

Liverpool John Moores University

Title: PHYSIOLOGICAL SYSTEMS
Status: Definitive
Code: **3003FNDSCI** (101208)
Version Start Date: 01-08-2015

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

Team	Leader
Andrias O'Reilly	Y
Craig Wilding	
Robbie Rae	
Fatima Perez de Heredia	
Simone Durr	

Academic Level: FHEQ3 **Credit Value:** 12 **Total Delivered Hours:** 24
Total Learning Hours: 120 **Private Study:** 96

Delivery Options

Course typically offered: Semester 2

Component	Contact Hours
Lecture	12
Practical	12

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Report	Report	Practical report	50	
Test	Test	Test	50	

Aims

This module aims to examine the concepts of homeostasis, communication and transport within organisms.

Learning Outcomes

After completing the module the student should be able to:

- 1 review the mechanisms employed to produce a homeostatic state within living organisms with reference to specific physiological systems.
- 2 Develop skills in data analysis and interpretation

Learning Outcomes of Assessments

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

Report	2
Test	1

Outline Syllabus

The relationship between form and function, adaptation to the environment reflected in physical structures and biochemical modification.

The concept of homeostasis. Feedback mechanisms, positive and negative feedback and the steady state. Thermo-regulatory systems in animals. Diffusion and passive transport facilitated diffusion, active transport, co-transport, exocytosis and endocytosis, intestinal absorption and renal excretion. Circulatory systems and their characteristics. Open and closed circulatory systems. Neural and endocrine systems and their integration.

Learning Activities

The module will be delivered using a combination of lectures, workshops and practicals.

Notes

This module provides students with an appreciation of the basic physiological mechanisms.