

Liverpool John Moores University

Title: ADVANCED PHYSIOLOGY
Status: Definitive
Code: **6001CHMBIO** (101279)
Version Start Date: 01-08-2011

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

Team	Leader
Jennifer Sneddon	Y
Elaine Hemers	
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Academic Level: FHEQ6 **Credit Value:** 12.00 **Total Delivered Hours:** 33.00
Total Learning Hours: 120 **Private Study:** 87

Delivery Options

Course typically offered: Summer

Component	Contact Hours
Lecture	22.000
Practical	5.000
Seminar	3.000
Tutorial	1.000

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Exam	Exam	Examination - short answer questions	40.0	2.00
Report	Prac Rpt	Critical laboratory report	40.0	
Presentation	Poster	Poster	20.0	

Aims

To investigate short- and long-term physiological responses by humans to

environmental variation and stress.

Learning Outcomes

After completing the module the student should be able to:

- 1 Discuss the impact of selected environmental conditions on human physiology.
- 2 distinguish between short- and long-term physiological changes
- 3 Evaluate the physiological and biochemical mechanisms associated with change in reproductive and dietary status in humans.

Learning Outcomes of Assessments

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

EXAM	1	2	3
Practical Report	1	2	
Poster	1	2	3

Outline Syllabus

Environmental entrainment of biological rhythms in humans.
Effect of diet on human health.
Effect of human variation on physiology.

Learning Activities

The module will be delivered using lectures, a practical, three short tutorials and a poster workshop.

References

Course Material	Book
Author	Garrett, W. and Kirkendall, D.
Publishing Year	2000
Title	Exercise and Sports Science.
Subtitle	
Edition	
Publisher	Lippincott, Williams & Wilkins, Philadelphia, USA
ISBN	

Course Material	Book
Author	Hines, T.M.

Publishing Year	1998
Title	Comprehensive Review of Biorhythm Theory
Subtitle	Physiological Reports. 83(1): 19-64
Edition	
Publisher	
ISBN	

Course Material	Book
Author	Noakes, T.D. & St Clair-Gibson
Publishing Year	2004
Title	Logical limitations to the catastrophe models of fatigue during exercise in humans
Subtitle	British Journal of Sports Medicine 38: 648-9
Edition	
Publisher	
ISBN	

Course Material	Book
Author	Silverthorn, D.U.
Publishing Year	2007
Title	Human Physiology.
Subtitle	
Edition	4th Edition.
Publisher	Pearson International
ISBN	

Notes

Building on a knowledge of fundamental mechanisms and the diversity of physiological strategies adopted by humans, this module highlights current studies investigating adaptive responses of humans to environmental extremes and regulation of physiological processes under differing environments. This module is only for students from TAR College.