

MODULE DESCRIPTOR

Module Title

Clinical Immunology

Reference	AS3901	Version	4
Created	August 2021	SCQF Level	SCQF 9
Approved	May 2011	SCQF Points	15
Amended	September 2021	ECTS Points	7.5

Aims of Module

To provide students with the ability to discuss the molecular and cellular basis of diseases affecting the immune system, and the applications of immunological techniques designed to diagnose and monitor them.

Learning Outcomes for Module

On completion of this module, students are expected to be able to:

- 1 Discuss lymphocyte activation and control, and the interaction of the immune system with antigen.
- 2 Explain the immunology of hypersensitivity, autoimmunity, immunodeficiency, transplantation and cancer.
- 3 Explain the features and applications of immunoassays in the diagnosis and monitoring of diseases affecting the immune system.

Indicative Module Content

Lymphocyte Activation & Control: first and second signals, accessory molecules, soluble immunoregulators (cytokines, interleukins, chemokines). Defence against Infection: vaccination, subversion by pathogens, superantigens. Hypersensitivity : types I to V. Autoimmunity: MHC, rheumatological (SLE, RA, autoantibodies) and kidney (Goodpastures) and organ-specific (thyroid, coeliac, pernicious anaemia, diabetes) diseases. Immunodeficiency: Complement, primary (T & B & NK cell) and secondary (HIV). Transplantation: rejection, solid organs, bone marrow. Cancer : tumour antigens, evasion. Immunoassays: haemagglutination, RIA, ELISA, tissue typing, functional assays.

Module Delivery

This is a lecture based module supplemented by tutorials and group discussions.

Indicative Student Workload

	Full Time	Part Time
Contact Hours	40	N/A
Non-Contact Hours	110	N/A
Placement/Work-Based Learning Experience [Notional] Hours	N/A	N/A
TOTAL	150	N/A
<i>Actual Placement hours for professional, statutory or regulatory body</i>		

ASSESSMENT PLAN

If a major/minor model is used and box is ticked, % weightings below are indicative only.

Component 1

Type:	Examination	Weighting:	70%	Outcomes Assessed:	2, 3
Description:	Extended response questions				

Component 2

Type:	Coursework	Weighting:	30%	Outcomes Assessed:	1
Description:	Problem solving exercise				

MODULE PERFORMANCE DESCRIPTOR**Explanatory Text**

The first grade represents Component 1 (EX1) weighted as major and the second, Component 2 (CW1), weighted as minor. A minimum of Module Grade D is required to pass the module, with compensation of grade E in in Component 1 or Component 2 permitted. Non-submission of either component will result in an NS grade.

Module Grade	Minimum Requirements to achieve Module Grade:
A	AA, AB
B	AC, AD, AE, BA, BB, BC, CA
C	BD, BE, CB, CC, CD, DA, DB
D	CE, DC, DD, DE, EA, EB, EC
E	AF, BF, CF, DF, ED, EE, EF, FA, FB, FC, FD
F	FE, FF
NS	Non-submission of work by published deadline or non-attendance for examination

Module Requirements

Prerequisites for Module	Successful completion of Stage 2 of the course, or equivalent.
Corequisites for module	None.
Precluded Modules	None.

INDICATIVE BIBLIOGRAPHY

- HALL, A., SCOTT, C., and BUCKLAND, M. *Clinical Immunology*. Current edition. Oxford University Press.
- DELVES, P.J., MARTIN, S.J., BURTON, D.R and ROITT, I.M. *Roitt's Essential Immunology*. Current Edition. Wiley-Blackwell Publishing.