Liverpool John Moores University

Title:	BIOLOGY OF DISEASE 'A'
Status:	Definitive
Code:	**7000BMBMOL** (101500)
Version Start Date:	01-08-2011
Owning School/Faculty:	Pharmacy & Biomolecular Sciences
Teaching School/Faculty:	Pharmacy & Biomolecular Sciences

Team	Leader
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Academic Level:	FHEQ7	**Credit Value:**	20.00	**Total Delivered Hours:**	40.00
Total Learning Hours:	200	**Private Study:**	160		

Delivery Options
Course typically offered: Semester 1

Component	Contact Hours
Lecture	24.000
Practical	11.000
Tutorial	2.000

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Exam	AS1	One 3-hour paper, students answer three essay/interpretative style questions from a choice of six.	50.0	3.00
Report	AS2	A case study linked to lecture material	20.0	
Practice	AS3	Microbiological practical	30.0	

Aims

To provide opportunities for:
1. Acquisition of an integrated knowledge of human pathological processes.
2. Familiarisation with various laboratory methods to diagnose and monitor disease.

Learning Outcomes

After completing the module the student should be able to:

1	Critically discuss and demonstrate an ability to integrate knowledge in relation to major pathologies associated with haematological, hepatic and gastrointestinal tract.
2	Justify the choice of investigative procedures used in studying selected human diseases and be able to interpret the results of such analyses.
3	Demonstrate an ability to apply appropriate microbiological procedures in the biomedical laboratory.
4	Demonstrate an ability to apply critical thinking when presented with a case scenario.

Learning Outcomes of Assessments

The assessment item list is assessed via the learning outcomes listed:

EXAM	1	
case study	2	4
practical	1	3

Outline Syllabus

The concept of health and disease; cell damage, repair, ageing and adaptation, cell death; genetic factors in disease; the inflammatory response and immunopathology; toxinology; abnormalities of cell growth and neoplasia; types of agencies causing pathology; alterations in homeostasis and disease.
Specific organ, multi-organ and systemic pathologies.
The scientific activities of the departments of haematology (and transfusion science), cellular pathology, microbiology, genetics, immunology and clinical chemistry in clinical and veterinary units. Recombinant DNA technology; the role and potential application of molecular biology in the diagnosis of pathology.
The major pathologies and microbiological infections associated with the haematological, hepatic and gastrointestinal systems. Examples may include: anaemia, white cell and myelo-proliferative disorders, haemostatic defects; hepatitis, cirrhosis and jaundice; malabsorption, chronic inflammatory diseases and microbiological causes of gastrointestinal tract infection.
The critical use of laboratory procedures in the diagnosis of pathologies of the haematological, hepatic and gastrointestinal systems.

Learning Activities

The module will run on a single teaching day in Semester 1. Most of the material will be delivered by lectures (either three or four 50-minute lectures per teaching day) given by either academic staff or, where appropriate, external professional practitioners. Coursework will be delivered through practical classes and a case study which will be linked to lecture material and supported by tutorials.

References

Course Material	Book
Author	Marshall, W. J and Bangert S K.
Publishing Year	2008
Title	Clinical Chemistry.
Subtitle	
Edition	6th ed
Publisher	Mosby
ISBN	9780723434559

Course Material	Book
Author	Underwood, J.C.E.
Publishing Year	2009
Title	General and Systematic Pathology
Subtitle	
Edition	5th ed
Publisher	Churchill Livingstone
ISBN	0443068887

Course Material	Book
Author	Peakman M, and Vergani D.
Publishing Year	2009
Title	Basic and Clinical Immunology
Subtitle	
Edition	2nd ed
Publisher	Churchill Livingstone
ISBN	9780443100826

Course Material	Book
Author	Young B, O'Dowd G and Stewart W.
Publishing Year	2010
Title	Wheater's Basic pathology
Subtitle	
Edition	5th ed
Publisher	Churchill Livingstone
ISBN	9780443067976

Course Material	Book
Author	Engleberg N.C.
Publishing Year	2006
Title	Schaechter's Mechanisms of Microbial Disease
Subtitle	
Edition	4th ed
Publisher	Lippincott Williams and Wilkins
ISBN	0781753422

Course Material	Book
Author	Hoffbrand A V, Moss P A H, and Petit J E.
Publishing Year	2007
Title	Essential Haematology
Subtitle	
Edition	5th ed
Publisher	Blackwell Publishing
ISBN	9781405136495

Notes

This module will provide students with an understanding of the scientific basis of some clinically important diseases and the laboratory methods used to study them at the molecular, cellular, tissue and organ level.