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Module details for Key Concepts in Biomechanics for Sport and Exercise

Module Details

SCQF Level:

08

Module Code:

SPS202

Credit Value:

20

Year:

2020/1

Term:

Term 2

School:

School of Applied Sciences

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Description

This module introduces the student to the study of biomechanical concepts applied within a sport health and performance perspective. It will offer the student the opportunity to analyse movement using various biomechanical laboratory techniques including those relating to movement analysis, reaction forces and the application of Newton's Laws.

Aims

The aim of this Module is to provide the student with an understanding of the core concepts of biomechanical concepts and basic practical laboratory skills within biomechanics.

Learning Outcomes

By the end of this module the student should be able to:

1. Describe the how the biomechanics of movement influence sport and exercise performance.
2. Discuss and apply laboratory means of measuring the biomechanics of movement.
3. Apply formulae relating to the biomechanics.
4. Be able to discuss biomechanical concepts in a sport and exercise context.
5. Evaluate a laboratory experiment, which requires application of knowledge and analysis skills pertinent to biomechanics.

Indicative Content

1 Biomechanical concepts in sport and exercise

Further develop understanding of how motion, forces, movement of mass, and acceleration can be applied in a sport, health and exercise context.

2 Specialist equipment use (injury)

Learn about the use of specialist equipment, such as force platforms, 2D motion analysis, contact mats, and electromyography to assess injury risk.

3 Specialist equipment use (performance)

Learn about the use of specialist equipment, such as force platforms, 2D motion analysis, contact mats, and electromyography to improve performance.

Teaching and Learning Work Loads

For session 2020/21 the expectation is that the teaching and learning hours stated in this descriptor will form a mix of synchronous and asynchronous student/staff activity, with the majority of this being online. The exact pattern of this activity is likely to vary from the standard face-to-face hours listed below but the overall student effort remains the same. Up-to-date information on the delivery of the module can be found on the relevant module MLS site and on your student timetable.

TEACHING AND LEARNING METHOD	HOURS
Lecture	13
Tutorial/Seminar	13
Practical Activity	12
Assessment	42
Independent	120
Total	200

Guidance notes

SCQF Level - The Scottish Credit and Qualifications Framework provides an indication of the complexity of award qualifications and associated learning and operates on an ascending numeric scale from Levels 1-12 with SCQF Level 10 equating to a Scottish undergraduate Honours degree.

Credit Value – The total value of SCQF credits for the module. 20 credits are the equivalent of 10 ECTS credits. A full-time student should normally register for 60 SCQF credits per semester.

Disclaimer

We make every effort to ensure that the information on our website is accurate but it is possible that some changes may occur prior to the academic year of entry. The modules listed in this catalogue are offered subject to availability during academic year 2020/21, and may be subject to change for future years.

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