

University of the West of Scotland

Module Descriptor

Session: 2023/24

Last modified: May 24

Status: Published

Title of Module: Clinical Immunology

Code: BIOL10008	SCQF Level: 10 (Scottish Credit and Qualifications Framework)	Credit Points: 20	ECTS: 10 (European Credit Transfer Scheme)
School:	School of Health and Life Sciences		
Module Co-ordinator:	Fiona Menzies		

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

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 **normally** 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. 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.

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 Level 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 Level 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 Level 10. Demonstrate originality and creativity in dealing with different challenges encountered in each research and/or case study.
Communication, ICT and Numeracy Skills	SCQF Level 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 Level 10. Exercise a high level of autonomy and initiative undertaking the integration of research and scholarship and critical reflection into their study.

Pre-requisites:	Before undertaking this module the student should have undertaken the following:	
	Module Code: BIOL09034	Module Title: Infection and Immunity
	Other:	
Co-requisites	Module Code:	Module Title:

* Indicates that module descriptor is not published.

Learning and Teaching	
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 to achieve the module learning outcomes are stated below:	Student Learning Hours (Normally totalling 200 hours): (Note: Learning hours include both contact hours and hours spent on other learning activities)
Lecture/Core Content Delivery	15
Tutorial/Synchronous Support Activity	15
Asynchronous Class Activity	6
Independent Study	164
	200 Hours Total

**Indicative Resources: (eg. Core text, journals, internet access)
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)

Engagement Requirements

Students are academically engaged if they are regularly engaged with timetabled on-campus and online teaching sessions, asynchronous online learning activities, course-related learning resources, and complete assessments and submit these on time. Please refer to the Academic Engagement and Attendance Procedure at the following link: [Academic Engagement and Attendance Procedure](#)

For the purposes of this module, academic engagement equates to the following:
Attendance at synchronous sessions (lectures, workshops, and tutorials), completion of asynchronous activities, and submission of assessments to meet the learning outcomes of the module.

Supplemental Information

Programme Board	Biological Sciences and Health
Assessment Results (Pass/Fail)	No
Subject Panel	Biology L7-11
Moderator	Robin Freeburn
External Examiner	D Stobo
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)
Changes/Version Number	4.06 Mode of delivery updated.

Assessment: (also refer to Assessment Outcomes Grids below)
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)
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.
(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 Handbook.)

Assessment Outcome Grids (Footnote A.)

Component 1						
Assessment Type (Footnote B.)	Learning Outcome (1)	Learning Outcome (2)	Learning Outcome (3)	Learning Outcome (4)	Weighting (%) of Assessment Element	Timetabled Contact Hours
Review/ Article/ Critique/ Paper	✓			✓	40	2

Component 2						
Assessment Type (Footnote B.)	Learning Outcome (1)	Learning Outcome (2)	Learning Outcome (3)	Learning Outcome (4)	Weighting (%) of Assessment Element	Timetabled Contact Hours
Class test (written)	✓	✓	✓	✓	60	4

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](#)

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