

# unit guide

Issues in empirical psychology

PSY\_1\_ISE

https://www.lsbu.ac.uk/psycho/teaching/iopmain.shtml

Faculty of Arts and Human Sciences

2007/8

# become what you want to be

# Table of Contents

Unit Details	3
Short Description	3
Aims of the Unit	3
Learning Outcomes	3
Knowledge and Understanding	3
Intellectual Skills	3
Practical Skills	3
Transferable Skills	4
Assessment of the Unit	4
Introduction to Studying the Unit	5
Overview of the Main Content	5
Overview of Types of Classes	5
Importance of Student Self-Managed Learning Time	6
Employability	6
The Programme of Teaching, Learning and Assessment	6
Learning Resources	9
Core Materials	9
Optional Materials	9
	Unit Details

# 1.0 UNIT DETAILS

Unit Title:	Issues in Empirical Psychology
Unit Level:	1
Unit Reference Number:	PSY_1_ISE
Credit Value:	20
Student Study Hours:	150
Contact Hours:	36
Private Study Hours:	114
Pre-requisite Learning (If applicable):	NONE
Co-requisite Units (If applicable):	NONE
Course(s):	BSc Psychology (Hons)
Year and Semester	06/07, Semester 2
Unit Coordinator:	Dr. Elizabeth Newton
UC Contact Details	liz.newton@lsbu.ac.uk
Teaching Team & Contact Details	Daniel Frings, <u>fringsd@lsbu.ac.uk</u>
(If applicable):	Agata Flis, flisa@lsbu.ac.uk
	Dr. Frances Lyons, frances@lyonsf.fsnet.co.uk
Subject Area:	Psychology
Summary of Assessment Method:	1 x 500 word structured summary (40%)
-	1 x 1000 word critical summary (60%)

# 2.0 SHORT DESCRIPTION

This unit wil explore selected issues in the major areas of psychology. It will focus on the empirical as well as the conceptual aspects of these issues. For example, the value of animal research in psychology. An important aspect of this focus will be the seminar programme, in which students will be helped to develop the ability to read and interpret primary sources related to these issues. For example, an original article reporting a twin study might be used to drill into the heredity-environement debate in Developmental Psychology and Individual Differences.

# 3.0 AIMS OF THE UNIT

- To introduce students to the empirical and theoretical aspects of key topics in the major areas of psychology;
- To help students learn to read, criticise and interpret journal articles relating to these issues.

### 4.0 LEARNING OUTCOMES

### 4.1 Knowledge and Understanding

- Outline the arguments for and against using animals in psychology;
- Outline the nature/nurture debate and describe the principles of twin studies;
- Describe how the study of abnormal cognition helps us understand normal cognition;
- Describe how different methods can help answer the same questions.

### 4.2 Intellectual Skills

- Handle primary source material critically;
- Employ evidence based reasoning and examine the issues associated with different approaches (in practical work / in other sources);
- Apply multiple perspectives to psychological issues.

### 4.3 Practical Skills

• Retrieve and/or organise information effectively e.g. from electronic sources.

### 4.4 Transferable Skills

- Retrieve and/or organise information effectively e.g. from electronic sources;
- Comprehend and use data effectively (includes reported data);
- Make critical judgements and evaluations about relevant research;
- Successfully apply multiple perspectives to issues in psychology;
- Communicate effectively using written and spoken language.

# 5.0 ASSESSMENT OF THE UNIT

- 1. 1 x 500 word Structured Summary (40%) Based on either Topic 1 OR Topic 2
- 2. 1 x 1000 Critical Summary (60%) Based on either Topic 3 OR Topic 4

#### Notes about submitting coursework

Coursework deadlines are published in Course/Field Guides and on Psychology notice boards. It is your responsibility to ensure that you are aware of these dates. All coursework must be submitted to the AHS Faculty Office in Borough Road (B266).

Occasionally, individual students may be asked, in writing, to also provide an electronic copy. Failure to supply electronic copy within two weeks of a written request will result in the coursework being deemed as an incomplete submission, hence given a mark of zero.

- 1. When handing in coursework, you must:
  - complete the coursework submission form and attach it to the front of your coursework;
  - take the coursework to the Faculty Office. Your submission form will be date stamped and a receipt issued. Please keep all receipts;
  - keep a copy of your essay.

You must not hand coursework to your unit co-ordinator or other lecturer.

