University of the West of England
BRISTOL

CORPORATE AND ACADEMIC SERVICES

MODULE SPECIFICATION

Part 1: Basic Data						
Module Title	Human Development and Pathology					
Module Code	USSKBR-30-3		Level	3	Version	1
Owning Faculty	Health and Applied Sciences		Field	BBAS		
Contributes towards	BSc(hons) Healthcare Science (Life Sciences/Tissue Science Pathway)					
UWE Credit Rating	30	ECTS Credit Rating	15	Module Type	Standard	
Pre-requisites	USSKAS-30-2 Physiological and Immunological Systems		Co- requisites			
Excluded Combinations	None		Module Entry requirements	N/A		
Valid From	September 2014		Valid to	September 2020		

CAP Approval Date	26/03/2014

Part 2: Learning and Teaching	
Learning Outcomes	On successful completion of this module students will be able to: Compare and contrast the anatomy and physiology of the male and female reproductive systems related to function and fertility (A, B). Discuss the contribution of the laboratory to the investigation of the infertile couple (A). Critically evaluate the various approaches to the application of reproductive science methods and techniques and illustrate their value in relevant areas of clinical practice (A). Discuss the genetic and embryological processes in relation to both human development, and pathology of the reproductive systems (A, B) Demonstrate an understanding of the importance of patient-centred care (A). Demonstrate an in-depth knowledge of human physiology (A, B) Discuss selected aspects of disordered physiology that underpin the major, non-cancer health burdens (A, B) Demonstrate a critical appreciation of the relationship between fundamental physiological knowledge and its application to understanding disease states (A, B) Critically evaluate the rationale of physiological and pharmacological approaches to the management of disordered physiology (A, B).
Syllabus Outline	**Syllabus Content**

	This module looks at both the processes, physiology and clinical procedures related to reproduction and development from embryo to newborn, and the pathophysiology of the major, non-cancer health burdens that currently affect our society and are responsible for the majority of deaths, as well as some of the more topical and increasingly important causes of morbidity and mortality.
	
	• Reproductive Anatomy
	  ○ Studies into the topographical, tissue, and cellular anatomy of the male and female reproductive systems, including an appreciation of the supporting tissues and systems such as musculoskeletal and circulatory
	• Coitus and Pregnancy
	  ○ The physiological process of coitus leading to fertilisation, and the changes in both anatomy and physiology of the female during gestation and leading up to parturition
	• Genetics
	  ○ The genetic basis of the developing foetus, as well as genetic abnormalities both x and y linked and their clinical implications
	• Embryology
	  ○ Development of the human body from gastrulation and germ layer development, through to organogenesis and skeletal growth and maturation
	• Disorders and diseases of reproduction
	  ○ Cancer and microorganism based disease affecting the reproductive system and the developing foetus
	• Clinical diagnosis, analysis, investigation and treatment for fertility/infertility
	• Cardiovascular system and body fluid homeostasis:
	  ○ Congestive heart failure, atherosclerosis and ischaemic heart disease, myocardial infarction, cardiac pacemakers, hypo- and hypertension. Renal failure, haemodialysis, oedema.
	• Endocrine system:
	  ○ Dysfunction of the endocrine pancreas and selected hormonal systems within the hypothalamic-hypophyseal-adrenal axis.
	• Respiratory system:
	  ○ Ventilatory control, gas exchange and transport; bronchitis, emphysema and asthma

Contact Hours	The contact hours (72) are distributed as follows: • 56 hours lectures • 10 hours of tutorial sessions • 3 hours of practical classes • 3 hours of revision sessions **Independent learning:** Using defined TEL strategies includes hours engaged with essential reading, data handling, presentations etc.
Teaching and Learning Methods	The module will be delivered as mainly as lectures with some practical classes, tutorial sessions and revisions sessions.

Scheduled learning

- Scheduled contact time is structured around a series of lectures that introduce the key concepts of the topic under discussion.
- Practical classes will build on the anatomy and physiology aspects of the syllabus
- Tutorial sessions will include discussions on essay writing/creating essay plans, data interpretation.
- Revision session will be based around writing targeted essay plans based on past papers, towards the end of the module.

