# Liverpool John Moores University

Title:	ISSUES IN BIOMEDICAL SCIENCE
Status:	Definitive
Code:	<b>4000BMBMOL</b> (101455)
Version Start Date:	01-08-2011
Owning School/Faculty:	Pharmacy & Biomolecular Sciences
Teaching School/Faculty:	Pharmacy & Biomolecular Sciences

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Academic Level:	FHEQ4	Credit Value:	12.00	Total Delivered Hours:	37.00
Total Learning Hours:	120	Private Study:	83		

# **Delivery Options**

Course typically offered: Semester 1

Component	Contact Hours
Lecture	24.000
Workshop	12.000

# Grading Basis: 40 %

#### **Assessment Details**

Category	Short	Description	Weighting	Exam
	Description		(%)	Duration
Exam	AS1	Examination: 50% Multiple-	50.0	1.00
		choice or short-answer		
		questions and one seen essay.		
Report	AS2	Coursework: 50% 1 written assignments/workshops.	50.0	

#### Aims

To introduce the work of clinical laboratories and recent developments of relevance

to biomedical scientists and also to foster course identity within students.

### Learning Outcomes

After completing the module the student should be able to:

- 1 describe the organisation of the clinical laboratory services in the UK and be acquainted with career opportunities and recent developments in the biomedical sciences.
- 2 describe and write coherently about issues of relevance to biomedical sciences.
- 3 identify environmental, socio-economic and cultural factors affecting communities.
- 4 describe recent legislation which affects health care and delivery services in the UK.
- 5 describe patterns of disease epidemics and give specific accounts of medical laboratory science practice in detection and control of disease.
- 6 be aware of some aspects of the legal regulation of medicine and medical research, including medical ethics and animal experimentation.

### Learning Outcomes of Assessments

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

EXAM	1	3	5	6
CW	1	2	4	6

### **Outline Syllabus**

The role of professional bodies and state registration.

The nature and organisation of work carried out in clinical laboratories.

Recent developments in biomedical sciences (currently to include developments in molecular biology, genetics and drugs of abuse.

The role of biomedical laboratories in relation to specific health issues (e.g. AIDS, E. Coli 0157, coronary heart disease, cancers).

Social, economic, environmental and cultural factors which enhance or discriminate against health.

Problems associated with the health care and the delivery of health services.

Principles and practice of screening tests in the control of disease, and monitoring of disease during epidemics.

Medical Ethics, local Ethical Review Committees, legal regulation.

Animal experimentation, Home Office Licences, legal implications, ethical review.

### Learning Activities

Lectures, workshops, videos and discussion groups.

### References

Course Material	Book
Author	Klaidman, S.
Publishing Year	2000
Title	Saving the Heart, the battle to conquer coronary heart
	disease.
Subtitle	
Edition	
Publisher	OUP
ISBN	019512792

Course Material	Book
Author	Monamy, V.
Publishing Year	2000
Title	Animal Experimentation
Subtitle	
Edition	
Publisher	Cambridge University Press
ISBN	0521667860

Course Material	Book
Author	Beauchamp, T.L. and Childress, J.F.
Publishing Year	2001
Title	Principles of Biomedical Ethics.
Subtitle	
Edition	
Publisher	OUP
ISBN	0195143229

Course Material	Book
Author	Murray, P.R. and others
Publishing Year	2005
Title	Medical Microbiology.
Subtitle	
Edition	5th ed.
Publisher	Mosby
ISBN	0323033032

Course Material	Book
Author	Schwarz, L., Preece, P.E. and Hendry, R.A.
Publishing Year	2002
Title	Medical Ethics: a case-based Approach.
Subtitle	
Edition	
Publisher	W. B. Saunders
ISBN	0702025437

Course Material	Book
Author	www.ibms.org
Publishing Year	0
Title	
Subtitle	
Edition	
Publisher	
ISBN	

Course Material	Book
Author	www.nhs.uk
Publishing Year	0
Title	
Subtitle	
Edition	
Publisher	
ISBN	

Course Material	Book
Author	www.doh.gov.uk
Publishing Year	0
Title	
Subtitle	
Edition	
Publisher	
ISBN	

Course Material	Book
Author	www.corec.org.uk (Central Office for Research Ethics
	Committees)
Publishing Year	0
Title	
Subtitle	
Edition	
Publisher	
ISBN	

Course Material	Book
Author	Murphy, T.F.
Publishing Year	2004
Title	Case Studies in Biomedical Research Ethics
Subtitle	
Edition	
Publisher	MIT Press
ISBN	1417560665

Author	www.hpc-uk.org
Publishing Year	0
Title	
Subtitle	
Edition	
Publisher	
ISBN	

### Notes

This module will introduce the student to the organisational structure of the clinical laboratory services, acquaint the student with recent developments in Biomedical Sciences and foster course identity through workshops.