

## Liverpool John Moores University

Title: BIOMECHANICS OF FOOTBALL  
Status: Definitive  
Code: **6111SPFOOT** (125530)  
Version Start Date: 01-08-2021

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

Team	Leader
Mark Lake	Y

**Academic Level:** FHEQ6  
**Credit Value:** 20  
**Total Delivered Hours:** 48  
**Total Learning Hours:** 200  
**Private Study:** 152

### Delivery Options

Course typically offered: Semester 2

Component	Contact Hours
Lecture	22
Off Site	8
Practical	4
Seminar	6
Workshop	6

**Grading Basis:** 40 %

### Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Report	Report	Analysis Report	50	
Exam	Exam	Exam	50	2

### Aims

*The aim of this module is to examine biomechanics of football skills and risk factors for injury. The module develops the students' understanding of biomechanical factors related to football skills, equipment and injury prevention and their ability to critically analyse these concepts.*

## Learning Outcomes

After completing the module the student should be able to:

- 1 Conduct an experimental analysis of a football skill and interpret and critically analyse the findings
- 2 Evaluate a football skill from a biomechanical perspective
- 3 Evaluate injury risk in football from a biomechanical perspective

## Learning Outcomes of Assessments

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

Analysis Report	1	
Exam	2	3

## Outline Syllabus

*Advance knowledge of methods used in football biomechanics research.*

*Fundamental review of motion and force measurement.*

*Performance analysis of a football skill.*

*Collection of kinematic data for assessment of a football skill.*

*Assessing the equipment (boots and surfaces) used in football.*

*Biomechanical support of elite performers in relation to performance and injury prevention.*

## Learning Activities

Students are expected to attend time-tabled lectures and are 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 group work, practical and laboratory 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 evaluate and apply material. Students will be required to evidence this in the production of their coursework and other assessments.

## Notes

This module focuses on the quantification of football skills from both a performance and injury prevention perspective. Students experience kinematic data collection in the laboratory and are shown how the data is processed towards final assessment of the performance or risk factors for injury. Sports injury aspects are also expanded with taught material on football equipment (boots and surfaces).

