



**CORPORATE AND ACADEMIC SERVICES**


**MODULE SPECIFICATION**

Part 1: Basic Data					
Module Title	Applied Pharmacology for Non-Medical Prescribers				
Module Code	UZTSPS-15-3	Level	3	Version	1
Owning Faculty	Health and Applied Sciences	Field	Continuing Care Adult Nursing		
Contributes towards	BSc (Hons) Specialist Practice MSc Advanced Practice MSc Specialist Practice MSc Integrated Professional Development Postgraduate Diploma Integrated Professional Development Graduate Diploma Integrated Professional Development BSc(Hons) Integrated Professional Development				
UWE Credit Rating	15	ECTS Credit Rating	7.5	Module Type	Standard
Pre-requisites	N/A		Co- requisites	Prescribing Practice	
Excluded Combinations	Applied Pharmacology for Non-Medical Prescribers UZTRBA-20-M  Applied Pharmacology for Non-Medical Prescribers UZTSPT-15-M		Module Entry requirements	Must fulfil current entry requirements set by the student's professional body in relation to prescribing practice. Selection forms must be signed by both individuals and organisations before students are enrolled.	
Valid From	September 2013		Valid to	September 2018	

<b>CAP Approval Date</b>	17 April 2013
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Part 2: Learning and Teaching	
Learning Outcomes	<p>On successful completion of this module students will be able to:</p> <ul style="list-style-type: none"> <li>Describe the basic human anatomy and physiology as applied to pharmacology and prescribing practice (Component A)</li> <li>Understand and apply knowledge of drug actions in prescribing practice (Component A)</li> <li>Identify key factors in the choice of routes of drug administration (Component A)</li> <li>Understand the mechanisms of action of major classes of drugs i.e. pharmacodynamics (Component A)</li> <li>Critically evaluate the factors involved in drug absorption, distribution, metabolism and excretion, i.e. pharmacokinetics (Component A)</li> <li>Critically analyse and discuss the causes and consequences of drug interaction and adverse drug reactions (Component A)</li> </ul>

	<ul style="list-style-type: none"> <li>• Critically evaluate the relationship between the extremes of age, pregnancy and breast feeding and the impact upon the safety of drug and drug response (Component A)</li> <li>• Discuss the issues which influence patient concordance and drug response (Component A)</li> <li>• Understand the differences between medicines used according to their license, medicines used off licence and medicines used off label (Component A)</li> <li>• Demonstrate a critical understanding of pharmacological knowledge through literature searching and its application to practice (Component A)</li> </ul>
Syllabus Outline	<p><b>Pharmacokinetics</b></p> <ul style="list-style-type: none"> <li>• An introduction to the basic principles and factors which affect drug absorption, distribution, metabolism and excretion with reference to lipid: water solubility, concentration gradients and explanation of key terms including <math>t_{max}</math>, <math>C_{max}</math>, <math>t_{1/2}</math>, AUC and <math>V_d</math></li> <li>• Enteral routes of drug administration, their uses and limitations</li> <li>• Parenteral routes of drug administration, their uses and limitations</li> </ul> <p><b>Drug interactions, adverse reactions, side effects, toxicity</b></p> <ul style="list-style-type: none"> <li>• Multiple drug therapy and the possibility of synergistic and antagonistic drug interactions</li> <li>• Enzyme induction and inhibition and its consequences on plasma drug concentrations, effect of gut contents, food and other drugs on absorption</li> <li>• Adverse reactions Type A - expected/dose dependant and Type B - bizarre, e.g. anaphylactic shock, side effects and their value in drug therapy.</li> <li>• Toxic drug effects, their management and/or avoidance and effects of patient concordance</li> </ul> <p><b>Physiology, age and health in drug usage</b></p> <ul style="list-style-type: none"> <li>• Physiological changes that occur in ageing</li> <li>• Drug therapy in neonates, children and the elderly with reference to pharmacokinetics</li> <li>• Differential effects of drugs in diseased and healthy patients/subjects</li> <li>• Drug misuse and dependence</li> </ul> <p><b>Mechanism of action of classes of drugs</b></p> <ul style="list-style-type: none"> <li>• Outline consideration of the mechanism of action of major classes of drugs including those used to control pain, cardiac diseases, respiratory disorders, common gastrointestinal complaints, use of antimicrobial agents, common endocrine diseases (diabetes mellitus and thyroid disease) and those drugs acting within the central nervous system</li> </ul>
Contact Hours	To comply with professional body requirements for the blended learning prescribing programme at UWE students must attend the university for 15 days, have 5 protected learning days to undertake directed learning and complete 12 days supervised learning in practice.
Teaching and Learning Methods	The module will include a range of teaching methods to maximise the students learning capabilities and experiences including lectures, small group work and case studies. This will be supported by a series of revision/exam skills sessions, as either one-to-one or class events, focusing on short answer questions and multiple choice questions. Students are given a one hour mock examination and the provision of appropriate revision material, including previous examination papers to be accessed via the library, web and Blackboard. Students are encouraged to learn and share experiences from one another's areas of practice, as well as from their designated medical supervisor.

