

| Module Details |  |
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| Module Title   | Cognitive Psychology and Psychobiology |
| Module Code    | PSY5018-B                              |
| Academic Year  | 2024/5                                 |
| Credits        | 20                                     |
| School         | School of Social Sciences              |
| FHEQ Level     | FHEQ Level 5                           |

| Contact Hours  |       |
|----------------|-------|
| Type           | Hours |
| Lectures       | 24    |
| Laboratories   | 4     |
| Directed Study | 172   |

| Availability |                                     |
|--------------|-------------------------------------|
| Occurrence   | Location / Period                   |
| BDA          | University of Bradford / Semester 1 |

| Module Aims  |
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| <p>The aim of this module is to discuss in depth fundamental approaches of cognitive and biological psychology. The module builds upon students' knowledge of cognitive and biological psychology concepts that were covered in Level 4 through the module PSY4009 Brain and Behaviour. The module will supply students with knowledge and understanding of concepts relevant to phenomena including memory, attention, perception, language, vision, emotion, brain and central nervous system and sensory processing.</p> <p>By the end of this module students will understand major theoretical perspectives in cognitive and biological psychology (e.g., Baddeley's model of working memory, Ekman's theory of emotions etc); will get hands-on experience with cognitive assessment measures (e.g., Montreal Cognitive Assessment, digit span test etc); and be able to describe techniques used in cognitive psychology (e.g., different cognitive assessment batteries such as Wechsler, CANTAB, questionnaires etc) and biological psychology (e.g., pathophysiological techniques such as EEG, CT and EMG, and techniques that assess structural and anatomical brain functioning including PET, MRI, fMRI and CT).</p> |

## Outline Syllabus

Students complete 6 lectures and 1 lab in cognitive psychology and 6 lectures and 1 lab in psychobiology.

Week 1. Overview of the module and applications of cognitive psychology

Week 2. Attention

Week 3. Perception

Week 4. Language processing

Week 5. Career Booster Week

Week 6. Working memory

Week 7. Long-term memory

Week 8. Methods of biological psychology

Week 8. The nervous system

Week 9. The brain: structures, regions and functions

Week 10. The sensory and nervous systems

Week 11. Learning and memory

Week 12. Emotion and stress

## Learning Outcomes

| Outcome Number | Description  |
|----------------|--|
| 01             | Understand the major theoretical perspectives in cognitive and biological psychology   |
| 02             | Recognise how the brain supports cognitive capacities and human behaviours             |
| 03             | Describe the methodologies and techniques used in cognitive and biological psychology. |

## Learning, Teaching and Assessment Strategy

A weekly two-hour lecture plus 2 two-hour labs. Labs will involve case study analysis and activity-based learning. Extensive use of videos and the virtual learning environment are used to help support student learning. Oral formative feedback is given by tutors during classes.

This module is designed to help students achieve the following transferable skills:

- \* Communication
- \* Analytical skills
- \* Problem-solving
- \* Improving learning and performance

Summative assessment comprises:

(1) A 1,500 essay on a cognitive psychology topic. Students have to present an intervention that could potentially improve a cognitive function (e.g., memory). Examples of topics include interventions to improve semantic memory in healthy schoolchildren or episodic memory in healthy older people or short-term memory in children with Down Syndrome or any other topic the students are interested in.

(2) A 1,500 magazine articles on a psychobiology topic. Students have to present an article on a psychobiology topic in lay terms to be accessible by a wider audience. Students have to pick one of the following two topics: (a) The effects of stress on students' academic performance or (b) The impact of memory loss on Alzheimer's disease.

(3) 10 MCQs throughout the semester. Five MCQs are on the cognitive psychology lectures and 5 MCQs are on the psychobiology lectures. The 5 best grades count towards student's final grade.

| Mode of Assessment |                        |  |           |
|--------------------|------------------------|--|-----------|
| Type               | Method                 | Description  | Weighting |
| Summative          | Coursework - Written   | 1,500 word essay on a cognitive psychology topic     | 40%       |
| Summative          | Online MCQ Examination | MCQs (10)  | 20%       |
| Summative          | Coursework - Written   | 1,500 word magazine article on a psychobiology topic | 40%       |

| Reading List   |
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| To access the reading list for this module, please visit <a href="https://bradford.rl.talis.com/index.html">https://bradford.rl.talis.com/index.html</a> |

*Please note:*

*This module descriptor has been published in advance of the academic year to which it applies. Every effort has been made to ensure that the information is accurate at the time of publication, but minor changes may occur given the interval between publishing and commencement of teaching. Upon commencement of the module, students will receive a handbook with further detail about the module and any changes will be discussed and/or communicated at this point.*

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