MODULE SPECIFICATION

Part 1: Information			
Module Title	Immunology		
Module Code	USSJXQ-15-2	Level	Level 5
For implementation from	2020-21		
UWE Credit Rating	15	ECTS Credit Rating	7.5
Faculty	Faculty of Health & Applied Sciences	Field	
Department	HAS Dept of Applied Sciences		
Module Type:	Standard		

Pre-requisites	None
Excluded Combinations	None
Co-requisites	None
Module Entry Requirements	None
PSRB Requirements	None

Part 2: Description

Overview: This module underpins, extends and compliments the immunology content within the Studies in Biology of Disease. Individual components of the immune system are explored in detail, to enable linking together as a whole system, prior to application in a range of human disease settings and practical scenarios.

Educational Aims: See Learning Outcomes.

Outline Syllabus: In this module you will examine Basic Cellular, Molecular and Clinical Immunology.
The content may include: self, non self and danger theories, antigen presentation, antigens and immunogens, molecular recognition – innate and acquired, inflammation, innate and mucosal immunity, cellular and humoral responses, roles of antibodies, effector cells, cytokines, complement, vaccines and immunization, hypersensitivity, tolerance and autoimmunity, cancer immunology and immunotherapy.

Teaching and Learning Methods: Teaching will be in the form of interactive lectures- building up from basic immunological components to the full immune system and its application to therapy but also its contribution to a range of disease pathologies. Lectures will be interspersed with

questions and quizzes to encourage active learning, and links through to practical or clinical application and real life examples. Module delivery is cognisant of visual, auditory, written and kinaesthetic learning styles and seeks to meet all these needs. Lectures are interspersed with practical classes that focus on the uses of antigen- antibody interactions in a variety of settings for clinical application. Practical videos, U-tube clips, power point slides, question sheets, lecture recordings and quizzes are employed to support self- directed learning.

Distinctive features:
Teaching style incorporates a good balance of visual, auditory, written and kinaesthetic learning (hands-on, text, pictures, figures, oral narrative and examples or anecdotes). Slides are clearly flagged to identify to students what is basic core knowledge, what is required for a second class degree, and the detail needed for first class marks. Practicals are designed to build on the student practical experience across the series and incorporate material from the lectures across the term.

Part 3: Assessment

The exam will enable the students to demonstrate a basic knowledge of cellular and molecular immunology; the role of innate, cellular and humoral responses to a spectrum of antigens (including immunogens), and how effector cells, antibodies and immune-deficiencies cause immunopathology.

Coursework will require students to manipulate, analyse, and interpret results derived from laboratory experiments and to evaluate important laboratory immunological techniques and their theoretical bases, and relate them to clinical application.

The coursework assessment for this module will be the production of a scientific abstract and a lay abstract for one out of a series of practical experiments. Marks will also be awarded for completion of each practical, good lab skills and results.

Plagiarism will be designed out by rotating the practical that is designated for coursework submission each year. Students will be required to name the partner or partners that they performed lab-work with on their coursework submission.

Whilst students will be encouraged to work in pairs or sometimes groups of up to 8 students, the coursework will be undertaken by each student independently. This will be clearly communicated to the students in their handbook, in class and in lectures.

Tutorials will be provided in the writing of scientific and lay abstracts made available on blackboard. Formative feedback will be given throughout practical classes and lectures, as well as on abstracts written for the first practical in the series. The tutorials and feedback will inform the final assessed coursework submission.

Reasonable adjustments (RA) will be made for any students with a declared RA. All material will be released at least 48 hours in advance of teaching and lecture capture / recordings will be provided as a an additional learning aide.

The assessments and outcomes are analysed after each learning cycle and delivery for the following year is adapted to address any identified issues or shortcoming and to embrace good suggestions or new developments.

First Sit Components	**Final Assessment**	**Element weighting**	**Description**
Examination (Online) - Component A	✓	50 %	Online examination (24 hours)
Practical Skills Assessment - Component B		10 %	Practical assessment
Written Assignment - Component B		40 %	Written abstracts (2 x 250 words)

Resit Components	Final Assessment	Element weighting	Description
Examination (Online) - Component A	✓	50 %	Online examination (24 hours)
Practical Skills Assessment - Component B		10 %	Practical assessment
Written Assignment - Component B		40 %	Written abstracts (2 x 250 words)

Part 4: Teaching and Learning Methods

Learning Outcomes

On successful completion of this module students will achieve the following learning outcomes:

Module Learning Outcomes	Reference
Demonstrate basic knowledge of the cellular and molecular aspects of immunology	MO1
Distinguish the role of innate, humoral and cellular mechanisms in response to a wide spectrum of pathogens and antigens	MO2
Recognise how antibodies and effector cells contribute to pathology in selected immune mediated diseases	MO3
Perform and evaluate important laboratory immunological techniques and demonstrate an understanding of their theoretical bases	MO4
Manipulate, analyse, interpret and concisely explain results derived from laboratory experiments	MO5

Contact Hours

Independent Study Hours:	
Independent study/self-guided study	117
Total Independent Study Hours:	117
Scheduled Learning and Teaching Hours:	
Face-to-face learning	33
Total Scheduled Learning and Teaching Hours:	33
Hours to be allocated	150
Allocated Hours	150

Reading List

The reading list for this module can be accessed via the following link:

https://uwe.rl.talis.com/index.html

Part 5: Contributes Towards
This module contributes towards the following programmes of study: