PS350-15 Body Perception: Neurons to Experience

20/21

Department

Psychology

Level

Undergraduate Level 3

Module leader

James Tresilian

Credit value

15

Module duration

12 weeks

Assessment

30% coursework, 70% exam

Study location

University of Warwick main campus, Coventry

Description

Introductory description

To develop understanding and the ability to think critically about how we sense, perceive and experience the body and its relationship to the environment.

Module web page

Module aims

The module will introduce students to behavioural phenomena, subjective experiences and neural mechanisms associated with proprioception, interoception, and static and dynamic spatial orientation perception. Practical applications of body perception and sensation in sport, health and vehicular control (particularly aviation and space flight) will be emphasized.

Outline syllabus

This is an indicative module outline only to give an indication of the sort of topics that may be covered. Actual sessions held may differ.

Body Sensing and Body Awareness
Body Schemas and Body Images
Delusions, Effort and Agency
Kinesthetic Vision & Kinesthetic Touch
The Body in Perception
Interoception
Pain
Equilibrioception & Motion Sickness
The Body in Space
Revision
Revision

Learning outcomes

By the end of the module, students should be able to:

- Knowledge of the functional anatomy and neurophysiology of the somatosensory, kinesthetic and vestibular systems
- Knowledge and understanding of how sensory receptors transduce proximal stimulation into neural signals and how the central nervous system uses these signals to obtain information about the body
- Knowledge of the regions of the central nervous system involved in body perception and how neurological damage can affect behaviour and experience
- Understanding of how sensory signals from the body can affect behaviour, produce perceptual experience, evoke 'feelings', and influence our senses of wellness/illness, fatigue and effort
- Knowledge of how multiple sensory modalities and non-sensory sources of information contribute to body perception and experience
- Understanding of how non-veridical (illusory) body percepts can affect experience and behaviour and the consequences for performance in real-world situations

Indicative reading list

Wolfe, J. et al. (2015) Sensation and Perception (4th Edition). Sunderland MA: Sinauer Associates Craig, A. D. (2014) How do you feel? An Interoceptive Moment with your Neurobiological Self. Princeton University Press.

Tresilian, J. R. (2012) Sensorimotor Control and Leaning: An Introduction to the Behavioral Neuroscience of Action. Palgrave MacMillan.

Subject specific skills

knowledge of the functional anatomy and neurophysiology of the somatosensory, kinesthetic and vestibular systems

Understand how neurological damage can affect behaviour and experience Understanding of how sensory signals from the body can affect behaviour, knowledge of the regions of the central nervous system involved in body perception

Transferable skills

- familiarity with collecting and organising stored information found in library book and journal collections, and online, critically evaluating primary and secondary sources
- · effective personal planning and self-reflection skills

Study

Study time

Type Required

Lectures 34 sessions of 1 hour (23%)

Private study 116 hours (77%)

Total 150 hours

Private study description

116 hours guided individual study

Costs

No further costs have been identified for this module.

Assessment

You do not need to pass all assessment components to pass the module.

Students can register for this module without taking any assessment.

Assessment group D5

Weighting	Study time	Eligible for self-certification
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Assessment component

Participation tests 5% No

There will be a set of multiple choice, true-false and short answer self-test questions to be completed online within two weeks. Completion of all sets is worth 5%

	Weighting	Study time	Eligible for self-certification		
Reassessment component is the same	e				
Assessment component					
Short answer assignment	25%		Yes (extension)		
Reassessment component is the same					
Assessment component					
Online Examination	70%		No		
Online examination: No Answerbook required					

Feedback on assessment

Reassessment component is the same

Model answers and written comments for short answer question set.\r\nImmediate formative feedback comments for individual questions in the weekly question sets.\r\nExam results online.\r\n

Past exam papers for PS350

Availability

Courses

This module is Optional for:

- Year 1 of TPSS-C8P9 Postgraduate Taught Psychological Research
- Year 3 of UPSA-C800 Undergraduate Psychology
- Year 4 of UPSA-C801 Undergraduate Psychology (with Intercalated year)
- Year 3 of UPSA-C804 Undergraduate Psychology with Education Studies

This module is Option list A for:

• Year 3 of UPSA-C804 Undergraduate Psychology with Education Studies

This module is Option list B for:

- Year 3 of UPHA-VL78 BA in Philosophy with Psychology
- Year 4 of UPHA-VL79 BA in Philosophy with Psychology (with Intercalated year)
- Year 1 of TPSS-C8P9 Postgraduate Taught Psychological Research

This module is Option list C for:

• Year 3 of UPSA-C802 Undergraduate Psychology with Linguistics