

## STUDENT AND ACADEMIC SERVICES

## MODULE SPECIFICATION

		Part 1: Basi	c Data				
Module Title	Clinical Science	;					
Module Code	UZYRSG-30-M		Level	М	Versio	on	2
UWE Credit Rating	30 ECTS Credit Rating		15	WBL module? No			
Owning Faculty	Health and Applied Sciences		Field	Allied Health Professions			ns
Department	Allied Health Pr	ofessions	Module Type	Standard			
Contributes towards	MSc Physician	Associate Studie	S				
Pre-requisites	None		Co- requisites	None			
Excluded Combinations	None		Module Entry requirements	None			
First CAP Approval Date	24/03/2016 20/07/2017 (v2)		Valid from	September	2017 (	(v2)	

	Part 2: Learning and Teaching					
Learning Outcomes	On successful completion of this module students will be able to:					
	<ul> <li>Demonstrate an understanding of the fundamental concepts of pathology and the causes, development, structural changes, clinical features and complications of an agreed range of common disorders [Components A and B].</li> <li>Critically discuss the strategies available to control and treat microbial &amp; viral infections [Component B]</li> <li>Critically discuss the biological basis of selected haematological disease states [Component B]</li> <li>Demonstrate a comprehensive understanding of the biological bases of the different immunohaemolytic disease states [Components A]</li> <li>Demonstrate an understanding of the dysfunction of the immune system and be able to relate this to the associated disease states [Components A].</li> <li>Identify and critically discuss the changes in anatomy and physiology for required clinical disorders and pathologies [Components A and B]</li> </ul>					
Syllabus Outline	<ul> <li><u>Anatomy and Physiology</u>: The structure and function of normal and pathological states of key systems including cardiovascular, respiratory, gastrointestinal, renal, and neurological</li> <li><u>Medical Microbiology</u>: The control of infectious diseases in human populations: students will develop knowledge of antimicrobial drugs;</li> </ul>					
	vaccination; environmental control of diseases, vectors and reservoirs; disinfection and sterilisation					
	<ul> <li><u>Medical Microbiology</u>: Infectious diseases of key body systems: students will develop a deeper knowledge of infections of selected body systems such as the neurological system, genital tract, the respiratory tract and the</li> </ul>					

	<ul> <li>gastrointestinal tract: covering the epidemiology of infections that are associated with the system; pathogenic and virulence traits of the infecting microbes; prevention and treatment of infections of the system; i.e. the host-microbe balance aspects of different infections will be developed. Examples covered will be chosen to illustrate other fundamental microbiological principles such as zoonoses, noscomial infections, opportunistic pathogens, environmentally acquired infections and endogenous infections</li> <li><u>Haematology</u>: The anaemias. Classification systems. Megaloblastic anaemias. Iron deficiency and related anaemias. Normal erythrocyte structure and function. Red cell survival disorders. Haemoglobinopathies and the thalassaemia syndromes. Red cell enzymopathies.</li> <li><u>Haematology</u>: Haematological malignancy. Aetiology and the multi-hit hypothesis. Classification. Principles of investigation and diagnostic criteria. Pathophysiology. Theoretical basis of cytotoxic chemotherapy.</li> <li><u>Applied immunology</u>: Application of antibodies in immunodiagnostics and current technology. Antibody engineering and use of monoclonal and other synthesized antibodies. Applications of antibodies and cytokines in the treatment of diseases. Chemotherapy.</li> </ul>						
Contact Hours	Formal lectures	- typically up	to 6 hours pe	er week during	g teaching w	eeks, wher	e
	Laboratory practi	cals will be so	er. cheduled in pla	ace of relevar	nt lectures w	here appro	priate.
	Students will also	spend 3 day	s in clinical pla	acement.			
Teaching and Learning Methods	Scheduled learning includes lectures, seminars, tutorials, demonstration, practical classes.						
	<b>Independent learning</b> includes hours engaged with essential reading, case study preparation, assignment preparation and completion etc. These sessions constitute an average time per level as indicated in the table below. Scheduled sessions may vary slightly depending on the module choices you make.						
	Placement lear	rning include:	s hours engag	ged in practice	e (clinical pla	cement).	
Key Information Sets Information	Key Information Sets (KIS) are produced at programme level for all programmes that this module contributes to, which 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.						
	Key Inform	ation Set - Mo	odule data				_
	Numberof	credits for this	s module		30		-
	Hours to be allocated	Scheduled learning and teaching study hours	Independent study hours	Placement study hours	Allocated Hours		
	300	90	186	24	300	0	1
	The table below constitutes a -	indicates as a	a percentage t	he total asses	ssment of the	e module w	/hich

