Current Issues in Biomechanics

Module Information

2022.01, Approved

Summary Information

Module Code	7111SPOSCI
Formal Module Title	Current Issues in Biomechanics
Owning School	Sport and Exercise Sciences
Career	Postgraduate Taught
Credits	20
Academic level	FHEQ Level 7
Grading Schema	50

Teaching Responsibility

LJMU Schools involved in Delivery
Sport and Exercise Sciences

Learning Methods

Learning Method Type	Hours
Lecture	4
Practical	8
Tutorial	12

Module Offering(s)

Display Name	Location	Start Month	Duration Number Duration Unit
SEP-CTY	CTY	September	12 Weeks

Aims and Outcomes

Aims	This module aims to develop and extend students' opportunity to investigate issues of current importance in Sport and Clinical Biomechanics. Students will gain valuable experience in critically appraising the literature and exploring recent research questions in the laboratory by developing skills in data collection, analysis and presentation.

After completing the module the student should be able to:

Learning Outcomes

Code	Number	Description
MLO1	1	Critically evaluate selected current issues in Biomechanics.
MLO2	2	Critically appraise the literature in selected areas of biomechanical research.
MLO3	3	Conduct experimental or analytical work in selected areas of biomechanical research.

Module Content

Outline Syllabus	Topics to be covered include: muscle-tendon mechanics, bioengineering analysis, locomotive biomechanics; foot biomechanics; clinical biomechanics and human gait; advances in experimental techniques in biomechanics and virtual rehabilitation. The laboratory content of the module will involve using measurement skills developed in the Technical training module (3D movement analysis and force platform) to replicate an experimental study from the literature.
Module Overview	This module provides an opportunity to study select current issues in biomechanics as applied to sport. It requires you to read the latest literature in the appropriate fields and evaluate past and current directions. The module aims to: develop and extend your opportunity to investigate issues of current importance in Sport and Clinical Biomechanics present you with a variety of cutting-edge research topics in biomechanics applied to sport, exercise and clinical applications
Additional Information	This module provides the opportunity to study selected topics of current issues in biomechanics applied to sport. It requires students to read up to date literature in the appropriate fields and to evaluate past and current directions. They will be presented with a variety of cutting-edge research topics in biomechanics applied to sport, exercise and clinical applications.

Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Module Learning Outcome Mapping
Presentation	Essay 1	50	0	MLO1
Essay	Essay 2	50	0	MLO2, MLO3

Module Contacts

Module Leader

Contact Name	Applies to all offerings	Offerings
Mark Lake	Yes	N/A

Partner Module Team

Contact Name	Applies to all offerings	Offerings