Independent learning 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.

The module will be supported by Blackboard.

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 Information Set - Module data

Number of credits for this module				30
Hours to be allocated	Scheduled learning and teaching study hours	Independent study hours	Placement study hours	Allocated Hours
300	72	228		300

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

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 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	60%
Coursework assessment percentage	20%
Practical exam assessment percentage	20%
	100%

Reading Strategy

You will be expected to use your lecture notes and any handouts or online material you may be provided in conjunction with **one** of the recommended texts. Please be aware that only a limited number of texts are provided within the library for reference

	and that it is recommended that you purchase a text of your own rather than relying solely on this shared resource. In addition, it is advisable that you read around the topics by accessing other textbooks, by looking at relevant research journal articles, and by accessing weblinks, particularly where the lecturer has indicated relevant sources during lectures (e.g. current news topic/research paper).
Indicative Reading List	**Recommended Texts (ONE of the following):** Johnson, M.H. (2013) *Essential reproduction*. 7th Ed. Oxford: Wiley Blackwell. **Ordered by the library as an eBook** Moore, K.L., Persaud, T.V.N. & Torchia, M.G. (2013) *The developing human: clinically oriented embryology*.[online] *9th Ed Philadelphia, PA:*.W.B. Saunders Elsevier. Copies ordered by the library. Second hand versions of older editions can be picked up at lower cost Guyton, A.C. & Hall, J.E. (2005) *Textbook of Medical Physiology*, 11th Ed. Philadelphia, PA: W.B. Saunders & Co. Porth, C.M. (2008) *Pathophysiology: Concepts of Altered Health States*, 8th Ed. Philadelphia, PA: Lippincott Williams & Wilkins. Underwood, J.C.E. ed. (2004) *General and Systemic Pathology*, 4th Ed. Edinburgh: Churchill Livingston **Additional texts** Young, B., Lowe, J.S., Stevens, A. & Heath J.W. (2006) *Wheater's functional histology. 5th Ed* .Edinburgh: Churhill Livingston. Mitchell, B. & Sharma, R. (2009) *Embryology and illustrated colour text*. 2nd Ed. Naff, C.F. (2006). *Reproductive Technologies*. Detroit: Greenhaven Press. Fullick, A. (2009) *Test-tube babies:In-vitro Fertilization*, 2nd Ed, Chicago: Heinemann Davies, M., Overton, C. & Webber, L. (2008) *Infertility*. Oxford: OUP

Part 3: Assessment	
Assessment Strategy	The assessment for this module is designed to test the breadth and depth of the student's knowledge as well as their ability to critically analyse and summarise information from relevant research and clinical resources. The controlled assessment for this module is a written exam of 3hrs, which is line with the Department's assessment strategy for level 3 modules. This will present the students with the opportunity to demonstrate their knowledge and understanding of key clinical and scientific applications of reproductive sciences and pathophysiology. Their understanding and knowledge of the respective anatomy and physiology of the reproductive systems will be assessed through identification of specific structures, tissues, organs, and related systems and explaining specific functions of these related to normal and pathological conditions. Further discussion and critique of syllabus topics will be assessed through the essay coursework component, which also helps prepare students for the controlled exam format. Opportunities for formative assessment and feedback are built into the Blackboard design for this module.

Identify final assessment component and element			
% weighting between components A and B (Standard modules only)		**A:** **60**	**B**: **40**

First Sit	
Component A (controlled conditions) **Description of each element**	**Element weighting** **(as % of component)**
1.Written exam (3 hours)	100
Component B **Description of each element**	**Element weighting** **(as % of component)**
1.CW1 Practical assessment – anatomical spot test (digitised and controlled conditions)	50
2.CW2 Essay based assessment (2000 words)	50

Resit (further attendance at taught classes is not required)	
Component A (controlled conditions) **Description of each element**	**Element weighting** **(as % of component)**
1. Exam (3 hours)	100
Component B **Description of each element**	**Element weighting** **(as % of component)**
1. CW4 Case study based assessment (1500 words)	50
2. CW5 Essay assessment (1500 words)	50
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.	