	Written Exam: Unseen written exam, open book written exam, In-class test Coursework: Written assignment or essay, report, dissertation, portfolio, project Practical Exam: Oral Assessment and/or presentation, practical skills assessment, practical exam						
	Please note the necessarily re of this module	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:					
		Total assessment of the module:					
		Written exam assessment percentage 50%					
		Coursewor	kassessm	ent percenta	age	50%	
		Practical ex	kam assess	, ment perce	ntage	0%	
					5	100%	
Reading Strategy	Core reading						
	Any core read students may referred to tex will also reflect	ling will be i be required ts that are t the range o	ndicated cle d to purchas available el of reading to	early, along se a set tex ectronically be carried	with the me t, be given or in the Li out.	ethod for acc a print stud ibrary. Modu	cessing it, e.g. dy pack or be lle handbooks
	Further readin	g					
	Further readin Students are themselves. T bibliographic a accessed rem familiar with c the academic	<sup>-</sup> urther reading will be required to supplement the set text and other printed reading. Students are expected to identify all other reading relevant to their chosen topic for chemselves. They will be required to read widely using the library search, a variety of bibliographic and full text databases, and Internet resources. Many resources can be accessed remotely. The purpose of this further reading is to ensure students are familiar with current research, classic works and material specific to their interests from the academic literature.					
	Access and sl	cess and skills					
	The developr provided withi within the curr to identify suc web pages, in information ar	nent of liter n the first se iculum to de h resources ncluding inte nd referencin	rature seard emester. Stu evelop their effectively. eractive tuto ng. Sign up v	ching skills idents will b information Additional s orials on fin workshops a	is support e presented retrieval an support is av iding books are also offe	ed by a Lik d with further d evaluation vailable throus and journa ered by the L	orary seminar r opportunities skills in order ugh the library lls, evaluating ibrary.
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 handbook.						
	Medical Micro	obiology					
	<ul> <li>Brook</li> <li>Adelberg</li> <li>Engle</li> <li>of Microb</li> <li>Green</li> <li>Microbiol</li> </ul>	s, G., Carro <i>'s Medical M</i> berg, N., Dif <i>bial Disease.</i> wood, D., S <i>logy: a guide</i>	II, K., Morse <i>Aicrobiology</i> Rita, V. and Baltimore: Slack, J., Perestore to microbia	S. and Mie . 26 <sup>th</sup> ed. Lo Dermody, T Lippincott, <sup>1</sup> utherer, J., a al infections:	tzner T. (20 ndon: McG (2006) So Williams & V and Barer, M <i>pathogene</i>	13) <i>Jawetz,</i> raw Hill chaechter's M Wilkins M. (2012) <i>M</i> e esis, immunit	Melnick & /lechanisms edical y, laboratory

<i>diagnosis and control.</i> 18 <sup>th</sup> ed. London: Churchill Livingstone Elseveir
<u>Haematology</u>
<ul> <li>Abbas, A.K., Lichtman, A.H. and Pillai, S. (2015) <i>Cellular and Molecular Immunology</i>. 8<sup>th</sup> ed. Oxford: Elsevier Saunders.</li> <li>Goldsby R., Kindt T., Osbourne B. &amp; Kuby J. (2002) <i>Immunology</i> 5<sup>th</sup> ed. New York: W.H. Freeman.</li> <li>Hoffbrand, A., Pettit, J. and Moss, P. (2012) <i>Hoffbrand's Essential Haematology</i>. [online] 7<sup>th</sup> ed. Oxford: Wiley Blackwell [Accessed 18 January 2016]</li> <li>Male, D.K, (2012) <i>Immunology</i>. [online] 8<sup>th</sup> ed. Oxford: Elsevier Saunders. [accessed 18 January 2016].</li> <li>Overfield, J., Dawson, M., and Hamer, D. (2008) <i>Transfusion Science</i>. 2<sup>nd</sup> Ed. Oxford: Scion Publishing Ltd.</li> </ul>

## Part 3: Assessment

Assessment Strategy	<b>Component A - Exam (2hrs)</b> for this module will include a controlled conditions exam consisting of questions that cover the breadth of topics included in the syllabus, and are delivered through a variety of models such as matching pairs, identity, wordbank, MCQ, sequence and others. This is designed to mimic the breadth and depth of material and knowledge a Physician Associate will be required to draw on 'on the job' and 'in the moment'. This exam will enable students to prepare for the national exam
	<ul> <li><u>Component B - Viva – maximum 30</u> minutes. This is designed to assess the learning outcomes of the module which require a critical discussion which is not enabled sufficiently through an MCQ assessment.</li> </ul>

Identify final assessment component and element	Compone	ent A		
% weighting between components A and B (Standard modules only)			B: 50	
First Sit				
Component A (controlled conditions) Description of each element		Element v (as % of co	weighting pmponent)	
1. Exam- 2 hours		10	00	
Component B Description of each element		Element v (as % of co	weighting pmponent)	
1. Viva – maximum 30 minutes		100		

Resit (further attendance at taught classes is not required)			
Component A (controlled conditions)	Element weighting		
Description of each element	(as % of component)		
1. Exam- 2-hours	100		
Component B	Element weighting		
Description of each element	(as % of component)		

1. Viva – maximum 30 minutes	100

If a student is permitted a retake of the module under the University Regulations and Procedures, the assessment will be that indicated by the Module Description at the time that retake commences.

## FOR OFFICE USE ONLY

First CAP Approv	Approval Date 24 March 2016				
Revision CAP Approval Date	20 July 2	2017	Version	2	Link to RIA 12402