the following ways:

- I. Lecture presentations with the key concepts
- II. Group discussions on the material
- III. Laboratory/software applications
- IV. Internet sites related to psychology
- V. Videos
- VI. On-line experiments
- VII. Related journal articles

Indicative Texts:

Kantowitz, B.H., Roediger, H.L., III, Elmes, D.G. (2015). *Experimental Psychology. Understanding Psychological Research*, Cengage.

Field, A. (2018). *Discovering Statistics using IBM SPSS*. Sage Publications.

Journals:

American Psychologist

British Journal of Psychology

British Journal of Social Psychology

Journal of Cross-Cultural Psychology

Journal of Personality

Journal of Personality and Social Psychology

Psychological Bulletin

Psychological Review

See syllabus for complete reading list

Change Log for this CSD:

Major or Minor Change	Nature of Change	Date Approved & Approval Body	Change Actioned by Registry Services
Minor	Removed specific assessment table from CSD	09.11.21, Psychology Department	
	Various updates as part of the UG programme review	AB Jan 2022	
	Revision – annual update	May 2023	