

# University of the West of Scotland

## Module Descriptor

Session: 2023/34

Last modified: May 24

Status: Published

**Title of Module: Biology of Disease**

<b>Code: BIOL10001</b>	<b>SCQF Level: 10</b> (Scottish Credit and Qualifications Framework)	<b>Credit Points: 20</b>	<b>ECTS: 10</b> (European Credit Transfer Scheme)
<b>School:</b>	School of Health and Life Sciences		
<b>Module Co-ordinator:</b>	Gary Boyd		

### Summary of Module

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.

To include:

The theory and practice of transfusion science.

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.

Atherosclerosis

Movement & movement disorders: Parkinson's disease; Huntingdon's disease; ALS. Learning & memory: mechanisms; deficits & dementias; Alzheimer's disease, prion diseases; treatments for memory deficit.

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).

### Module Delivery Method

Face-To-Face	Blended	Fully Online	HybridC	HybridO	Work-based Learning
✓			✓		

#### Face-To-Face

Term used to describe the traditional classroom environment where the students and the lecturer meet synchronously in the same room for the whole provision.

#### Blended

A mode of delivery of a module or a programme that involves online and face-to-face delivery of learning, teaching and assessment activities, student support and feedback. A programme may be considered "blended" if it includes a combination of face-to-face, online and blended modules. If an online programme has any compulsory face-to-face and campus elements it must be described as blended with clearly articulated delivery information to manage student expectations

#### Fully Online

Instruction that is solely delivered by web-based or internet-based technologies. This term is used to describe the previously used terms distance learning and e learning.

#### HybridC

Online with mandatory face-to-face learning on Campus

#### HybridO

Online with optional face-to-face learning on Campus

#### Work-based Learning

Learning activities where the main location for the learning experience is in the workplace.

Campus(es) for Module Delivery						
The module will <b>normally</b> be offered on the following campuses / or by Distance/Online Learning: (Provided viable student numbers permit)						
Paisley:	Ayr:	Dumfries:	Lanarkshire:	London:	Distance/Online Learning:	Other:
			✓			

Term(s) for Module Delivery					
(Provided viable student numbers permit).					
Term 1	✓	Term 2		Term 3	

Learning Outcomes: (maximum of 5 statements)
On successful completion of this module the student will be able to:
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.

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

<b>Pre-requisites:</b>	Before undertaking this module the student should have undertaken the following:	
	<b>Module Code:</b> BIOL09003	<b>Module Title:</b> Human Physiology

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

\* Indicates that module descriptor is not published.

<b>Learning and Teaching</b>	
<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> (Normally totalling 200 hours): (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
	200 Hours Total

<b>**Indicative Resources: (eg. Core text, journals, internet access)</b>
<p>The following materials form essential underpinning for the module content and ultimately for the learning outcomes:</p> <p>Mader S. S. (2006) Human Biology, 9th Ed. McGraw Hill</p> <p>Hoffbrand, A.V., Moss, P.A.H. &amp; Pettit, J.H – Essential Haematology (5th ed). Blackwell.</p> <p>Recommended Textbooks:</p> <p>Martini F. H. &amp; Bartholomew E. F. (2003) Essentials of Anatomy &amp; Physiology, 3rd Ed. Prentice-Hall</p> <p>Marieb, E. Human Anatomy and Physiology (6th Edn), Benjamin Cummings (2004) ISBN 0 321 20413 1</p> <p>Nowak, T.J. &amp; Handford, A.G. Pathophysiology - Concepts and Applications for Health Care Professionals (2003) McGraw Hill</p> <p>Key scientific papers to initiate research on selected atherosclerosis-related topics.</p> <p>Other: Lecture notes (VLE) Tutorial notes (provided in tutorial) Relevant module information: announcements; timetable; staff contact details (VLE)</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)

<b>Engagement Requirements</b>
<p>In line with the Academic Engagement Procedure, Students are defined as academically engaged if they are regularly engaged with timetabled teaching sessions, course-related learning resources including those in the Library and on the relevant learning platform, and complete assessments and submit these on time. Please refer to the Academic Engagement Procedure at the following link: <a href="#">Academic engagement procedure</a></p> <p>Where a module has Professional, Statutory or Regulatory Body requirements these will be listed here: Attendance at synchronous sessions (lectures, tutorials), completion of asynchronous activities, and submission of assessments to meet the learning outcomes of the module.</p>

## Supplemental Information

<b>Programme Board</b>	Biological Sciences and Health
<b>Assessment Results (Pass/Fail)</b>	No
<b>Subject Panel</b>	Biology L7-11
<b>Moderator</b>	Fiona Henriquez
<b>External Examiner</b>	D Stobo
<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>Changes/Version Number</b>	2.12  Changed campus from PA to LK. Added standard text for E+D and attendance.

<b>Assessment: (also refer to Assessment Outcomes Grids below)</b>
Coursework 1 40% of final mark
Coursework 2 30% of final mark
Coursework 3 30% of final mark
(N.B. (i) <b>Assessment Outcomes Grids</b> 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 <b>indicative schedule</b> listing approximate times within the academic calendar when assessment is likely to feature will be provided within the Student Handbook.)

## Assessment Outcome Grids (Footnote A.)

<b>Component 1</b>					
<b>Assessment Type (Footnote B.)</b>	<b>Learning Outcome (1)</b>	<b>Learning Outcome (2)</b>	<b>Learning Outcome (3)</b>	<b>Weighting (%) of Assessment Element</b>	<b>Timetabled Contact Hours</b>
Essay	✓			30	0
Review/ Article/ Critique/ Paper	✓			10	0

<b>Component 2</b>					
<b>Assessment Type (Footnote B.)</b>	<b>Learning Outcome (1)</b>	<b>Learning Outcome (2)</b>	<b>Learning Outcome (3)</b>	<b>Weighting (%) of Assessment Element</b>	<b>Timetabled Contact Hours</b>
Class test (written)	✓			30	2

<b>Component 3</b>					
<b>Assessment Type (Footnote B.)</b>	<b>Learning Outcome (1)</b>	<b>Learning Outcome (2)</b>	<b>Learning Outcome (3)</b>	<b>Weighting (%) of</b>	<b>Timetabled Contact Hours</b>

				Assessment Element	
Class test (written)	✓	✓	✓	30	2
<b>Combined Total For All Components</b>				100%	4 hours

#### Footnotes

A. Referred to within Assessment Section above

B. Identified in the Learning Outcome Section above

#### Note(s):

1. More than one assessment method can be used to assess individual learning outcomes.
2. Schools are responsible for determining student contact hours. Please refer to University Policy on contact hours (extract contained within section 10 of the Module Descriptor guidance note).  
This will normally be variable across Schools, dependent on Programmes &/or Professional requirements.

#### Equality and Diversity

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](#)

#### [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)