Key Information Sets Information	<b>Key Information Set - Module data</b>				
	Number of credits for this module				15
	Hours to be allocated	Scheduled learning and teaching study hours	Independent study hours	Placement study hours	Allocated Hours
	150	75	75	0	150 
	Total assessment of the module:				
	Written exam assessment percentage				100%
	Coursework assessment percentage				0%
					100%
Reading Strategy	<p>Core readings</p> <p>It is essential that students read one of the many texts on research methods available through the Library. Module guides will also reflect the range of reading to be carried out.</p> <p>Further readings</p> <p>Students are expected to identify all other reading relevant to their chosen research topic for themselves. They will be encouraged to read widely using the library search, a variety of bibliographic and full text databases, and Internet resources. Many resources can be accessed remotely.</p> <p>Access and skills</p> <p>The development of literature searching skills is supported by a Library seminar provided within the first semester. These level three skills will build upon skills gained by the student whilst studying at levels one and two. Additional support is available through the Library Services web pages, including interactive tutorials on finding books and journals, evaluating information and referencing. Sign-up workshops are also offered by the Library.</p>				
Indicative Reading List	<p>Indicative reading list</p> <p>The following list is offered to provide validation panels/accrediting bodies with an indication of the type and level of information students may be expected to consult. As such, its currency may wane during the life span of the module specification. However, as indicated above, <i>current</i> advice on readings will be available via the module guide.</p> <p>Boarder M. Newby D. Navti P. (2010). <i>Pharmacology for pharmacy and the health sciences – a patient-centred approach</i>. Oxford: Oxford University Press.</p> <p>Dawson, JS. (2005). <i>Crash Course Pharmacology</i>. 2nd edition. Edinburgh: Mosby Elsevier.</p> <p>Karch, AM. Sheader L. Speake T. Griffiths C (2010). <i>Focus on Nursing Pharmacology</i>. London: Lippincott, Williams and Wilkins.</p>				

	<p>Neal, MJ. (2012). <i>Medical Pharmacology at a Glance</i>. 7th edition. West Sussex: Wiley-Blackwell.</p> <p>Scott, WN. &amp; McGrath, D. (2012). <i>Nursing Pharmacology made incredibly easy!</i> 3<sup>rd</sup> Edition, London: Lippincott Williams &amp; Williams.</p> <p>Thorp, CM. (2008). <i>Pharmacology for the Health Care Professions</i>. West Sussex: Wiley-Blackwell.</p> <p>Rang, HP. Dale, MM. Flower R. Ritter, JM. Henderson G. (2011). <i>Rang &amp; Dale's Pharmacology</i> 7th edition. Edinburgh: Churchill Livingstone.</p> <p>You will be provided with a copy of the British National Formulary (BNF) - which you may bring to the pharmacology exam (note this copy must be clean/free from notes for the examination).</p>
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Part 3: Assessment	
Assessment Strategy	The assessment strategy within this module complies with professional body standards for Non-Medical Prescribing. The individual components of the assessment are non-negotiable and are regularly updated to reflect current changes in legislation. An updated list of assessments is available within the current module handbook. To comply with the students professional body standards assessments are non-compensatory. In addition if students by their omission or incorrect answer would cause direct harm to a patient then they must be referred. Students must pass all assessments within one year of starting the course or attend all sessions and undertaken all assessments again.

Identify final assessment component and element	Component A element 1	
% weighting between components A and B (Standard modules only)	A:	B:
First Sit		
Component A (controlled conditions) Description of each element	Element weighting (as % of component)	
2 ½ hour unseen written examination that consists of a total of twenty, short answer and multi-choice questions (MCQ) to test pharmacological knowledge and its application to practice.  Students must achieve a minimum 80% pass	100%	

Resit (students are given the opportunity to attend a revision class)		
Component A (controlled conditions) Description of each element	Element weighting (as % of component)	
2 ½ hour unseen written examination that consists of a total of twenty, short answer and multi-choice questions (MCQ) to test pharmacological knowledge and its application to practice.  Students must achieve a minimum 80% pass	100%	
If a student is permitted an exceptional retake of the module the assessment will be that indicated by the Module Description at the time that retake commences.		