University of the West of England
BRISTOL

ACADEMIC SERVICES

MODULE SPECIFICATION

Part 1: Basic Data						
Module Title	Applied Paramedic Pharmacology					
Module Code	UZYSV6-15-3		Level	3	Version	1
Owning Faculty	Health and Applied Sciences		Field	Allied Health Professionals		
Contributes towards	BSc (Hons) Paramedic Science					
UWE Credit Rating	15	ECTS Credit Rating	7.5	Module Type	Standard	
Pre-requisites			Co- requisites			
Excluded Combinations			Module Entry requirements			
Valid From	September 2014		Valid to	September 2020		

CAP Approval Date	28/03/2014

Part 2: Learning and Teaching	
Learning Outcomes	On successful completion of this module students will be able to: 1. Critically evaluate why the paramedic needs to have an understanding of emergency, urgent and critical care drug pharmacotherapy and therapeutics (Component A). 2. 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). 3. Evaluate the anatomical, physiological and gerontological factors, including co-morbidities, which can affect the administration of medication (Component A). 4. Evaluate the effects of polypharmacy (Component A). 5. Synthesise a comprehensive knowledge of drug actions with applied paramedic/specialist paramedic practice (Component A). 6. Critically review the role of patient group directives and the potential role of specialist paramedic prescribing (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	• Introduction: An overview of pharmacology and therapeutics in pre-hospital emergency, critical and urgent care • 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

<table>
<tr><td></td><td>affecting:
The central nervous system
The cardiovascular system
The respiratory system
The digestive system
The endocrine system
Indications, contra-indications, side-effects and dosages of:
Analgesic and 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.</td></tr>
<tr><td>Contact Hours</td><td>The programme will be entirely delivered using a blended learning methodology; incorporating technology enhanced learning material, online web content, video presentations, lectures, seminars.
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).
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.</td></tr>
<tr><td>Teaching and Learning Methods</td><td>Scheduled learning includes clinical skills workshops and simulation.
Independent learning includes hours engaged with essential reading, revision and maintaining a portfolio</td></tr>
<tr><td>Key Information Sets Information</td><td>Key Information Sets (KIS) are produced at programme level for all programmes that this module contributes to, this is a requirement set by HESA/HEFCE. KIS are comparable sets of standardised information about undergraduate courses allowing prospective students to compare and contrast between programmes they are interested in applying for.

<u>Key Information Set - Module data</u>

Number of credits for this module 15

<table>
<tr><th>Hours to be allocated</th><th>Scheduled learning and teaching study hours</th><th>Independent study hours</th><th>Placement study hours</th><th>Allocated Hours</th></tr>
<tr><td>150</td><td>36</td><td>114</td><td>0</td><td>150</td></tr>
</table>

The table below indicates as a percentage the total assessment of the module which constitutes:-

Exam: 2 hour unseen exam
Practical Exam: Objective Structured Clinical Examinations

Please note that this is the total of various types of assessment and will not necessarily reflect the component and module weightings in the Assessment section of this module description:</td></tr>
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	Total assessment of the module: Written exam assessment percentage 100% Coursework assessment percentage 0% Practical exam assessment percentage 0% 100%
Reading Strategy	**Core readings** 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. **Further readings** 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. **Access and skills** 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. **Indicative reading list** 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, *current* advice on readings will be available via the module guide
Indicative Reading List	• Bledsoe, B and Benner, R (2006) *Critical Care Paramedic.* New Jersey: Pearson Education. • Fisher, D.F. et al (2013) *UK Ambulance Service Clinical Practice Guidelines*. Bridgwater: Class Publishing. • Simonsen, T. et al (2008) *Illustrated Pharmacology for Nurses.* London: Hodder Education.

Part 3: Assessment	
Assessment Strategy	Summative assessment Component A (100%): 2.5 hour unseen exam Rationale: To assess the student's general knowledge and understanding of all aspects of paramedic administered therapeutics Formative assessment will take place through skills supervision and feedback, also tutorial support and reading by a personal tutor of draft work.

Identify final assessment component and element	**Component A**	
% weighting between components A and B (Standard modules only)	**A:**	**B**:
	100%	

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

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