

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
Module Leader	Dr Joshua Payne
HECoS Code	100497
Cost Code	GAPS

Programmes in which module to be offered

Programme 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	130 hrs
Module duration (total hours)	150 hrs

For office use only	
Initial approval date	18.5.21
With effect from date	September 21
Date and details of revision	
Version number	1

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:

Assessment will be made up of a combination of short critical appraisals (3 x 750 words) of academic papers utilising various contemporary techniques and a 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	30%
2	1, 3	Written Assignment	30%
3	1, 2, 3	Poster Presentation	40%

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 Neuroscience

Brain Stimulation

NeuroImage

Trends in Cognitive Sciences

Journal of Neuroscience Methods

Experimental Brain Research

Employability skills – the Glyndŵr Graduate

Each module and programme is designed to cover core Glyndŵr Graduate Attributes with the aim that each Graduate will leave Glyndŵr 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