

# Module specification

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Module Code	PSYON711
Module Title	Emerging Technologies in Psychology
Level	7
Credit value	15
Faculty	Faculty of Social and Life Sciences
HECoS Code	100497
Cost Code	GAPS

# Programmes in which module to be offered

Programme title	e title Is the module core or option for this	
	programme	
MSc Psychology	Core	

# **Pre-requisites**

None

### Breakdown of module hours

Learning and teaching hours	15 hrs
Placement tutor support	0 hrs
Supervised learning e.g. practical classes, workshops	0 hrs
Project supervision (level 6 projects and dissertation modules only)	0 hrs
Total active learning and teaching hours	15 hrs
Placement / work based learning	0 hrs
Guided independent study	135 hrs
Module duration (total hours)	150 hrs

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Initial approval date	18.5.21
With effect from date	September 2021
Date and details of	January 2024 – updated assessment strategy
revision	



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Version number	2

#### Module aims

The aim of this module is to provide an overview of contemporary emerging technologies and techniques applied within psychological research. The focus is on providing students with knowledge regarding the advantages and disadvantages of these contemporary techniques, and their pragmatic and practical application.

### **Module Learning Outcomes -** at the end of this module, students will be able to:

1	Critically evaluate a range of advanced research technologies in the context of psychological research
2	Apply knowledge of neuroscience technologies to inform and enhance cognitive neuroscience research questions
3	Evaluate the role of emerging technologies and what they can add to our understanding of human psychology

#### **Assessment**

**Indicative Assessment Tasks:** 

- 1) 1500-word critical appraisal of a peer reviewed Journal utilising various contemporary techniques
- 2) Poster presentation (15 mins) of a proposed research study.

Assessment number	Learning Outcomes to be met	Type of assessment	Weighting (%)
1	1,3	Written Assignment	50
2	1,2,3	Presentation	50

### **Derogations**

None

# **Learning and Teaching Strategies**

The overall learning and teaching strategy will include a series of lectures with accompanying media devices. There will be a mix of supporting notes/along with directed study for students to complete as they work through the material and undertake the assessment tasks. The use of a range digital tools within the virtual learning environment together with additional sources of reading will also be utilised to promote breadth and depth of learning.



## **Indicative Syllabus Outline**

- Cognitive Science Research Traditions
- Electroencephalography (EEG) & Event-related potentials (ERP)
- Magnetoencephalography (MEG)
- Functional Magnetic Resonance Imaging (fMRI)
- Connectomics
- Near-Infrared Optical Imaging (fNIRI)
- Non-invasive brain stimulation

## **Indicative Bibliography:**

Please note the essential reads and other indicative reading are subject to annual review and update.

#### **Essential Reads**

Newman, A. (2019). Research Methods for Cognitive Neuroscience. SAGE publications.

### Indicative journals

Journal of Neuroscience

Frontiers in Neuroscence

**Brain Stimulation** 

Neurolmage

Trends in Cognitive Sciences

Journal of Neuroscience Methods

Experimental Brain Research

# **Employability – The Wrexham University Skills Framework**

Each module and programme are designed to cover core Graduate attributes with the aim that each Graduate will leave Wrexham University having achieved key employability skills as part of their study. The following attributes will be covered within this module either through the content or as part of the assessment. The programme is designed to cover all attributes and each module may cover different areas.

#### **Core Attributes**

Engaged
Enterprising
Creative
Ethical

#### **Key Attitudes**

Commitment



Curiosity Resilience Confidence Adaptability

### **Practical Skillsets**

Digital Fluency Organisation Leadership and Team working Critical Thinking Emotional Intelligence Communication