

Liverpool John Moores University

Title: Hospital Laboratory Practice 1 and Physiology
Status: Definitive
Code: **4004BMBMOL** (117417)
Version Start Date: 01-08-2012

Owning School/Faculty: Pharmacy & Biomolecular Sciences
Teaching School/Faculty: Pharmacy & Biomolecular Sciences

Team	Leader
Pat Barry	Y
Elaine Hemers	
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Academic Level: FHEQ4 **Credit Value:** 24.00 **Total Delivered Hours:** 126.00
Total Learning Hours: 240 **Private Study:** 114

Delivery Options

Course typically offered: Semester 2

Component	Contact Hours
Lecture	23.000
Off Site	90.000
Practical	5.000
Tutorial	8.000

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Portfolio	Portfolio		50.0	
Test	HP Test		30.0	
Report	Practical		20.0	

Aims

*To introduce the concepts of professional autonomy and accountability.
To foster an awareness of professional relationships within the hospital laboratory environment.*

To provide an introduction to the integration of physiological processes in humans.

Learning Outcomes

After completing the module the student should be able to:

- LO1 Practice within the legal and ethical boundaries of their profession and in a non-discriminatory manner; including confidentiality, informed consent and exercise a professional duty of care.
- LO2 Know the limits of their practice, when to seek advice and their obligation to maintain fitness to practice.
- LO3 Understand the need for effective communication throughout the care of the patient, client or user
- LO4 Discuss the different physiological systems and their functions
- LO5 Present, analyse and interpret physiological data, and work in a group to prepare a verbal presentation on a physiological subject.

Learning Outcomes of Assessments

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

Pre-registration Portfolio	LO 1	LO 2	LO 3
Human Physiology Class test	LO 4	LO 5	
Practical Report	LO 5		

Outline Syllabus

Role of the Health Professions Council (HPC) and Institute of Biomedical Science (IBMS). Laboratory accreditation and CPA. Storage and disposal of human samples. Dignity, privacy and confidentiality of patients. Equal opportunities legislation. Confidentiality (Caldicot) and the data protection act. HPC code of conduct and ethics. Personal scope of practice. Health requirements of the HPC. Personal and laboratory health and safety. EC Working Time Directive. Role of the Biomedical Scientist and the relationship to other professions. Limitations of professional practice and referral mechanisms. Principles of effective communication within the laboratory and to service users.

Review of the heart and blood vessels in the systemic and pulmonary systems. Electrical and mechanical events in the cardiac cycle. Control of heart rate and cardiac output. Regulation of blood pressure.

Control of ventilation. Factors affecting alveolar exchange of respiratory gases. Haemoglobin and oxygen transport. Carriage and elimination of carbon dioxide.

Exocrine function of the digestive tract and accessory glands. Absorption of

nutrients. Neuro-hormonal control of digestion.

Thermoregulation in humans.

Learning Activities

Lectures, Practical, Seminars, work based learning

References

Course Material	Book
Author	Martini, F.H. & Nath, J.L.
Publishing Year	2009
Title	'Fundamentals of Anatomy and Physiology'
Subtitle	
Edition	8th edition
Publisher	Pearson, Benjamin Cummings
ISBN	9780321539106

Course Material	Book
Author	Silverthorn, D.U
Publishing Year	2007
Title	'Human Physiology: An Integrated Approach'
Subtitle	
Edition	4th edition
Publisher	Pearson, Benjamin Cummings
ISBN	9780321396242

Course Material	Book
Author	VanPutte, C., Regan, J. & Russo, A.
Publishing Year	2010
Title	Seeley's Essentials of Anatomy and Physiology
Subtitle	
Edition	7th edition
Publisher	Oxford University Press
ISBN	9780071220064

Course Material	Website
Author	Glencross, H., Ahmed, N., & Wang, Q,
Publishing Year	2011
Title	http://www.hpc-uk.org/
Subtitle	Health Professions Council
Edition	1st edition
Publisher	

ISBN	9780199533599
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Course Material	Website
Author	
Publishing Year	
Title	http://www.ibms.org/
Subtitle	Institute of Biomedical Science
Edition	
Publisher	
ISBN	

Course Material	Book
Author	
Publishing Year	
Title	Biomedical Science Practice
Subtitle	Experimental and Professional Skills
Edition	
Publisher	
ISBN	

Notes

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