

Liverpool John Moores University

Title: HUMAN MOVEMENT FOUNDATIONS
Status: Definitive
Code: **4015SPOSCI** (117534)
Version Start Date: 01-08-2015

Owning School/Faculty: Sport and Exercise Sciences
Teaching School/Faculty: Sport and Exercise Sciences

Team	Leader
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Academic Level: FHEQ4 **Credit Value:** 24.00 **Total Delivered Hours:** 53.00

Total Learning Hours: 240 **Private Study:** 187

Delivery Options

Course typically offered: Standard Year Long

Component	Contact Hours
Lecture	44.000
Practical	6.000
Seminar	1.000
Tutorial	1.000

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Report	data handl		50.0	
Exam	exam		50.0	1.00

Aims

The aim of this module is to introduce the basic principles of human anatomical structure and biomechanics and to illustrate applications of these principles in sport, exercise and health. The module also aims to provide an introduction to experimental methods in Kinanthropometry and biomechanics and to develop skills in data acquisition and handling.

Learning Outcomes

After completing the module the student should be able to:

- 1 Perform data handling skills applied to Kinanthropometric and/or biomechanical measurements.
- 2 Describe human anatomical structure, function and body composition and apply these concepts to sport, exercise and health.
- 3 Apply concepts and techniques of biomechanics to sport and exercise.

Learning Outcomes of Assessments

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

data handling	1	
exam	2	3

Outline Syllabus

*Oestology
Tissue organisation and structure
Body composition.
Skeletal Muscle structure
Biomechanics of muscles - EMG
Joints classification and nomenclature
Anatomy lower limb - foot ankle knee
Anatomy axial skeleton
Anatomy upper limb
2D video analysis
linear motion
angular motion
segmental analysis
forces (Newton's Laws)
statics*

Learning Activities

Students are expected to attend time-tabled lectures and are encouraged to utilise the available directed learning/private study time and resources made available via the virtual learning platforms. Students should seek advice from module staff and/or conduct essential reading as directed. 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, understanding and their ability to apply module material. Students will be required to evidence this in the production of their coursework, in practical/tutorial discourse, via learning platform tasks and in exams.

Notes

This module is designed to develop the student's basic knowledge and understanding of the structure and function of a number of the body's physiological systems in relation to their role in human health and exercise performance. This will be evaluated by the completion of the relevant assessment tasks. This module will incorporate support strategies in an attempt to ensure student progression. This will include feed forward and feedback on assessment and personal tutorial support. This will be augmented with interactive resources that facilitate self directed exploration of the human body, functional movement and anatomical principles.