

CORPORATE AND ACADEMIC SERVICES

MODULE SPECIFICATION

Part 1: Basic Data					
Module Title	Applied Paramedic Pharmacology				
Module Code	UZYSLR-15-3	Level	3	Version	2
Owning Faculty	Health and Life Sciences	Field	Allied Health Professions		
Contributes towards	BSc (Hons) Applied Paramedic Science				
UWE Credit Rating	15	ECTS Credit Rating	7.5	Module Type	Standard
Pre-requisites	None		Co- requisites	None	
Excluded Combinations	None		Module Entry requirements	None	
Valid From	September 2012 February 2017 (v2)		Valid to		

CAP Approval Date	10 October 2012 21 March 2017
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Part 2: Learning and Teaching	
Learning Outcomes	<p>On successful completion of this module students will be able to:</p> <ol style="list-style-type: none"> 1. Critically evaluate why the paramedic/specialist paramedic needs to have a good understanding of emergency, urgent and critical care drug pharmacotherapy and therapeutics (Component A). 2. Critically review the role of patient group directives and the potential role of specialist paramedic prescribing (Component A). 3. Apply understanding of the processes involved in the pharmacodynamics and pharmacokinetics of the range of medications available for administration by paramedics and specialist paramedics (Component A). 4. Evaluate the anatomical, physiological and gerontological factors, including co-morbidities, which can affect the administration of medication (Component A). 5. Evaluate the effects of polypharmacy (Component A). 6. Synthesise a comprehensive knowledge of drug actions with applied paramedic/specialist paramedic practice (Component A). 7. Understand and evaluate the effects of toxidromes and their management (Component A). 8. Safely and effectively apply clinical reasoning to decisions about drug selection and administration (Component A).
Syllabus Outline	<ul style="list-style-type: none"> • Introduction: An overview of pharmacology and therapeutics in pre-hospital

	<p>emergency, critical and urgent care</p> <ul style="list-style-type: none"> • Medicines, ethics, the law and safe practice • How drugs work: Pharmacokinetics and pharmacodynamics and the therapeutic response across the life-span • Principles of drug administration and calculating dosage • Indications, contra-indications, side-effects and dosages of pharmacotherapy affecting: <ul style="list-style-type: none"> ○ The central nervous system ○ The cardiovascular system ○ The digestive system ○ The endocrine system • Indications, contra-indications, side-effects and dosages of: <ul style="list-style-type: none"> ○ Analgesic and anti anti-inflammatory pharmacotherapy ○ Antibiotic pharmacotherapy ○ Sedative and anaesthetic pharmacotherapy ○ Anti-emetic pharmacotherapy • The harmful effects of drugs including adverse drug reactions, interactions and allergic response • Overdose and recognition of toxidromes.
Contact Hours/Scheduled Hours	<p>The programme will be entirely delivered using a blended learning methodology; incorporating technology enhanced learning material, online web content, video presentations, lectures, seminars.</p> <p>The total notional study time for each module is calculated to be 150 hours, divided between student independent time (114 hours) and student/lecturer interaction time (36 hours).</p> <p>The contact time with the students is approximately 36 hours for each module. Different methods to deliver course content will be chosen to provide the best possible learning experience to students.</p>
Teaching and Learning Methods	<p>The programme will be entirely delivered using a blended learning methodology; incorporating technology enhanced learning material, online web content, video presentations, lectures, seminars and workshops.</p> <p>The following methods will be used to deliver the course contents:</p> <ul style="list-style-type: none"> • Lectures: lectures will be delivered by members of the faculty (average three hours time per lecture) Power-point presentations and other materials will be available to students for follow-up. Lectures will be followed by an online discussion group. • Online discussion groups with a member of the faculty available to answer questions submitted via the Blackboard. • Wiki pages for group and individual work • The Virtual Learning Environment [Blackboard] of UWE will be the platform for programme communication and will include technology enhanced learning materials, on-line discussions and assessments This resource will also be used to track student engagement activity; course management; tutorial and pastoral support
Reading Strategy	<p>Access and skills</p> <p>All students are encouraged to make use of the extensive resources provided through the Library. The development of advanced literature searching skills in support of dissertation preparation is supported by the Library seminars delivered within the programme. Additional support is available through the iSkillZone available via the Library web pages. This includes interactive tutorials on search skills and on the use of</p>

	<p>specific electronic library resources. Sign up workshops are also offered by the Library.</p> <p>Essential Reading</p> <p>There may be a set text which students are expected to buy. Other essential reading will be provided electronically or as printed study packs. A list of recommended titles will be provided in the module handbook and updated annually.</p> <p>Further Reading</p> <p>Further reading will be required to supplement the set textbook and other printed readings. Students are expected to identify all other reading relevant to their chosen topic for themselves. They will be encouraged to read widely using the library catalogue, a variety of bibliographic and full text databases, and internet resources. It will be expected that assignment bibliographies and reference lists will reflect the range of reading carried out.</p> <p>Blackboard</p> <p>This module is supported by Blackboard where students will be able to find all necessary module information. Direct links to information sources will also be provided from within Blackboard.</p>
Indicative Reading List	<p>Indicative reading list:</p> <p>Simonsen, T. et al (2008) <i>Illustrated Pharmacology for Nurses</i>. Hodder Education: London</p> <p>Bledsoe, B and Benner, R (2006) <i>Critical Care Paramedic</i>. Pearson Education: New Jersey</p> <p>Joint Royal Colleges Ambulance Liaison Committee (2006) <i>Ambulance Service Guidelines</i>. ASA: London</p> <p>Web Sites</p> <p>Interactive Clinical Pharmacology: http://www.icp.org.nz/</p> <p>Interactive Clinical Pharmacology and Therapeutics Quiz Page: http://www2.warwick.ac.uk/fac/med/research/csri/research/cpt/qs/</p> <p>Prescribe: http://www.e-lfh.org.uk/projects/pharmacology/index.html provides e-learning materials to help medical students (and students of other healthcare professions) to develop a firm grounding in the principles of basic and clinical pharmacology</p> <p>Toxicology Book Online: http://lifeinthefastlane.com/book/toxicology/ Highlighted textbook chapters with links to up to date additional resources including guidelines, references, illustrations, high quality clinical images, clinical cases, ECG traces, podcasts and more</p>

Part 3: Assessment	
Assessment Strategy	<p>Summative Assessment:</p> <p>Component A (100%): 2.5 hour unseen exam To assess the student's general knowledge and understanding of all aspects of paramedic administered therapeutics</p>
First Sit	

Component A (controlled conditions) Description of each element	Element weighting (as % of component)
1. Unseen exam 2.5 hour	100%

Resit (further attendance at taught classes is not required)	
Component A (controlled conditions) Description of each element	Element weighting (as % of component)
1. Unseen exam 2.5 hour	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.	

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First CAP Approval Date	10 October 2012			
Revision CAP Approval Date	21 March 2017	Version	2	RIA 12263