Module Proforma

Approved, 2022.02

Summary Information

Module Code	4503SPOPID
Formal Module Title	Introduction to Biomechanics
Owning School	Sport and Exercise Sciences
Career	Undergraduate
Credits	20
Academic level	FHEQ Level 4
Grading Schema	40

Module Contacts

Module Leader

Contact Name	Applies to all offerings	Offerings
Dominic Doran	Yes	N/A

Module Team Member

Contact Name	Applies to all offerings	Offerings

Partner Module Team

Contact Name	Applies to all offerings	Offerings

Teaching Responsibility

LJMU Schools involved in Delivery
LJMU Partner Taught

Partner Teaching Institution

Institution Name
Portobello Institute

Learning Methods

Learning Method Type	Hours
Lecture	24
Practical	4
Workshop	11

Module Offering(s)

Offering Code	Location	Start Month	Duration
SEP-PAR	PAR	September	12 Weeks

Aims and Outcomes

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 biomechanics and to develop skills in data handling.

Learning Outcomes

After completing the module the student should be able to:

Code	Description
MLO1	Describe human anatomical structure and function and apply these concepts to sport, exercise and health
MLO2	Apply concepts and techniques of biomechanics to sport and exercise

Module Content

Outline Syllabus
Anatomical terminologyTissue organisation and structureSkeletal Muscle structure and functionFunctional anatomy of the musculoskeletal systemLinear motionAngular motion2D video analysis Forces (Newton's Laws)Jump analysisApplications in biomechanical contexts

Module Overview

Additional Information
Your knowledge of and understanding of structural and functional anatomy will be developed along with the mechanical principles that govern human movement. This will be evaluated by the completion of the relevant assessment tasks. You will be expected to engage with interactive resources that facilitate self directed exploration of the human body, functional movement and anatomical principles.

Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Learning Outcome Mapping
Test	Online anatomy test	50	0	MLO1
Exam	Biomechanics MCQ Exam	50	1	MLO2