- 2. Unless you have obtained a formal extension from your year tutor, coursework submitted:
  - up to two weeks after the deadline date will receive a maximum mark of the pass mark (40%);
  - more than two weeks after the deadline will not be marked.
- 3. Extensions are only granted for valid reasons (see Course/Field guide). The Year Tutor will normally require concrete evidence (e.g. medical certificate). If you want an extension of the deadline date, you must:
  - get a copy of the form for late submission from the Faculty Office;
  - fill in Part A of the form, giving reasons why you cannot meet the existing deadline date;
  - supply the Year Tutor with relevant documentary evidence;
  - submit the form to the Year Tutor (Daniel Frings; <u>fringsd@lsbu.ac.uk</u>) who will fill in Part B the decision whether to agree the request rests with the Year Tutor;
  - attach the form to the front of your coursework when you submit it (keep a copy for your records);
  - each extension form is only valid for <u>one</u> piece of coursework;
  - the maximum extension is two weeks.

Students should note that extensions are only granted in exceptional circumstances. In order for an illness or other personal problem to be accepted as grounds for an extension, the Year Tutor will need to convince herself that the problem occurred at such a time, and was of such a duration, that a student's ability to complete the assignment to the best of their ability was significantly reduced.

# 6.0 INTRODUCTION TO STUDYING THE UNIT

### 6.1 Overview of the Main Content

Week	Lecture	Seminar	
1	Introduction to Unit (EN): An introduction to major issues relevant to many areas of psychology.		
2	<b>Topic 1 (EN):</b> To what extent does the study of animal behaviour inform our understanding of human behaviour?		
3		Topic 1 (odd groups):	
4	<b>Topic 2 (EN):</b>	Topic 1 (even groups):	
5	effects of heredity from environment?	Topic 2 (odd groups):	
6	<b>Topic 3 (DF):</b> To what extent have different research methodologies led to various explanations of the existence of racism?	Topic 2 (even groups):	
7		Topic 3 (ALL GROUPS)*:	
	Easter Break		
8	<b>Topic 4 (FL):</b> To what extent does the study of impaired cognition help us to understand normal cognition? Topic 3 (even groups):	No Seminar	
9		Topic 4 (odd groups):	
10	Assessment 2 Preparation/Review Session (FL & DF): A review of issues covered in topics 3 &	Topic 4 (even groups):	
	4, highlighting the information needed for the second assignment.		
11	4, highlighting the information needed for the second assignment.	Tutors available during seminar hours (11-1) for support	

\* In week 7, all groups will be combined and everyone will have their seminar that week- this is so that some students are not made to wait for 4 weeks for their seminar on Topic 3

### 6.2 Overview of Types of Classes

#### Lectures:

These have been divided into four blocks (Topics 1-4) and each block is spread across two weeks. Each lecturer will be covering a different topic. Lectures start PROMPTLY at 9.30.

#### Seminars:

Students will be required to attend on seminar every two weeks beginning from weeks 3 and 4. Students will be notified of their seminar groups in due course. You must notify the unit coordinator if you have special circumstances for changing your seminar group, otherwise you will be expected to arrive for your seminar as directed.

Each seminar will be based around set reading relevant to the topic area. Seminars will start PROMPTLY at 11.15. Students are expected to have attempted to read this article **BEFORE** the seminar. During the seminar, students will be split into groups and asked to prepare a short,

informal presentation summarising the main points/issues of one section of the reading (for example, the Introduction, Method, Results or Discussion of a research article). The second part of each seminar will then involve a class discussion of each groups' comments.

### 6.3 Importance of Student Self-Managed Learning Time

Self-managed learning is particularly important for this unit given the emphasis on students gaining experience in reading primary source material and not simply relying on summaries of topics from text books. Although students will be given support in the skills necessary to read this type of material effectively, this guidance must be supported by the students own efforts in attempting to put these skills to use; in the first instance this will mean that students will need to have read the articles which they will be given during the course of the unit.

### 6.4 Employability

The skills and knowledge acquired in this unit (see key skills) will help establish a foundation for the remainder of the degree. In particular they will help students develop the ability to be able to read source material in an effective way, to learn how to identify the most relevant information and to evaluate the arguments and evidence being proposed. These are important skills for students either going on to further study or into a variety of professions. In addition, students will also be asked to present this material to small groups of their peers which will develop their ability to communicate information in a concise and accurate manner. This is also important, both for their present course of study and for whatever career they subsequently choose.

### 7.0 THE PROGRAMME OF TEACHING, LEARNING AND ASSESSMENT

# <u>Weeks 2 & 3:</u> To what extent does the study of animal behaviour inform our understanding of human behaviour?

#### Aims

- To develop an understanding of how and when animals are used in psychological research;
- To understand how this research has been applied to human behaviour;
- To further understanding of learning theory;
- To appreciate the impact of environmental influences on brain development and learning in animals and humans;
- To help students learn to read and summarise primary source articles.

