University of the West of Scotland

Module Descriptor

Session: 2024/25

Title of Module: Drugs and Human Interactions			
Code: CHEM10018	**SCQF Level: 10 (Scottish Credit and Qualifications Framework)**	**Credit Points: 20**	**ECTS: 10 (European Credit Transfer Scheme)**
School:	School of Computing, Engineering, and Physical Sciences		
Module Co-ordinator:	Ann-Sophie Korb		

Summary of Module

The principles of pharmacodynamics and pharmacokinetics are covered with respect to drug targets, drug-target interactions, drug absorption, drug distribution, drug metabolism, drug excretion and drug delivery.

The application and importance of these principles is demonstrated through study of:

- Human Performance and Image Enhancement Drug (PIED) use, including sports doping but with further reference to drug facilitated crimes: effects and reactions, protocols for sample recovery, and analytical methods for detection

- Alternative matrices testing, including oral fluid and hair.

This module will work to develop a number of the key 'I am UWS' Graduate Attributes. Those who complete this module will develop professional attributes of being research minded, an effective communicator and inquiring. It will also develop the knowledge, skills and abilities related to high-level academic study in Forensic Science.

Module Delivery Method

Face-To-Face	Blended	Fully Online	HybridC	Hybrid 0	Work-Based Learning
☒	☐	☐	☐	☐	☐

See Guidance Note for details.

Campus(es) for Module Delivery

The module will **normally** be offered on the following campuses / or by Distance/Online Learning: (Provided viable student numbers permit) (tick as appropriate)

Paisley:	Ayr:	Dumfries:	Lanarkshire:	London:	Distance/Online Learning:	Other:
☒	☐	☐	☐	☐	☐	Add name

Term(s) for Module Delivery					
(Provided viable student numbers permit).					
Term 1	☐	Term 2	☒	Term 3	☐

Learning Outcomes: (maximum of 5 statements) **These should take cognisance of the SCQF level descriptors and be at the appropriate level for the module.** At the end of this module the student will be able to:	
L1	Demonstrate an appreciation and integration of some of the concepts and language employed in pharmacology and toxicology to enable the comprehension of the role of these disciplines in a forensic setting
L2	Demonstrate the ability to interpret, evaluate, and report drug testing appropriately.
L3	Develop ability to interpret and synthesise concepts and information in discussion of case studies.
L4	Interpretation of data from pharmacologically important substances.

Employability Skills and Personal Development Planning (PDP) Skills	
SCQF Headings	During completion of this module, there will be an opportunity to achieve core skills in:
Knowledge and Understanding (K and U)	SCQF Level **10** Gaining a detailed, integrated knowledge and understanding of pharmacology and toxicology
Practice: Applied Knowledge and Understanding	SCQF Level **10** Acquiring detailed knowledge and understanding in laboratory analysis and applying that knowledge to tackle defined pharmacological problems.
Generic Cognitive skills	SCQF Level **10** Undertaking a critical evaluation of the toxic properties and social use of selected modern drugs of abuse

Communication, ICT and Numeracy Skills	SCQF Level **10** Presenting formal written accounts that clearly illustrate a critical understanding of pharmacology. Bringing information together from a variety of sources, including research literature, using information retrieval systems and appropriate IT skills to produce written reports	
Autonomy, Accountability and Working with others	SCQF Level **10** Working effectively with others in group assignments. Identifying and addressing individual learning needs in the subject area associated with the module	
Pre-requisites:	Before undertaking this module the student should have undertaken the following:	
	Module Code: CHEM08002 CHEM09002	**Module Title:** Organic Chemistry 2 Analytical Chemistry
	Other:	Or suitable alternative
Co-requisites	**Module Code:**	**Module Title:**

*Indicates that module descriptor is not published.

