



Module Descriptor

Title	Biology of Disease		
Session	2025/26	Status	Published
Code	BIOL10001	SCQF Level	10
Credit Points	20	ECTS (European Credit Transfer Scheme)	10
School	Health and Life Sciences		
Module Co-ordinator	Gary Boyd		
Summary of Module			
<p>This module builds upon provision of physiology, pathophysiology and haematology at previous levels and focusses on aspects of human disease including pathological haematology, transfusion science and major, current disease issues in the developed world.</p> <p>To include:</p> <p>The theory and practice of transfusion science.</p> <p>The pathogenesis of blood disorders such as anaemias; haemoglobinopathies; thalassaemias; blood cancers; disorders of haemostasis; aetiology and pathogenesis of disease; disease processes at cell and tissue levels.</p> <p>Atherosclerosis</p> <p>Movement & movement disorders: Parkinson’s disease; Huntingdon’s disease; ALS. Learning & memory: mechanisms; deficits & dementias; Alzheimer’s disease, prion diseases; treatments for memory deficit.</p> <p>This module will work to develop a number of the key “I am UWS” Graduate Attributes to make those who complete the module; Universal (Critical thinker, analytical, inquiring, research minded), Work Ready (Knowledgeable, Digitally literate, Effective communicator) and Successful (Autonomous).</p>			

Module Delivery Method	On-Campus¹	Hybrid²	Online³	Work -Based Learning⁴
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

¹ Where contact hours are synchronous/ live and take place fully on campus. Campus-based learning is focused on providing an interactive learning experience supported by a range of digitally-enabled asynchronous learning opportunities including learning materials, resources, and opportunities provided via the virtual learning environment. On-campus contact hours will be clearly articulated to students.

² The module includes a combination of synchronous/ live on-campus and online learning events. These will be supported by a range of digitally-enabled asynchronous learning opportunities including learning materials, resources, and opportunities provided via the virtual learning environment. On-campus and online contact hours will be clearly articulated to students.

³ Where all learning is solely delivered by web-based or internet-based technologies and the participants can engage in all learning activities through these means. All required contact hours will be clearly articulated to students.

⁴ Learning activities where the main location for the learning experience is in the workplace. All required contact hours, whether online or on campus, will be clearly articulated to students

Campuses for Module Delivery	<input type="checkbox"/> Ayr <input type="checkbox"/> Dumfries		<input checked="" type="checkbox"/> Lanarkshire <input type="checkbox"/> London <input type="checkbox"/> Paisley		<input type="checkbox"/> Online / Distance Learning <input type="checkbox"/> Other (specify)	
	Term 1	<input checked="" type="checkbox"/>	Term 2	<input type="checkbox"/>	Term 3	<input type="checkbox"/>
Long-thin Delivery over more than one Term	Term 1 – Term 2	<input type="checkbox"/>	Term 2 – Term 3	<input type="checkbox"/>	Term 3 – Term 1	<input type="checkbox"/>

Learning Outcomes	
L1	Apply knowledge of physiology and pathophysiology to evaluate current issues in areas of major clinical importance, including neuropathology, diabetes mellitus, cardiovascular disease and neoplasia.
L2	Develop a critical appreciation of pathological haematology, including haemostatic disorders and haematological neoplasia
L3	Develop a thorough appreciation of transfusion science.
L4	
L5	

Employability Skills and Personal Development Planning (PDP) Skills	
SCQF Headings	During completion of this module, there will be an opportunity to achieve core skills in:
Knowledge and Understanding (K and U)	SCQF 10 Develop a detailed knowledge and understanding of the pathological areas covered by the module.
Practice: Applied Knowledge and Understanding	SCQF 10 Applying scientific knowledge to solve practical problems; gain practical expertise in transfusion practice.
Generic Cognitive skills	SCQF 10 Develop the ability to extract and analyse relevant information from published research papers.
Communication, ICT and Numeracy Skills	SCQF 10 Clearly and critically explain ideas gained from analysis of spoken, written and online resources.
Autonomy, Accountability and Working with Others	SCQF 10 Work with others in teams to pursue research in pathophysiology.

