



Module Descriptor

Title	Clinical Immunology						
Session	2024/25	Status					
Code	BIOL10008	SCQF Level	10				
Credit Points	20	ECTS (European Credit Transfer Scheme)	10				
School	Health and Life Sciences						
Module Co-ordinator	S Woods						

Summary of Module

This module will discuss in detail current issues and up to date technologies in Clinical Immunology. It will also involve in-depth analysis of how the immune system is involved in disease mechanisms, including microbial infection (bacteria, viruses, fungi, protists, helminths), hypersensitivity, autoimmune disease, immunodeficiencies, cancer immunology, transplantation and immunology of pregnancy. In addition, experts will be invited to give seminars about their research in the clinical immunology field and working in a clinical immunology laboratory. During this module the student will also gain valuable insight into scientific investigation, from hypothesis, through collection of evidence to conclusive outcomes and how this shapes the next cycle of investigation.

This module will work to develop a number of the key 'I am UWS' Graduate Attributes to make those who complete this module:

Universal

- Critical Thinker
- Ethically-minded
- Research-minded

Work Ready

- Knowledgeable
- Effective Communicator
- Ambitious

Successful

- Autonomous
- Resilient
- Driven

Module Delivery Method	On-Camp	ous ¹	I	Hybrid ²	Online ³		Work -Based Learning⁴	
Campuses for Module Delivery	Ayr 🗌 Dumfri	es		Lanarks	Online / Distance Learning Other (specify)			
Terms for Module Delivery	Term 1		3	Term 2		Term	3	
Long-thin Delivery over more than one Term	Term 1 – Term 2			Term 2 – Term 3		Term Term	3 – 1	

Lear	ning Outcomes
L1	Demonstrate a critical understanding of molecular and cellular mechanisms of the immune response to pathogens.
L2	Detail the main mechanisms of the immune function in specific conditions (eg transplantation, pregnancy and cancer).
L3	Demonstrate a critical understanding of adverse reactions of the immune system: autoimmune disease, hypersensitivity, Severe Combined Immunodeficiencies and Acquired Immunodeficiencies
L4	Demonstrate critical analysis of case studies, published research works and evidence reported there in.
L5	NA

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 Demonstrate a critical understanding of how the immune system responds to infection and tumour growth and what are the consequences of an adverse immune reaction and deficiencies of the immune system						
Practice: Applied Knowledge and Understanding	SCQF 10						

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

	Integrate research into specific topics and apply a range of standard investigative research techniques to analyse single immunology case studies
Generic	SCQF 10
Cognitive skills	Demonstrate originality and creativity in dealing with different challenges encountered in each research and/or case study.
Communication,	SCQF 10
ICT and Numeracy Skills	Presentation and critical evaluation and review of the literature and immunological research and/or case studies by using appropriate software and statistical analysis.
Autonomy,	SCQF 10
Accountability and Working with Others	Exercise a high level of autonomy and initiative undertaking the integration of research and scholarship and critical reflection into their study.

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

Learning and Teaching

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.

During completion of this module, the learning activities undertaken to achieve the module learning outcomes will include formal lectures, structured tutorials, research seminars and independent study. VLE-based support materials will be available to support the module. There is also opportunity to further contribute to PDP with the assessments and tutorials, including a case study analysis.

Learning Activities	Student Learning
During completion of this module, the learning activities undertaken	nours
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	21
Tutorial / Synchronous Support Activity	15
Independent Study	164
n/a	0
n/a	
n/a	
TOTAL	200

The following materials form essential underpinning for the module content and ultimately for the learning outcomes:

Cellular and Molecular Immunology. Abbas. Elsevier Publishers

Research articles including original peer-reviewed articles and reviews

Immunology. Kuby. Freeman Publishers

Clinical Immunology. Hall, Scott & Buckland. Oxford University Press

Resources provided on module 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 <u>Student Attendance and Engagement Procedure</u>, Students are academically engaged if they are regularly attending and participating in timetabled oncampus and online teaching sessions, asynchronous online learning activities, courserelated learning resources, and complete assessments and submit these on time.

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

The university is committed to providing a supportive learning environment that actively facilitates student success. In this module, there is a high degree of student-led flexibility. You are academically engaged if you are regularly engaged with scheduled live sessions oncampus and online, including engaging with online learning activities in your own time, course-related learning resources, and with timely completion and submission of assessments.

Whilst we understand that there may be times when conflicting priorities make participation challenging, for you to gain the most from this module it is recommended that you participate in all scheduled live classes and complete your self-directed learning activities in a timely manner.

It may be difficult to pass the assessment associated with this module if you are not regularly engaging with the module work and live classes. We may reach out to check how things are going and offer support if we observe that you have not been attending sessions or completing online activities.

Equality and Diversity

The University's Equality, Diversity and Human Rights Procedure can be accessed at the following link: <u>UWS Equality, Diversity and Human Rights Code.</u>

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)

Divisional Programme Board	Biological Sciences Health
Overall Assessment Results	🗌 Pass / Fail 🔀 Graded
Module Eligible for Compensation	Yes 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	BSH L7-11
Moderator	R Freeburn
External Examiner	
Accreditation Details	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.
	This module is part of the BSc (Hons) Applied Bioscience and BSc (Hons) Applied Bioscience with Forensic Investigation programmes; accredited by Royal Society of Biology (RSB
Module Appears in CPD catalogue	Yes 🛛 No
Changes / Version Number	1

Assessment (also refer to Assessment Outcomes Grids below)

Assessment 1

Research paper interpretation exercise constituting 40% of the module mark. This will enhance critical analytical skills: students will be given a series of questions to answer in regard to the research paper. There will be tutorials supporting this activity and informal presentations will constitute formative assessments. The work will be submitted via the VLE (constituting 40% of the summative assessment)

Assessment 2

Class Test - Constituting 60% of the module mark. Learning of material will be supported through tutorials, including formative assessment exercises throughout. Questions will assess knowledge of key concepts, critical analysis skills and application of techniques.

Assessment 3

NA

(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	L01	LO2	LO3	LO4	LO5	Weighting of Assessment Element (%)	Timetabled Contact Hours

Review/ Article/	\boxtimes		\square	40	2
Critique/ Pape					

Component 2							
Assessment Type	LO1	LO2	LO3	LO4	LO5	Weighting of Assessment Element (%)	Timetabled Contact Hours
Class test (Written)	\square	\square	\square	\square		60	4

Component 3							
Assessment Type	LO1	LO2	LO3	LO4	LO5	Weighting of Assessment Element (%)	Timetabled Contact Hours
NA							
	100%	6 hours					

Change Control

What	When	Who