#### Lectures

The first lecture for topic 1 will discuss why animals are used at all in psychology and the methods used to when studying learning in animals. Basic learning theory (conditioning) will be covered in more depth and similarities between animals and humans will be explored. The lecture will end with some discussion of the biological basis of learning to enable greater understanding of the seminar and coursework research papers.

The second lecture looks at the methods used when studying higher-level cognitive processes in animals (working memory, spatial memory) and will introduce the study of animals in enriched environments. The application of research on animals will be discussed in terms how it has influenced our understanding of human cognition (for example with language and number). The lecture will end with a discussion of what other areas of psychology are (and aren't!) suitable for animal research.

#### Seminar

The seminar will involve summarising an original journal paper on conditioning in rats. Hard copies of the paper will be provided and must be read before the seminar.

#### Learning Outcomes

By the end of the lectures and seminar, students should be able to:

- Describe the methods used by psychologists studying animals;
- Understand when it is appropriate to extrapolate data from animals to humans;
- Describe the main principles of learning theory;
- Read and summarise an original journal article.

#### Core Reading

Davey, G., Albery, I.P., Chandler, C., Field, A., Jones, D., Messer, D., Moore, S, and Sterling, C. (2004) Complete Psychology. London: Hodder & Stoughton. Chapters 7 and 8.

Additional Reading will be given in the lectures and will also be available on Blackboard.

#### Weeks 4 & 5: To what extent can we separate the effects of heredity from environment?

#### Aims

- To introduce different approaches to the heredity-environment debate;
- To examine evidence for the effects of heredity and environment from developmental psychology, personality and intelligence;
- To introduce the principles of genetic transmission;
- To outline the principles of behaviour genetics and the methods of twin study research;
- To help students learn to read and summarise primary source articles.

#### Lectures

The first lecture introduces the heredity-environment debate in the context of different theoretical approaches to psychology. It then goes on to show that although there is clear evidence for extreme views of the effects of both heredity and environment, the debate is more meaningfully understood in terms of their relative contribution to behaviour. The areas of personality and intelligence are used to illustrate the interaction of heredity and environment

The second lecture deals with attempts to tease apart the relative influences of heredity and environment through the methods of behaviour genetics. The lecture introduces the concepts of genotype and phenotype and the basic principles of genetic transmission before going on to describe how twin studies can illuminate the controversy. The lecture concludes by pointing out the limitations of twin studies.

#### Seminar

The focus of the seminar is a journal article in the area of behaviour genetics relevant to the lecture. Students will be supplied with a hard copy of the journal article and, working in groups, helped to produce a short summary of it.

#### Learning Outcomes

By the end of the lectures and seminar, students should be able to:

- Describe different views of the relative contribution of heredity and environment;
- Outline evidence indicating that both heredity and evidence affect behaviour;
- Describe the basic mechanisms of genetic transmission;
- Outline the methodology of twin studies and summarise a relevant journal article.

#### Core Reading

Davey, G., Albery, I.P., Chandler, C., Field, A., Jones, D., Messer, D., Moore, S, and Sterling, C. (2004) *Complete Psychology*. London: Hodder & Stoughton. Chapters 5, 6, 29, 30.

Additional Reading will be given in the lectures and will also be available on Blackboard.

# <u>Weeks 6 & 7:</u> To what extent have different research methodologies led to various explanations of the existence of racism?

#### Aims

- To consider the concept of racism from a general psychological perspective;
- · To outline early psychometric-based research into the existence of racist attitudes;
- To describe qualitative research methods and how they have been applied to the issue of racism;
- · To examine the use of implicit attitude measurements in psychological research;
- To appreciate how each of the three methodologies represent a distinct way of conceptualising racism as a psychological construct;
- To help students learn to read and summarise primary source articles.

#### Lectures

These lectures will be looking at three distinct methodological approaches to the understanding of racism. The first approach is the more traditional 'self-report' (or psychometric) style of quantitative research whereby it was presumed that people were able to give explicit reports of their beliefs and attitudes. Secondly, we shall move on to a consideration of qualitative theories and methods which take a rather different view as to the origins and nature of racism; a key focus being on the constructive nature of language and 'discourse'. Finally we shall consider more recent social cognitive research which examines implicit cognitions and their role in explaining 'racist behaviours'. The departure taken in the implicit social cognition field represents the notion that it may not be a valid assumption that people are necessarily able to give direct reports as to the structure and content of their own beliefs and attitudes. Findings and methods in this area will be discussed.

