



## Module Descriptor

<b>Title</b>	Biology of Disease		
<b>Session</b>	2024/25	<b>Status</b>	Published
<b>Code</b>	BIOL10001	<b>SCQF Level</b>	10
<b>Credit Points</b>	20	<b>ECTS (European Credit Transfer Scheme)</b>	10
<b>School</b>	Health and Life Sciences		
<b>Module Co-ordinator</b>	Gary Boyd		
<b>Summary of Module</b>			
<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 &amp; movement disorders: Parkinson's disease; Huntingdon's disease; ALS. Learning &amp; memory: mechanisms; deficits &amp; 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>			

<b>Module Delivery Method</b>	<b>On-Campus<sup>1</sup></b> <input checked="" type="checkbox"/>	<b>Hybrid<sup>2</sup></b> <input type="checkbox"/>	<b>Online<sup>3</sup></b> <input type="checkbox"/>	<b>Work -Based Learning<sup>4</sup></b> <input type="checkbox"/>
<b>Campuses for Module Delivery</b>	<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)	
<b>Terms for Module Delivery</b>	Term 1 <input checked="" type="checkbox"/>	Term 2 <input type="checkbox"/>	Term 3 <input type="checkbox"/>	
<b>Long-thin Delivery over more than one Term</b>	Term 1 – Term 2 <input type="checkbox"/>	Term 2 – Term 3 <input type="checkbox"/>	Term 3 – Term 1 <input type="checkbox"/>	

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

<b>Employability Skills and Personal Development Planning (PDP) Skills</b>	
<b>SCQF Headings</b>	<b>During completion of this module, there will be an opportunity to achieve core skills in:</b>
<b>Knowledge and Understanding (K and U)</b>	<b>SCQF 10</b> Develop a detailed knowledge and understanding of the pathological areas covered by the module.
<b>Practice: Applied Knowledge and Understanding</b>	<b>SCQF 10</b> Applying scientific knowledge to solve practical problems; gain practical expertise in transfusion practice.
<b>Generic Cognitive skills</b>	<b>SCQF 10</b> Develop the ability to extract and analyse relevant information from published research papers.

<sup>1</sup> 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.

<sup>2</sup> 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.

<sup>3</sup> 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.

<sup>4</sup> 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

<b>Communication, ICT and Numeracy Skills</b>	<b>SCQF 10</b> Clearly and critically explain ideas gained from analysis of spoken, written and online resources.
<b>Autonomy, Accountability and Working with Others</b>	<b>SCQF 10</b> Work with others in teams to pursue research in pathophysiology.

<b>Prerequisites</b>	<b>Module Code</b> BIOL09034	<b>Module Title</b> Infection and Immunity
	<b>Other</b> BIOL09032 Intermediate Blood Sciences	
<b>Co-requisites</b>	<b>Module Code</b>	<b>Module Title</b>

<b>Learning and Teaching</b>	
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.	
<b>Learning Activities</b> During completion of this module, the learning activities undertaken to achieve the module learning outcomes are stated below:	<b>Student Learning Hours</b> (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	
<b>TOTAL</b>	<b>200</b>

<b>Indicative Resources</b>
<b>The following materials form essential underpinning for the module content and ultimately for the learning outcomes:</b>
The following materials form essential underpinning for the module content and ultimately for the learning outcomes:
Mader S. S. (2006) Human Biology, 9th Ed. McGraw Hill
Hoffbrand, A.V., Moss, P.A.H. & Pettit, J.H – Essential Haematology (5th ed). Blackwell.
Recommended Textbooks:
Martini F. H. & Bartholomew E. F. (2003) Essentials of Anatomy & Physiology, 3rd Ed. Prentice-Hall
Marieb, E. Human Anatomy and Physiology (6th Edn), Benjamin Cummings (2004) ISBN 0 321 20413 1

Nowak, T.J. & Handford, A.G. Pathophysiology - Concepts and Applications for Health Care Professionals (2003) McGraw Hill

Key scientific papers to initiate research on selected atherosclerosis-related topics.

Other:

Lecture notes (VLE)

Tutorial notes (provided in tutorial)

Relevant module information: announcements; timetable; staff contact details (VLE)

**(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)**

### Attendance and Engagement Requirements

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.

**For the purposes of this module, academic engagement equates to the following:**

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.

Please refer to the UWS Equality and Diversity Policy at the following link: [UWS Equality and Diversity Policy](#)

**(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

<b>Divisional Programme Board</b>	<b>Biological Sciences Health</b>
<b>Overall Assessment Results</b>	<input type="checkbox"/> Pass / Fail <input checked="" type="checkbox"/> Graded
<b>Module Eligible for Compensation</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <b>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.</b>

<b>School Assessment Board</b>	BSH L7-11
<b>Moderator</b>	
<b>External Examiner</b>	
<b>Accreditation Details</b>	This module is part of the BSc (Hons) Applied Bioscience programme; accredited by Royal Society of Biology (RSB). This module is part of the BSc (Hons) Biomedical Science programme; accredited by Institute of Biomedical Science (IBMS) and approved by Health & Care Professions Council (HCPC) as part of BSc (Hons) Applied Biomedical Science programme.
<b>Module Appears in CPD catalogue</b>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Changes / Version Number</b>	2.13

<b>Assessment (also refer to Assessment Outcomes Grids below)</b>
<b>Assessment 1</b>
Coursework 1 40% of final mark
<b>Assessment 2</b>
Coursework 2 30% of final mark
<b>Assessment 3</b>
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.)

<b>Component 1</b>							
<b>Assessment Type</b>	<b>LO1</b>	<b>LO2</b>	<b>LO3</b>	<b>LO4</b>	<b>LO5</b>	<b>Weighting of Assessment Element (%)</b>	<b>Timetabled Contact Hours</b>
Essay Review/ Article/ Critique/ Paper	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	30 (Essay) and 10 (Review/Article/Critique/Paper)	0

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

<b>Component 3</b>
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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
<b>Combined total for all components</b>						100%	4 hours

### Change Control

What	When	Who