

MODULE DESCRIPTOR

Module Title

Sports Biomechanics			
Reference	HS2119	Version	2
Created	March 2017	SCQF Level	SCQF 8
Approved	September 2015	SCQF Points	15
Amended	August 2017	ECTS Points	7.5

Aims of Module

The aim of this module is to develop students' ability to analyse human movement through needs identification, robust data collection and methods of evaluation.

Learning Outcomes for Module

On completion of this module, students are expected to be able to:

- 1 Identify mechanical characteristics associated with successful execution of a movement task.
- 2 Collect and interpret quantitative data associated with a movement task.
- 3 Collect and interpret qualitative information associated with a movement task.
- 4 Conduct an analysis of a movement task and relate to normative data or mechanical principles.

Indicative Module Content

Human movement studies; methodologies and systems of measurement; movement patterns; qualitative analysis of sporting movements; quantitative analysis of sporting movements; Quintic biomechanics software; model templates, deterministic models, critical features, angle-angle diagrams, dynamic systems theory.

Module Delivery

Lectures supported by tutorials, workshops and practical sessions in the laboratory.

Indicative Student Workload

	Full Time	Part Time
Contact Hours	36	N/A
Non-Contact Hours	114	N/A
Placement/Work-Based Learning Experience [Notional] Hours	N/A	N/A
TOTAL	150	N/A
<i>Actual Placement hours for professional, statutory or regulatory body</i>		

ASSESSMENT PLAN

If a major/minor model is used and box is ticked, % weightings below are indicative only.

Component 1

Type: Coursework Weighting: 100% Outcomes Assessed: 1, 2, 3, 4
Description:

MODULE PERFORMANCE DESCRIPTOR**Explanatory Text**

Written coursework assessed with a grading proforma. Overall grade determined as follows:

Module Grade	Minimum Requirements to achieve Module Grade:
A	Rows 1-4: Minimum of 2 rows at A, 1 row at B and 1 row at C Rows 5-7: Minimum of 2 rows at distinction and 1 row at pass Row 8: Pass
B	Rows 1-4: Minimum of 2 rows at B, 1 row at C and 1 row at D Rows 5-7: Minimum of 1 row at distinction and 2 rows at pass Row 8: Pass
C	Rows 1-4: Minimum of 2 rows at C and 2 rows at D Rows 5-7: Minimum of 3 rows at pass Row 8: Pass
D	Rows 1-4: Minimum of 3 rows at D and 1 row at E Rows 5-7: Minimum of 2 rows at pass Row 8: Pass
E	Rows 1-4: Minimum of 3 rows at E Rows 5-7: Minimum of 1 row at pass
F	Failure to achieve any of the above
NS	Non-submission of work by published deadline or non-attendance for examination

Module Requirements

Prerequisites for Module	Successful completion of Stage 1 of the BSc (Hons) Applied Sport and Exercise Science course or equivalent.
Corequisites for module	None.
Precluded Modules	None.

ADDITIONAL NOTES

A pass will not normally be awarded for this module unless the student has attended a minimum of 80% of all learning opportunities.

INDICATIVE BIBLIOGRAPHY

- 1 KNUDSON, D.V., 2013. Qualitative diagnosis of human movement. Champaign, IL: Human Kinetics.
- 2 McGINNIS, P.M., 2013. Biomechanics of Sport and Exercise. 3rd ed. Champaign, IL: Human Kinetics.
- 3 BARTLETT, R., 2014. Introduction to sports biomechanics: Analysing human movement patterns. 3rd ed. London: Routledge.