#### Seminar

In the seminar for this topic, students will be given a seminal article which utilised an innovative experimental design, the Implicit Association Task, to measure racial attitudes. Students will have the opportunity to read and present ideas from this paper to the rest of the group and will also be able to discuss the implications and limitations of such research.

#### Learning outcomes

By the end of the lectures and seminar, students should be able to:

- Describe different psychological methods for studying racism;
- Explain how differences in method are a direct result of how racism itself is conceptualised;
- Outline the procedure and principles of the Implicit Association Task;
- Read an original psychological research article and identify the key points within it.

#### **Core Reading**

# <u>Weeks 8 and 9:</u> To what extent does the study of impaired cognition help us to understand normal cognition?

#### Lectures

**Aims:** These lectures aim to describe the way in which cognitive psychology is informed by the in-depth cognitive neuropsychological study of cognitively impaired individuals. The focus of these lectures is on the relationship between theory of long-term memory and the study of patients with amnesia.

**Synopsis:** An important issue in cognitive psychology is the relationship between 'normal' (unimpaired or healthy) and impaired cognition. Use of the single case methodology, in which an individual with cognitive deficits is studied in depth using a range of procedures, has contributed significantly to the understanding of this relationship. In these lectures, we will focus on one area of cognitive psychology, long-term memory, and discuss how the cognitive neuropsychological study of patients with amnesia has informed theory.

#### Seminar

**Aims:** The seminar will focus on a paper reporting a single-case study of an individual with amnesia.

**Synopsis:** In the seminar, students will gain experience in reading an original paper on amnesia, applying material covered in the lecture to an understanding of how cognitive neuropsychological techniques are employed to study a particular individual with amnesia.

#### Learning outcomes

By the end of the lectures and seminar, students should:

- Be familiar with the use of single-case studies in cognitive neuropsychology;
- Be aware of a range of different methodologies used to study impaired cognition;
- Be aware how these inform our understanding of cognitive processes in unimpaired individuals;
- Have read and summarised several papers on the cognitive neuropsychology of amnesia.

#### Core reading

Groome, D., Dewart, H., Esgate, A., Gurney, K., Kemp, R., & Towell, N. (1999). *An introduction to cognitive psychology: Processes and disorders*. Hove: Psychology Press.

- Chapter 1 gives some useful background to the study of cognitive psychology and introduces the area of cognitive neuropsychology, particularly pages 9-13
- Chapter 5 describes a range of memory disorders

Jansari, A. (2005). Cognitive neuropsychology. In N. Braisby (Ed.), *Cognitive psychology: A methods companion* (pp. 139-181). Oxford: Oxford University Press.

 Gives an historical overview of cognitive neuropsychology, specific experimental techniques to study brain damage, and single-case versus group studies of brain function

Rutherford, A. (2005). Long-term memory: Encoding to retrieval. In N. Braisby & A. Gellatly (Eds.), *Cognitive psychology* (pp. 269-306). Oxford: Oxford University Press.

• Provides good background material on the empirical study and theory of long-term memory and considers the case of the famous amnesic patient, HM

Wilson, B. A., & Wearing, D. (1995). Prisoner of consciousness: A state of just awakening following herpes simplex encephalitis. In R. Campbell & M. A. Conway (Eds.), *Broken memories: Case studies in memory impairment*. Oxford: Blackwell.

- Chapter 2 gives an interesting account of another famous amnesic patient, Clive Wearing
- Chapter 3 considers the case of PS, another individual with retrograde amnesia

#### **Optional reading**

Johnsrude, I. S., & Hauk, O. (2005). Neuroimaging. In N. Braisby (Ed.), *Cognitive psychology: A methods companion* (pp. 105-137). Oxford: Oxford University Press.

If you're feeling brave, you may want to read into neuroimaging techniques in greater depth. This chapter describes a range of techniques, including PET, EEG, and fMRI.

Stone, T. (2005). Theoretical issues in cognitive psychology. In N. Braisby & A. Gellatly (Eds.), *Cognitive psychology* (pp. 617-653). Oxford: Oxford University Press.

Chapter 17 considers whether the discipline of cognitive psychology will eventually be replaced by cognitive neuroscience, providing an interesting philosophical debate on brain and mind

# 8.0 LEARNING RESOURCES

8.1 Core Materials

[Click and replace]

### 8.2 Optional Materials