Learning and Teaching	
In line with current learning and teaching principles, a 20-credit module includes 200 learning hours, normally including a minimum of 36 contact hours and maximum of 48 contact hours.	
Learning Activities During completion of this module, the learning activities undertaken to achieve the module learning outcomes are stated below:	**Student Learning Hours** (Normally totalling 200 hours): (Note: Learning hours include both contact hours and hours spent on other learning activities)
Lecture/Core Content Delivery	24
Tutorial/Synchronous Support Activity	12
Laboratory/Practical Demonstration/Workshop	12
Independent Study	152
	200 Hours Total
****Indicative Resources: (eg. Core text, journals, internet access)**	

The following materials form essential underpinning for the module content and ultimately for the learning outcomes:

Rang, H.P., Dale, M.M. (2012) *Rang and Dale's Pharmacology*. 7th edn. Edinburgh: Elsevier Churchill Livingstone

Marshall, W.J., Lapsley, M., Day, A., Shipman, K. (2020) *Clinical Chemistry*, 9th edn., St. Louis Missouri: Elsevier

Moffat, A. C., et al.(2011) *Clarke's Analysis of Drugs and Poisons*, 4th edn., London: Pharmaceutic

Please ensure the list is kept short and current. Essential resources should be included, broader resources should be kept for module handbooks / Aula VLE.

Resources should be listed in Right Harvard referencing style or agreed professional body deviation and in alphabetical order.

(**N.B. Although reading lists should include current publications, students are advised (particularly for material marked with an asterisk*) to wait until the start of session for confirmation of the most up-to-date material)

Attendance and Engagement Requirements

In line with the Student Attendance and Engagement Procedure: Students are academically engaged if they are regularly attending and participating in timetabled on-campus and online teaching sessions, asynchronous online learning activities, course-related learning resources, and complete assessments and submit these on time.

For the purposes of this module, academic engagement equates to the following:

Attendance of all classes (classes and laboratories), regular engagement with online materials, and submission of assessments.

Equality and Diversity

The University's Equality, Diversity and Human Rights Procedure can be accessed at the following link: UWS Equality, Diversity and Human Rights Code.

Please ensure any specific requirements are detailed in this section. Module Co-ordinators should consider the accessibility of their module for groups with protected characteristics..

Aligned with the University’s commitment to equality and diversity, this module supports equality of opportunity for students from all backgrounds and learning needs. Using the VLE, material will be presented electronically in formats that allow flexible access and manipulation of content. This module complies with University regulations and guidance on inclusive learning and teaching practice. Specialist assistive equipment, support provision and adjustment to assessment practice in accordance with the University’s policies and regulations can be put in place. More information on the University’s EDI policies can be accessed at: https://www.uws.ac.uk/about-uws/uws-commitments/equality-diversity-inclusion/

UWS Equality and Diversity Policy
(N.B. Every effort will be made by the University to accommodate any equality and diversity issues brought to the attention of the School)

Supplemental Information

Divisional Programme Board	Physical Sciences
Assessment Results (Pass/Fail)	Yes ☐No ☒
School Assessment Board	Physical Sciences
Moderator	Carrie Mullen
External Examiner	M. Symes
Accreditation Details	This is a core module in a programmes Accredited by the Chartered Society of Forensic Sciences
Changes/Version Number	Summary of Module minor edits. Module Delivery: From Hybrid-C to Face-to-Face. Attendance and Engagement Requirements: sentence added to clarify meaning of attendance/engagement in this module. Accreditation Details: Chartered Society of Forensic Sciences added.

Assessment: (also refer to Assessment Outcomes Grids below)
Assessment 1 – Examination (65%)
Assessment 2 – Written assessments, and presentation (35%)
(N.B. (i) **Assessment Outcomes Grids** for the module (one for each component) can be found below which clearly demonstrate how the learning outcomes of the module will be assessed. (ii) An **indicative schedule** listing approximate times within the academic calendar when assessment is likely to feature will be provided within the Student Module Handbook.)

Assessment Outcome Grids (**See Guidance Note)**

Component 1

Assessment Type (Footnote B.)	Learning Outcome (1)	Learning Outcome (2)	Learning Outcome (3)	Learning Outcome (4)	Learning Outcome (5)	Weighting (%) of Assessment Element	Timetabled Contact Hours
Unseen open book	X	X				65	2

Component 2							
Assessment Type (Footnote B.)	**Learning Outcome (1)**	**Learning Outcome (2)**	**Learning Outcome (3)**	**Learning Outcome (4)**	**Learning Outcome (5)**	**Weighting (%) of Assessment Element**	**Timetabled Contact Hours**
Laboratory/ Clinical/ Field notebook	X	X	X	X		15	
Report of practical/ field/ clinical work		X	X	X		10	
Presentation	X	X	X			10	
Combined Total for All Components						**100%**	**2 hours**