

Liverpool John Moores University

Title: HUMAN ANATOMY AND PHYSIOLOGY
Status: Definitive
Code: **3412FNDSCI** (125828)
Version Start Date: 01-08-2021

Owning School/Faculty: Pharmacy & Biomolecular Sciences
Teaching School/Faculty: Sport and Exercise Sciences

| Team | Leader |
|----------------|--------|
| Sandra Fawcett | Y |
| Ben Edwards | |

Academic Level: FHEQ3 **Credit Value:** 20 **Total Delivered Hours:** 58
Total Learning Hours: 200 **Private Study:** 142

Delivery Options

Course typically offered: Semester 2

| Component | Contact Hours |
|-----------|---------------|
| Lecture | 44 |
| Online | 11 |
| Practical | 2 |

Grading Basis: 40 %

Assessment Details

| Category | Short Description | Description | Weighting (%) | Exam Duration |
|----------|-------------------|-------------------------------------|---------------|---------------|
| Report | Report | Practical Report | 60 | |
| Exam | Exam | Exam with multiple choice questions | 40 | 1 |

Aims

To develop knowledge and understanding of the basic structure and function of key physiological systems and metabolic processes.

Learning Outcomes

After completing the module the student should be able to:

- 1 Describe the function and anatomy (structure) of the cardiorespiratory, renal, endocrine, and neural physiological function and control.
- 2 Explain the concept of homeostasis and the role physiological systems play in its maintenance.
- 3 Describe and explain how to conduct, interpret and present in written and/or oral format, basic physiological laboratory experiments.

Learning Outcomes of Assessments

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

| | | |
|------------------|---|---|
| Practical report | 3 | |
| MCQ exam | 1 | 2 |

Outline Syllabus

Indicative topics:

Introduce physiology the concept of homeostasis.

History of anatomy and anatomical Nomenclature

How the body 'communicates':

1) Basic structure and function of the central and peripheral nervous system.

2) Basic structure and function of the endocrine system.

Tissues of the Body; Integument

Skeleton; Joints; Skeletal Muscle; Axial Muscles; Muscles of the limb.

Homeostatic regulation of body temperature

Basic structure and function of the Cardio-Respiratory system

Basic structure and function of the Lymphatic system.

Basic structure and function of the Digestive system.

Basic structure and function of the Renal and Reproductive systems

Learning Activities

Students are expected to attend time-tabled lectures and complete additional online tasks / lectures. Students are also encouraged to utilise the available directed learning/private study time to get advice from module staff and/or conduct essential reading. Some of the teaching sessions will contain practical based activities where students will be required to use their analytical, statistical and problem solving skills to enhance their own learning. Students should complete the required and recommended reading to widen their knowledge and understanding and their ability to apply material. Students will be required to evidence this in the production of their coursework and the module examination.

Notes

The aim of this module is to introduce the concepts of human physiology and their inter-relationships. In doing so it addresses the need for a basic understanding of the anatomy of physiological systems and the physiological responses that occur. Various concepts and theories will be advanced and examined. This process will be extended by the introduction of dedicated laboratory practicals where appropriate to facilitate understanding of how physiological systems adapt to enable the maintenance of homeostasis.