



MODULE SPECIFICATION

Part 1: Information			
Module Title	Neuropharmacology		
Module Code	USSKCA-15-3	Level	Level 6
For implementation from	2020-21		
UWE Credit Rating	15	ECTS Credit Rating	7.5
Faculty	Faculty of Health & Applied Sciences	Field	Applied Sciences
Department	HAS Dept of Applied Sciences		
Module type:	Standard		
Pre-requisites	None		
Excluded Combinations	None		
Co- requisites	None		
Module Entry requirements	None		

Part 2: Description
<p>Educational Aims: See Learning Outcomes.</p> <p>Outline Syllabus: The topics reflected in the module content may vary year on year depending on emerging or topical areas of interest and staff expertise. An indicative content is indicated below:</p> <p>Neurotransmitters and neurotransmission: neurotransmitter criteria, classical neurotransmitters, novel/putative neurotransmitters, process of neurotransmission, use of neurotoxins and other neurochemicals as pharmacological tools for research.</p> <p>Endogenous neuropharmacology: glutamate as a neurotransmitter and as an excitatory neurotoxin, endogenous pain pathways, sympathetic nervous system, selected endogenous neuropharmacology of relevance to clinical/illegal/social drug use.</p> <p>Clinical application of neurologically active compounds e.g. NMDA receptor manipulation, analgesics, antidepressants.</p> <p>Non-clinical application of neuroactive compounds e.g. sympathomimetics and beta-blockers for sporting advantage; eg illegal highs and alcohol for pleasurable gain.</p>

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Strategies to enhance drug delivery to the brain, including moderation of the blood-brain barrier and optimising endogenous transport mechanisms.

Teaching and Learning Methods: A variety of learning approaches will be used to allow students to develop an in-depth understanding and critical appreciation of aspects of neuropharmacology from the materials provided and the timetabled interactive sessions. Taught sessions at UWE will utilise TEL where possible, to support a pedagogy of Inductive Learning where the students will engage in facilitated activities such as interactive lectures, tutorials, seminars, workshops, debates, case studies, problem based learning etc.

Scheduled learning: interactive lectures, seminars and workshops.

Scheduled contact time is structured around a series of interactive lectures that introduce the key concepts, identify current levels of understanding and pin-point areas of scientific uncertainty. Theory is under-pinned by focussed analysis of selected areas informed by current research and/or emerging areas of interest within research/industry/or popular media arenas.

Interactive lectures will be supported by workshop and seminar activities that will allow more in-depth analysis and discussion around key concepts. Students will be expected to engage in preparatory reading and research for these sessions, including undertaking guided reading, textual and web-based research.

Revision will be embedded in the tutorial and workshop sessions, which will offer opportunities to practice past exam questions.

Independent learning includes hours engaged with essential reading, further research, assignment preparation and completion and revision for the final exam.

The module will be delivered through approximately 33 contact hours. These contact hours will include lectures, tutorial and seminar activities, plus in class formative assessment activities.

This contact time will also be underpinned by provision of online material to be delivered in an asynchronous manner through the University's E-Learning Environment Blackboard, including for example additional recorded media, case studies/additional reading to work through and online quizzes.

Part 3: Assessment

The assessment for this module is designed to test the breadth and depth of students' knowledge, as well as their ability to analyse, synthesize and summarise information critically, including published research data.

Component A is an online exam, with a 24 hour window for completion. The exam comprises a single seen question, which requires students to choose one from a list of topics, to select two recent research papers of relevance to the field and to then plan an essay which critically evaluates the contribution of the two studies to the chosen field, setting the evaluation within the context of the material covered during the module and addressing the module learning outcomes. This approach gives students great autonomy and the ability to research in depth an area of particular interest.

The written assignment provides the opportunity for the student to undertake a search of the available research literature in order to identify and evaluate scientific evidence in support of the set question. The assessment requires students to utilise a range of research-related skills including: literature searching using keywords and refinement of search strings; critical review of published research; application of evidence to set question; and referencing skills.

Opportunities for formative assessment and feedback are built into the scheduled learning during tutorial and workshop activities. This may take the form of structured activities, discussion of current research, review of past exam papers and real-time practice at question answering and follow-up feedback. Specifically, students are encouraged to submit 10% of their written assignment in advance of their deadline so that feedback can be

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provided as a learning opportunity such that their enhanced understanding of the task may then be applied to the assignment as a whole.

First Sit Components	Final Assessment	Element weighting	Description
Written Assignment - Component B		40 %	Data analysis
Examination (Online) - Component A	✓	60 %	Online examination (24 hours)
Resit Components	Final Assessment	Element weighting	Description
Written Assignment - Component B		40 %	Data analysis
Examination (Online) - Component A	✓	60 %	Online examination (24 hours)

Part 4: Teaching and Learning Methods

Learning Outcomes	On successful completion of this module students will achieve the following learning outcomes:	
	Module Learning Outcomes	Reference
	Evidence an in-depth understanding of selected neurotransmitters and neurotransmission.	MO1
	Discuss in detail aspects of endogenous neuropharmacology.	MO2
	Critically evaluate the manipulation of aspects of our endogenous neuropharmacology for the advancement of knowledge, for clinical benefit, or for pleasurable/competitive gain.	MO3
Contact Hours	Independent Study Hours:	
	Independent study/self-guided study	117
	Total Independent Study Hours:	117
	Scheduled Learning and Teaching Hours:	
	Face-to-face learning	33
	Total Scheduled Learning and Teaching Hours:	33
	Hours to be allocated	150
	Allocated Hours	150

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Reading List	<p><i>The reading list for this module can be accessed via the following link:</i></p> <p>https://uwe.rl.talis.com/modules/usskca-15-3.html</p>
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Part 5: Contributes Towards

This module contributes towards the following programmes of study:

Forensic Science [Sep][FT][Frenchay][4yrs] MSci 2018-19

Biomedical Science [Sep][FT][Frenchay][4yrs] MSci 2018-19

Biomedical Science [Sep][FT][Frenchay][3yrs] BSc (Hons) 2018-19

Biological Sciences [Sep][FT][Frenchay][3yrs] BSc (Hons) 2018-19

Biological Sciences [Sep][FT][Frenchay][4yrs] MSci 2018-19

Forensic Science [Sep][FT][Frenchay][3yrs] BSc (Hons) 2018-19