Prerequisites	Module Code BIOL09034	Module Title Infection and Immunity
	Other	
Co-requisites	Module Code	Module Title

Learning and Teaching	
<p>In line with current learning and teaching principles, a 20-credit module includes 200 learning hours, normally including a minimum of 36 contact hours and maximum of 48 contact hours.</p> <p>During completion of this module, the learning activities undertaken to achieve the module learning outcomes will include formal lectures, structured tutorials, laboratory classes/simulations and independent study. VLE-based support materials will be available to support the module.</p>	
Learning Activities	Student Learning Hours
During completion of this module, the learning activities undertaken to achieve the module learning outcomes are stated below:	(Note: Learning hours include both contact hours and hours spent on other learning activities)
Lecture / Core Content Delivery	28.5
Tutorial / Synchronous Support Activity	7
Independent Study	164.5
n/a	
n/a	
n/a	
TOTAL	200

Indicative Resources
<p>The following materials form essential underpinning for the module content and ultimately for the learning outcomes:</p> <p>Hoffbrand, A.V., Moss, P.A.H. & Pettit, J.H – Essential Haematology (9th ed). (2024) Blackwell.</p> <p>Mader S. S. Human Biology, 17th Ed. (2022) McGraw Hill</p> <p>Marieb, E. Human Anatomy and Physiology (11th Edn), Benjamin Cummings (2018)</p> <p>Martini F. H. & Bartholomew E. F. (2020) Essentials of Anatomy & Physiology, 8th Ed. Prentice-Hall</p> <p>Nowak, T.J. & Handford, A.G. Pathophysiology - Concepts and Applications for Health Care Professionals (2003) McGraw Hill</p> <p>Transplantation and Transfusion Science (Fundamentals of Biomedical Science) 2nd Edition. Avent, N (2018) Oxford University Press</p>
<p>(N.B. Although reading lists should include current publications, students are advised (particularly for material marked with an asterisk*) to wait until the start of session for confirmation of the most up-to-date material)</p>

Attendance and Engagement Requirements
<p>In line with the Student Attendance and Engagement Procedure, Students are academically engaged if they are regularly attending and participating in timetabled on-campus and online teaching sessions, asynchronous online learning activities, course-related learning resources, and complete assessments and submit these on time.</p> <p>For the purposes of this module, academic engagement equates to the following:</p>

Students are expected to attend all scheduled classes, to contribute to class discussions and submit the requested coursework.

Equality and Diversity

The University's Equality, Diversity and Human Rights Procedure can be accessed at the following link: [UWS Equality, Diversity and Human Rights Code](#).

In line with current legislation (Equality Act, 2010) and the UWS Equality, Diversity, and Human Rights Code, our modules are accessible and inclusive, with reasonable adjustment for different needs where appropriate. Module materials comply with University guidance on inclusive learning and teaching, and specialist assistive equipment, support provision and adjustment to assessment practice will be made in accordance with UWS policy and regulations. Where modules require practical and/or laboratory based learning or assessment required to meet accrediting body requirements the University will make reasonable adjustment such as adjustable height benches or assistance of a 'buddy' or helper.

(N.B. Every effort will be made by the University to accommodate any equality and diversity issues brought to the attention of the School)

Supplemental Information

Divisional Programme Board	Biological Sciences Health
Overall Assessment Results	<input type="checkbox"/> Pass / Fail <input checked="" type="checkbox"/> Graded
Module Eligible for Compensation	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If this module is eligible for compensation, there may be cases where compensation is not permitted due to programme accreditation requirements. Please check the associated programme specification for details.
School Assessment Board	Biology
Moderator	Anne Crilly
External Examiner	S Haliti
Accreditation Details	IBMS/ HCPC/ RSB
Module Appears in CPD catalogue	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Changes / Version Number	2.14

Assessment (also refer to Assessment Outcomes Grids below)

Assessment 1

Coursework 1 40% of final mark

Assessment 2

Coursework 2 30% of final mark

Assessment 3

Coursework 3 30% of final mark

(N.B. (i) Assessment Outcomes Grids for the module (one for each component) can be found below which clearly demonstrate how the learning outcomes of the module will be assessed.

(ii) An indicative schedule listing approximate times within the academic calendar when assessment is likely to feature will be provided within the Student Module Handbook.)

Component 1

Assessment Type	LO1	LO2	LO3	LO4	LO5	Weighting of Assessment Element (%)	Timetabled Contact Hours
Essay	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	40	0

Component 2

Assessment Type	LO1	LO2	LO3	LO4	LO5	Weighting of Assessment Element (%)	Timetabled Contact Hours
Class test (written)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	30	2

Component 3

Assessment Type	LO1	LO2	LO3	LO4	LO5	Weighting of Assessment Element (%)	Timetabled Contact Hours
Class test (written)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	30	2
Combined total for all components						100%	4 hours

Change Control

What	When	Who
Pre-requisites	July 2025	F Menzies
Indicative resources updated	July 2025	F Menzies