



MODULE SPECIFICATION

Part 1: Information			
Module Title	Haematology		
Module Code	USSKBK-30-3	Level	Level 6
For implementation from	2020-21		
UWE Credit Rating	30	ECTS Credit Rating	15
Faculty	Faculty of Health & Applied Sciences	Field	Applied Sciences
Department	HAS Dept of Applied Sciences		
Module type:	Standard		
Pre-requisites	Studies in the Biology of Disease 2020-21		
Excluded Combinations	None		
Co- requisites	None		
Module Entry requirements	None		

Part 2: Description
<p>Educational Aims: See Learning Outcomes.</p> <p>Outline Syllabus: 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.</p> <p>Haematological malignancy: Aetiology and the multi-hit hypothesis. Classification. Principles of investigation and diagnostic criteria. Pathophysiology. Theoretical basis of cytotoxic chemotherapy and stem cell transplantation.</p> <p>Haemostasis: Structure and contribution to haemostatic function of blood vessels, platelets, coagulation proteins and fibrinolytic proteins. Functional inter-relationships between the vascular, platelet, coagulation and fibrinolytic systems. Naturally occurring inhibitors of coagulation and fibrinolysis. Haemorrhagic conditions, the hypercoagulable state, and diagnosis and therapy of these.</p>

STUDENT AND ACADEMIC SERVICES

Blood donation:

Principles of the selection, collection, separation, storage and transportation of donated blood components for transfusion. The bacteriology, virology and parasitology of diseases which can be transmitted by transfusion.

Blood groups:

The major blood polymorphisms, for example, ABO, Rh, and selected other blood group systems. Blood group structure, function and relevance to transfusion.

Compatibility of blood:

In vitro antibody-antigen reactions for the selection of compatible blood. Optimisation of detection techniques for in vitro antibody-antigen reactions.

Immunohaematology:

Laboratory investigation of serological reactions to aid diagnosis of immunohaemolytic disease and immunological transfusion reactions. Strategies for the prophylaxis of immunohaemolytic disease.

Transfusion therapy:

The appropriate use of blood components. Hypersensitivity responses to transfusion.

Teaching and Learning Methods: This module is a core specialist module within the BSc Biomedical Science programme and so aims to deliver specialist knowledge through taught lectures, together with inductive tutorials, seminars and practical classes to enable application and problem-solving utilising this knowledge. Student learning will be further supported through the University's E-Learning Environment, Blackboard, with provision of materials and activities to guide independent study.

Students are expected to spend 66 hours on scheduled learning and a further 234 hours on independent learning.

Independent learning will take the following forms with an approximate indication of time required for each:

Essential reading to support acquisition of knowledge and completion of problem-solving tasks, case studies and online material related to lectures and tutorials – 120 hours

Preparation and completion of assignment – 48 hours

Exam revision and preparation – 60 hours

Scheduled learning includes lectures, tutorials and practical classes.

Independent learning includes hours engaged with essential reading, case study preparation, online activities, assignment preparation and completion.

Part 3: Assessment

The Assessment Strategy has been designed to support and enhance the development of subject-based knowledge and skills, whilst ensuring that the Learning Outcomes are achieved.

The coursework consists of a case study, enabling students to research and critically analyse current literature, as well as interpreting data. Both formative and summative feedback will be given during, and following completion of the assignment, which can feed forward to help students improve performance within the exam.

Component A is a 24-hour online examination comprising a mixture of question styles and is an effective method of assessing a student's ability to utilise and apply knowledge gained at this level.

Formative feedback is available throughout the module using Q and A sessions in lectures, group discussions, particularly in tutorials/seminars/practical, together with use of multiple choice questions throughout taught sessions to enable students to gain an indication of their progress anonymously. Briefing and Q and A sessions will be given before coursework deadlines, as well as tutorials covering how to approach exam questions throughout the course, together with specific exam revision and preparation sessions prior to the exam.

STUDENT AND ACADEMIC SERVICES

First Sit Components	Final Assessment	Element weighting	Description
Examination (Online) - Component A	✓	60 %	Online examination (24 hours)
Case Study - Component B		40 %	Case study (2000 words)
Resit Components	Final Assessment	Element weighting	Description
Examination (Online) - Component A	✓	60 %	Online examination (24 hours)
Case Study - Component B		40 %	Case Study (2000 words)

Part 4: Teaching and Learning Methods

Learning Outcomes	On successful completion of this module students will achieve the following learning outcomes:	
	Module Learning Outcomes	Reference
	Critically discuss the processes involved in the maintenance of normal blood composition and function	MO1
	Outline the nature and significance of investigative haematology and its role in the diagnostic process	MO2
	Discuss critically the biological basis of selected haematological disease states	MO3
	Demonstrate a detailed knowledge and understanding of the main areas of the module – haematological malignancies, haemostatic disorders, red cell disorders and blood transfusion	MO4
	Interpret parameters that characterise selected disease states	MO5
	Critically appraise relevant scientific literature	MO6
Contact Hours	Independent Study Hours:	
	Independent study/self-guided study	234
	Total Independent Study Hours:	234
	Scheduled Learning and Teaching Hours:	
	Face-to-face learning	66
	Total Scheduled Learning and Teaching Hours:	66
	Hours to be allocated	300
	Allocated Hours	300

STUDENT AND ACADEMIC SERVICES

Reading List	<p><i>The reading list for this module can be accessed via the following link:</i></p> <p>https://uwe.rl.talis.com/modules/usskbk-30-3.html</p>
--------------	---

Part 5: Contributes Towards

This module contributes towards the following programmes of study:

Biomedical Science [Sep][FT][Frenchay][4yrs] MSci 2018-19

Biomedical Science [Sep][FT][Frenchay][3yrs] BSc (Hons) 2018-19