

MODULE DESCRIPTOR

Module Title

Diagnostic Blood Sciences

Reference	AS4501	Version	2
Created	April 2020	SCQF Level	SCQF 10
Approved	February 2018	SCQF Points	30
Amended	October 2021	ECTS Points	15

Aims of Module

To provide students with the ability to apply principles of haematology, transfusion science and clinical biochemistry to the diagnosis, treatment and monitoring of disease, including evaluation and interpretation of clinical data.

Learning Outcomes for Module

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

- 1 Critically evaluate results from the analysis of blood.
- 2 Discuss the principles of biochemical investigations used in the diagnosis, treatment, and management of biochemical disorders.
- 3 Discuss the principles and uses of therapeutic drug monitoring and how substances of abuse can be investigated.
- 4 Discuss the principles of investigations used in the diagnosis, treatment and management or haematological disorders and complications of pregnancy, transfusion and transplantation.

Indicative Module Content

Haematological diseases: anaemias, haematological malignancies, haemorrhagic and thrombotic diseases. Transfusion science: Transfusion reactions, haemolytic disease of the foetus and new born. Clinical Biochemistry: Inborn errors of metabolism and hereditary disease, genetic and biochemical basis of inherited disease, clinical consequences of common inherited diseases, management of inherited disease, mass screening and laboratory investigations. Therapeutic drug monitoring (TDM) and toxicology. Diagnosis of selected endocrine disorders; Liver disease; Malabsorption syndromes; Prenatal diagnosis of birth defects, hormonal monitoring of foetal and maternal health, postnatal screening tests.

Module Delivery

This is a lecture based course supplemented with tutorials and practical laboratory sessions, elearning and case studies involving interpretation of clinical laboratory data.

Indicative Student Workload

	Full Time	Part Time
Contact Hours	48	N/A
Non-Contact Hours	252	N/A
Placement/Work-Based Learning Experience [Notional] Hours	N/A	N/A
TOTAL	300	N/A
Actual Placement hours for professional, statutory or regulatory body		

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, 4
Description:	Closed book examination.				

Component 2

Type:	Practical Exam	Weighting:	30%	Outcomes Assessed:	1
Description:	Unseen, 'spotter's test' examination.				

MODULE PERFORMANCE DESCRIPTOR**Explanatory Text**

The first grade represents Component 1 (EX1) weighted as major and the second, Component 2 (EX2), weighted as minor. A minimum of Module Grade D is required to pass the module, with compensation of grade E 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 3 of the course, or equivalent.
Corequisites for module	None.
Precluded Modules	None.

INDICATIVE BIBLIOGRAPHY

- 1 MOORE, G., KNIGHT, G. and BLANN, A., 2016. *Haematology*. 2nd Ed. Oxford University Press.
- 2 KNIGHT, R., 2012. *Transfusion and Transplantation Science*. Oxford University Press.
- 3 HALL, A. and YATES, C., 2010. *Immunology*. Oxford University Press.
- 4 OVERFIELD, J., DAWSON, M. and HAMER, D., 2008. *Transfusion Science*. 2nd Ed. Scion Publishing Ltd.
- 5 PALLISTER, C. and WATSON, M., 2010. *Haematology*. 2nd Ed. Scion Publishing Ltd.
- 6 AHMED, N. *Clinical Biochemistry. Current Edition*. Oxford University Press.