Module specification

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Refer to guidance notes for completion of each section of the specification.

Module Code	SES504
Module Title	Effective Movement in the Applied World
Level	5
Credit value	20
Faculty	FSLS
HECoS Code	100433
Cost Code	GASP

Programmes in which module to be offered

Programme title	Is the module core or option for this programme
BSc (Hons) Applied Sport and Exercise Sciences	Core

Pre-requisites

N/A

Breakdown of module hours

Learning and teaching hours	15 hrs
Placement tutor support	0 hrs
Supervised learning e.g. practical classes, workshops	15 hrs
Project supervision (level 6 projects and dissertation modules only)	0 hrs
Total active learning and teaching hours	**30** hrs
Placement / work based learning	0 hrs
Guided independent study	170 hrs
Module duration (total hours)	200 hrs

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Initial approval date	08/12/2021
With effect from date	01/09/2022

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Date and details of revision	
Version number	1

Module aims

This module aims to:

1. Apply the biomechanical principles identified in the module 'Introduction to Biomechanics and Performance Analysis' to sport specific activities.
2. Highlight the importance of developing a range of 'real-time' assessment techniques to assist performance.
3. Expose students to a range of practical issues in conducting performance analysis.
4. Further develop feedback mechanisms for presenting analysed data.
5. Develop quantitative and qualitative approaches to applied research.

Module Learning Outcomes - at the end of this module, students will be able to:

1	Analyse a sporting technique through biomechanical principles.
2	Evaluate the impact of biomechanical principles on the performance of a sports technique using quantitative and qualitative methods
3	Design and evaluate a notational analysis system within an applied sport environment
4	Utilise Notational analysis data to inform technical and / or tactical future performance

Assessment

Indicative Assessment Tasks:

This section outlines the type of assessment task the student will be expected to complete as part of the module. More details will be made available in the relevant academic year module handbook.

Assessment 1: Case Study: Working in small groups (2 or 3) to collect performance data students will produce an individual report that describes the design of a notation analysis system and use it to evaluate the technical or tactical aspects in sport.
They will use this information to design an appropriate system for assessing sporting performance, this design, through the use of analysis software (Sportscode or Nacsport) will then be used to describe how the interpretation of analysed data can be disseminated to a client and used to enhance performance.

Assessment 2: AV Presentation The students will produce an individual submission that describes the key technical/coaching elements of a sporting action. They will analyse the technical/coaching elements in terms of the mechanical principles that underpin their execution. The students will record the action, using an appropriate AV medium, and describe the action using quantitative or qualitative methods, evaluating the impact of the result of the analysis on the performance outcome of the action.

Assessment number	Learning Outcomes to be met	Type of assessment	Weighting (%)
1	3, 4	Written Assignment	50
2	1, 2	Presentation	50

Derogations

N/A

Learning and Teaching Strategies

This module will be taught through a series of lectures, seminars, practical workshops and blended learning, with the primary emphasis on the application of theory to practice.

Whilst lectures and seminars will be used to further develop theoretical components of the module, students will also be required to develop their use of leading computer software (Hudl SportsCode, NacSport, Kinovea and Quintic), these will be taught through workshops and blended learning opportunities.

As an additional aid to learning external links and reading materials will be highlighted. These will enable the student to identify strengths and weaknesses in their knowledge as well as opportunities to access resources in their own time. Formative learning opportunities will be provided throughout the module.

Elements of this module are maths based, support will be offered in-class as well as through the academic skills department.

Indicative Syllabus Outline

Application of qualitative and quantitative approaches to technique analysis in a variety of environments and population groups.
Factors impacting health and effective movement
Movement patterns and Injury prevention
Deterministic modelling
Models in qualitative analysis of sports technique.
The use of technology in Biomechanics (Quintic Coaching)
Systematic observation of athletic performance in individual and team sports.
Integration within the Coaching environment.
Sport, position and individual athlete profiling

Collection and presentation of performance analysis data.
Validity and reliability of performance analysis methodologies.
Intervention strategies to maximize the impact of performance analysis.
The use of computer software in notational analysis (Hudl Sportscode and Nacsport).
The use of performance indicators to assist in the development of notation analysis systems.

Indicative Bibliography:

Please note the essential reads and other indicative reading are subject to annual review and update.

Essential Reads

Blazevich, J. (2017), *Sports Biomechanics, the Basics: Optimising Human Performance.* 3rd ed. London: Bloomsbury.

O'Donoghue, P. (2014), *An Introduction to Performance Analysis of Sport*. 2nd ed. London: Routledge.

Watkins, J. (2014), *Fundamental Biomechanics of Sport and Exercise.* London: Routledge.

Hughes, M. and Franks, I. (2015), *The Essentials of Performance Analysis*. London: Routledge.

Other indicative reading

Bartlett, R. (2014), *Introduction to Sports Biomechanics: Analysing Human Movement Patterns*. 2nd Ed. London: Routledge.

Grimshaw, P., Cole, M., Burden, A. and Fowler, N. (2019), *Instant Notes in Sport & Exercise Biomechanics*. 2nd Ed. London: Routledge.

McGarry, T., O'Donoghue, P., and Sampaio, J, (2013), *Routledge Handbook of Sports Performance Analysis*. London: Routledge.

Payton, J. and Burden, A. (eds.) (2018), *Biomechanical Evaluation of Movement in Sport and Exercise*. Abingdon: Routledge.

Employability skills – the Glyndŵr Graduate

Each module and programme is designed to cover core Glyndŵr Graduate Attributes with the aim that each Graduate will leave Glyndŵr having achieved key employability skills as part of their study. The following attributes will be covered within this module either through the content or as part of the assessment. The programme is designed to cover all attributes and each module may cover different areas.

Core Attributes
Engaged
Enterprising
Creative
Ethical

Key Attitudes
Commitment
Curiosity
Resilience
Confidence
Adaptability

Practical Skillsets
Digital Fluency
Organisation
Leadership and Team working
Critical Thinking
Emotional Intelligence
Communication