Module Definition Form (MDF)

Module code: MOD007060	**Version:** 2 **Date Amended:** 29/Jan/2020

1. Module Title
The Neuroscience of Self

2a. Module Leader
Jane Aspell

2b. School
School of Psychology, Sport and Sensory Sciences

2c. Faculty
Faculty of Science and Engineering

3a. Level
6

3b. Module Type
Standard (fine graded)

4a. Credits
15

4b. Study Hours
150

5. Restrictions

Type	Module Code	Module Name	Condition
Pre-requisites:	None		
Co-requisites:	None		
Exclusions:	None		
Courses to which this module is restricted:			

LEARNING, TEACHING AND ASSESSMENT INFORMATION

6a. Module Description

This module will explore the latest psychological and neuroscientific research that addresses the question: How does the brain create your sense of self? Students will learn about recent ground-breaking research demonstrating how links between the body and the brain provide the fundamental underpinnings of self. Experiments involving multisensory body illusions that disturb the sense of self will be described in lectures and demonstrated in seminars. Lectures will describe how virtual reality, multisensory stimulation, brain imaging and the measurement of physiological signals can be used in experiments to investigate self- consciousness. Students will discover evidence for the surprising flexibility of the bodily self in healthy participants, and how body ownership, self-face recognition, and the experience of where the self is located can be shifted using simple body illusions and virtual reality. The module will also explore how research on patients with bizarre neurological and psychiatric disorders of self, such as 'out of body experiences', depersonalisation disorder, phantom limbs and xenomelia has influenced the latest scientific thinking on the brain bases of self-consciousness. Students will learn how experiments in healthy participants and case studies of patients with disorders of self provide converging support for the theory that the foundation for our sense of self is the brain's integration of multisensory signals from the external and internal body.

Finally, lectures will also delve into very recent research on how basic, 'low-level' aspects of self provide the underpinnings for 'higher', conceptual levels of self by examining links between autobiographical memory, the bodily self and personal identity. The module will be led and taught by staff with research expertise in these topics, and lectures will include coverage of their own research findings. Through the assessments, students will gain experience in how to convey scientific/medical information to a non-specialist audience and experience in giving oral presentations.

6b. Outline Content

Exploration of scientific and philosophical conceptions and definitions of self

Demonstrating the use of body illusions to explore the multisensory bases of self

Investigations of the brain bases of low level aspects of self: embodiment, body ownership, self-location, peripersonal space and agency

Critical evaluation of evidence from neurological and psychiatric patients with disorders of self

An examination of what disorders of self tell us about how the brain generates the self: exploring out-of- body experiences, depersonalisation disorder, phantom limbs, xenomelia and somatoparaphrenia.

6c. Key Texts/Literature

The reading list to support this module is available at: https://readinglists.aru.ac.uk/

6d. Specialist Learning Resources

Seminars will include interactive demonstrations of body illusions using plastic hands, virtual reality headsets and relevant computer programs to demonstrate the rubber hand illusion, the enfacement illusion and the full body illusion). These resources are already available in the School.

7. Learning Outcomes (threshold standards)		
No.	**Type**	**On successful completion of this module the student will be expected to be able to:**
1	Knowledge and Understanding	Critically evaluate experiments on healthy participants that investigate the brain bases of self-consciousness
2	Knowledge and Understanding	Critically evaluate how evidence from case studies of neurological and psychiatric patients with disorders of self can be used to test theories of self-consciousness.
3	Intellectual, practical, affective and transferrable skills	Interpret research findings in order to draw conclusions on relations between scientific evidence and theoretical positions.
4	Intellectual, practical, affective and transferrable skills	Synthesize and convey information on a complex [scientific] topic to a non-specialist audience.

8a. Module Occurrence to which this MDF Refers				
Year	**Occurrence**	**Period**	**Location**	**Mode of Delivery**
2025/6	ZZF	Template For Face To Face Learning Delivery		Face to Face

8b. Learning Activities for the above Module Occurrence			
Learning Activities	**Hours**	**Learning Outcomes**	**Details of Duration, frequency and other comments**
Lectures	12	1-4	Lectures (1 hour) x 11 weeks plus 1 hour lecture in TW 12
Other teacher managed learning	3	1-4	3 x 1 hour seminars
Student managed learning	135	1-4	6 hours reading for each lecture (total 66 hours) 3 hours reading for each seminar (total 9 hours) 60 hours preparation time for assessment
TOTAL:	150		

9. Assessment for the above Module Occurrence					
Assessment No.	**Assessment Method**	**Learning Outcomes**	**Weighting (%)**	**Fine Grade or Pass/Fail**	**Qualifying Mark (%)**
010	Coursework	2, 4	50 (%)	Fine Grade	30 (%)
Students will be required to create an 'NHS booklet' describing, in lay terms, the symptoms, causes and any possible treatments for a disorder of self. 1000 words.					
Assessment No.	**Assessment Method**	**Learning Outcomes**	**Weighting (%)**	**Fine Grade or Pass/Fail**	**Qualifying Mark (%)**
011	Practical	1, 3	50 (%)	Fine Grade	30 (%)
Students will be required to create an A3 conference poster describing and critically evaluating a published body illusion experiment. They will orally present the poster during a seminar session to module staff and peers.					

In order to pass this module, students are required to achieve an overall mark of 40% (for modules at levels 3, 4, 5 and 6) or 50% (for modules at level 7*).

In addition, students are required to:
(a) achieve the qualifying mark for each element of fine graded assessment as specified above
(b) pass any pass/fail elements

[* the pass mark of 50% applies for all module occurrences from the academic year 2024/25 – see Section 3a of this MDF to check the level of the module and Section 8a of this MDF to check the academic year]