

## **Module Descriptor**

Title	Clinical Immunology						
Session	2025/26 Status Published						
Code	BIOL10008	SCQF Level	10				
Credit Points	20 ECTS (European 10 Credit Transfer Scheme)						
School	Health and Life Sciences						
Module Co-ordinator	Stuart Woods						

#### **Summary of Module**

This module discusses in detail current issues and in-depth analysis of how the immune system is involved in disease mechanisms, including microbial infection (bacteria, viruses, fungi, protists and helminths), hypersensitivity, autoimmune disease, immunodeficiencies, cancer immunology, transplantation and immunology of pregnancy. We cover up to date technologies in Clinical Immunology including immune assay-based point of care testing (PoCT); their principles and applications in relation to detection of immune biomarkers in health and disease.

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. Experts will be invited to give seminars about their research in the clinical immunology field and working in a clinical immunology laboratory.

This module will work to develop a number of the key 'I am UWS' Graduate Attributes to make those who complete this module well-rounded, ethically-driven critical thinkers, who are research-oriented, communicative, resilient, and ready to succeed independently in a professional environment.

Module Delivery	On-Campus <sup>1</sup>	Hybrid <sup>2</sup>	Online <sup>3</sup>	Work -Based
Method				Learning⁴
	<u> </u>			
Campuses for	Ayr	\( \) Lanarks	hire O	nline / Distance

<sup>&</sup>lt;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>&</sup>lt;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>&</sup>lt;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>&</sup>lt;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

Module Delivery	Dumfrie	es	☐ London☐ Paisley	Learning  Other (specify)	
Terms for Module Delivery	Term 1		Term 2	Term 3	
Long-thin Delivery over more than one Term	Term 1 – Term 2		Term 2 – Term 3	Term 3 – Term 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	

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 Integrate research into specific topics and apply a range of standard investigative research techniques to analyse single immunology case studies					
Generic Cognitive skills	SCQF 10  Demonstrate originality and creativity in dealing with different challenges encountered in each research and/or case study.					
Communication, ICT and Numeracy Skills	SCQF 10  Presentation and critical evaluation and review of the literature and immunological research and/or case studies by using appropriate software and statistical analysis.					
Autonomy, Accountability and Working with Others	SCQF 10  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  During completion of this module, the learning activities undertaken	Student Learning Hours
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	
n/a	
n/a	
TOTAL	200

## **Indicative Resources**

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

Abbas, A.K., Lichtman, A.H., Pillai, S. Cellular and Molecular Immunology (10th Edition) Elsevier Publishers (2022)

Hall, Scott and Buckland. Clinical Immunology (Fundamentals of Biomedical Science) 2nd Edition, OUP (2016)

Punt, J., Stranford, S.A., Jones, P.P., Owen, J.A. Kuby Immunology (8th Edition) MacMillan Education (2019)

Research articles including original peer-reviewed articles and reviews

(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 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:

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: <a href="https://www.uws.numan.numa

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	☐ 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	Biology
Moderator	Robin Freeburn
External Examiner	S Haliti
Accreditation Details	IBMS/ HCPC/ RSB
Module Appears in CPD catalogue	☐ Yes ⊠ No

Changes / Version N	lumbei	1					
Assessment (also re	efer to /	Assessm	nent Out	comes	Grids be	elow)	
Assessment 1							
Interpretation exercise critical analytical ski case study and asked activity and informal submitted via the VL	lls. Stud d to ans presen	lents wil wer a se	l be give ries of qı	n either a uestions	a scienti . There v	fic research pape will be tutorials su	r or a clinical pporting this
Assessment 2							
Class Test - Constitu through tutorials, inc assess knowledge of	luding f	ormative	assess	ment ex	ercises t	hroughout. Quest	ions will
Assessment 3							
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Component 2							
Assessment Type	LO1	LO2	LO3	LO4	LO5	Weighting of Assessment Element (%)	Timetabled Contact Hours
Class test (Written)						60	4

Component 3							
Assessment Type	LO1	LO2	LO3	LO4	LO5	Weighting of Assessment Element (%)	Timetabled Contact Hours
	Com	pined to	tal for a	ll comp	onents	100%	6 hours

# **Change Control**

What	When	Who
Assessment 1 to include option of using clinical case studies	Nov 24	SW

Updated external examiner	Nov 24	SW
Module Summary update	July 2025	F Menzies
Indicative Resource list updated	July 2025	F Menzies