

COURSE SPECIFICATION DOCUMENT

Academic School/Department:	Psychology
Programme:	Psychology
FHEQ Level:	5
Course Title:	Experimental Methods in Psychology
Course Code:	PSY 5210
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 covers experimental design and testing methodology in the study of human behaviour. The course will elaborate on the content covered in Quantitative Methods in Psychology. More advanced statistical analysis will be covered alongside the theoretical base for using different research methods and what are the advantages and disadvantages of each. Also, we will discuss in depth ethical issues in psychological research and the way we report and present studies in psychology. Students are expected to deliver their experimental work with limited direction, building on what they learned in Quantitative Methods in terms of designing, conducting, and reporting an experiment according to APA standards.

Prerequisites:

MTH 4120 Probability and Statistics I
PSY 5205 Quantitative Methods in Psychology

Aims and Objectives:

In this course we will focus on the usefulness and appropriateness of different research methods for the examination of various phenomena. Special emphasis will be placed on the application of theories through experimentation and the critical evaluation of these. To illustrate these points, we will examine experimental studies in different areas of psychology such as memory, attention, language, emotion, psychophysics etc. Moreover, the laboratory class will complement the lectures, whereby students are required to collect, analyze and interpret data on a topic of their choice. This is an extended project to be presented to publication standards and at the Experimental Psychology poster session at the end of the semester.

Programme Outcomes:

Psychology: 5Aii, 5Aiii, 5Bi, 5Bii, 5Biii, 5Ci

A detailed list of the programme outcomes is found in the Programme Specification. This is maintained by Registry and located at:

<https://www.richmond.ac.uk/programme-and-course-specifications/>

Learning Outcomes:

By the end of this course, successful students should be able to:

- Demonstrate a detailed understanding of the experimental methods used in psychology.
- Appreciate the connections between the theories and their applications in experimentation and to be able to critically evaluate these.
- Demonstrate the ability to apply different methodologies when specific phenomena are examined.
- Demonstrate the ability to design, conduct, analyse, interpret and report an experimental study with limited guidance.
- Demonstrate the ability use statistical software to analyse data and interpret the result tables.
- Develop the ability to orally present an experimental study to the standards of a conference.

Indicative Content:

Theoretical:

- Observation and Correlation
- Experimental studies
- Ethics in Research
- Methods used in Individual Differences research
- Methods used in Cognitive Skills research
- Methods used in Perception and Attention research
- Methods used in Learning and Memory research
- Methods used in Psychophysics research

Laboratory:

- ANOVAs: all types
- Planned comparison and post-hoc tests
- Regression
- Non-parametric tests
- Preparing a poster presentation to conference standards

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	