

COURSE SPECIFICATION DOCUMENT

Academic School/Department:	School of Communications, Arts and Social Sciences
Programme:	Psychology
FHEQ Level:	4
Course Title:	Scientific Reasoning in Psychology
Course Code:	PSY 4220
Course Leader:	Dr Ira Konstantinou
Student Engagement Hours:	120
Lectures:	30
Seminar / Tutorials:	15
Independent / Guided Learning:	75
Semester:	Fall/Spring
Credits:	12 UK CATS credits 6 ECTS credits 3 US credits

Course Description: Scientific reasoning underpins the vast majority of contemporary research in psychology. This course introduces students to scientific concepts, their development and impact on the field of psychology. Students will engage with critical reading and analysis of psychological scholarly work, and develop a working knowledge of the application of design principles and statistical reasoning within psychological research.

Prerequisites: PSY 3100

Aims and Objectives: The primary aim of this module is to encourage critical reading and analysis of psychological scholarly work investigating experience and behaviour, culminating in an ability to conduct research under supervision. The focus will be on all aspects of the scholarly work, including the introduction, the methods and appropriateness of the research design, the statistical analyses and their report in the results section, and finally the interpretation of the results and description of the

limitations of the study in the discussion. The critical reading of papers and identification of both positive and negative aspects will be central in this course. Students will be encouraged to work independently, manage their own learning, and apply close reading, synthesis and critical evaluation of documents.

Programme Outcomes: 4Ai, 4Bi, 4Bii, 4Ci, 4Ciii, 4Di, 4Diii

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:

- develop an understanding of the role of empirical evidence in the creation and constraint of theory
- demonstrate a critical awareness of how theory guides the collection and interpretation of empirical data
- develop the ability to critically evaluate a range of research methods for investigating experience and behaviour
- deploy analytical skills and evaluate evidence in relation to the theoretical underpinnings, research findings, and applications.

Indicative Content:

- Evolution of the human mind
- Phases of scientific thinking
- Science, pseudoscience and antiscience
- Theory formation, zeitgeist and confirmation bias
- Relationship between theory and empirical evidence
- Description vs critical analysis in psychology
- Psychology research ethics
- Statistical reasoning
- Critical evaluation of scholarly work

Assessment:

This course conforms to the University Assessment Norms approved at Academic Board.

Teaching Methodology:

The course material will be covered in the following ways:

- I. Lecture presentations with the key concepts
- II. Group discussions on journal articles

