University of the West of England
BRISTOL

MODULE SPECIFICATION

Part 1: Basic Data						
Module Title	Applied Biomechanics in Sport					
Module Code	UISV5X-15-2		Level	2	Version	2
UWE Credit Rating	15	ECTS Credit Rating	7.5	WBL module?	No	
Owning Faculty	Hartpury		Field	Sport Science		
Department	Sport		Module Type	Standard		
Contributes towards	BSc (Hons) Sport and Exercise Sciences					
Pre-requisites	UISXL8-30-1 Introduction to Functional Anatomy and Sports Biomechanics		Co- requisites	None		
Excluded Combinations	None		Module Entry requirements	None		
Initial CAP Approval Date	07 September 2016		Valid from	01 September 2016 V2.0- 01 September 2018		
Revision CVC Approval Date	V2.0- 02 May 2018		Valid to	01 September 2024		

Part 2: Learning and Teaching	
Learning Outcomes	On successful completion of this module students will be able to: 1. Apply mechanical principles to an analysis of a given sports performance. (A) 2. Appraise the use of biomechanical data collection techniques to address a given problem within sports performance. (A) 3. Analyse data associated with a given sports performance. (A) **4.** Recommend interventions evidenced through biomechanical data and current literature. (A)
Syllabus Outline	• Introduction to problem-based learning; understanding and refining problems, teamwork, proposing solutions • Measurement within biomechanics (e.g. video, force, EMG); applications, limitations. • Impulse and momentum; concepts and application • Projectiles; concepts and application • Work, energy and power; concepts and application
Contact Hours	Indicative delivery modes: • Lectures, seminars, practical, workshops. 33 Hours • Self-directed learning 12 Hours • Independent learning 105 Hours TOTAL 150 Hours
Teaching and Learning Methods	The module will adopt a problem-based approach to address issues within biomechanics. The students will be introduced to problem-based learning to support the delivery of the module, although they will not be expected to work completely independently at this stage. Lectures and seminars will prepare students for independent work, as they are unlikely to have been exposed to this type of method previously. Lectures, seminars, practicals and workshops will also be used to address

	concepts that a majority of students find challenging. It is important that students study independently and in small groups to enable them to apply theoretical concepts to the issues they are tackling. Students will be expected to engage with directed study materials and to work independently to find their own material. **Virtual learning environment (VLE)**. This module will be supported by a virtual learning environment (VLE) that includes supporting materials and opportunities for collaboration. Links to current material relevant to the module content will be signposted here.
Key Information Sets Information	Key Information Sets (KIS) are produced at programme level for all programmes that this module contributes to, which is a requirement set by HESA/HEFCE. KIS are comparable sets of standardised information about undergraduate courses allowing prospective students to compare and contrast between programmes they are interested in applying for.

Key Information Set - Module data

Number of credits for this module	15

Hours to be allocated	Scheduled learning and teaching study hours	Independent study hours	Placement study hours	Allocated Hours
150	45	105	0	150

The table below indicates as a percentage the total assessment of the module which constitutes a -

Written Exam: Unseen written exam, open book written exam, In-class test
Coursework: Written assignment or essay, report, dissertation, portfolio, project
Practical Exam: Oral Assessment and/or presentation, practical skills assessment, practical exam

Please note that this is the total of various types of assessment and will not necessarily reflect the component and module weightings in the Assessment section of this module description:

Total assessment of the module:	
Written exam assessment percentage	100%
Coursework assessment percentage	0%
Practical exam assessment percentage	0%
	100%

Reading Strategy	**Essential readings** Any essential reading will be indicated clearly, along with the method for accessing it, e.g. students may be required to purchase a set text, be given a print study pack or be referred to texts that are available electronically or in the Library. Module guides will also reflect the range of reading to be carried out. **Further readings** Further reading will be required to supplement the set text and other printed readings. Students are expected to identify all other reading relevant to their chosen topic for themselves. They will be required to read widely using the library search, a variety of bibliographic and full text databases, and internet resources. Many resources can be accessed remotely. The purpose of this further reading is to ensure students are familiar with current research, classic works and material specific to their interests from

	their academic literature. **Access and skills** Formal opportunities for students to develop their library and information skills are provided within the induction period and student skills sessions. Additional support is available through online resources. This includes interactive tutorials on finding books and journals, evaluation information and referencing. Sign up workshops are also offered.
Indicative Reading List	The following list is offered to provide validation panels/accrediting bodies with an indication of the type and level of information students may be expected to consult. As such, its currency may wane during the life span of the module specification. However, as indicated above, CURRENT advice on readings will be available via other more frequently updated mechanisms. Books Blazevich, A. (Current Edition). *Sports Biomechanics the Basics: Optimising Human Performance.* London: A. & C. Black. Hamill, J., Knutzen, K. and Derrick, T. (Current Edition). *Biomechanical Basis Of Human Movement*. London: Lippincott Williams and Wilkins. McGinnis, P. (Current Edition). *Biomechanics of Sport and Exercise*. Champaign, IL: Human Kinetics. Journals Sports Biomechanics Journal of Applied Biomechanics Journal of Sports Sciences Journal of Electromyography and Kinesiology

Part 3: Assessment	
Assessment Strategy	The assessment strategy aligns with the teaching and learning strategy on the module by encouraging students to address current problems within biomechanics. Students will be assessed on their ability to propose solutions to problems, facilitated by an understanding of data and data collection techniques within biomechanics. Students will be assessed through a seen case study examination with a duration of 2 hours. This will include questions in relation to the case study including reference to data, manipulation of data and requiring students to comment upon the case and justify their solutions. Formative opportunities will be provided throughout the module in solving other problems, including data collection and analysis. In line with the College's commitment to facilitating equal opportunities a student may apply for alternative means of assessment if appropriate. Each application will be considered on an individual basis taking into account learning and assessment needs. For further information regarding this please refer to the VLE.

Identify final assessment component and element	Seen Case Study Examination	
% weighting between components A and B (Standard modules only)	**A:** **100%**	**B**: **0%**

First Sit	
Component A (controlled conditions) **Description of each element**	**Element weighting**
1. Seen Case Study Examination (2 hours)	100%

Resit (further attendance at taught classes is not required)	
Component A (controlled conditions) **Description of each element**	**Element weighting**
1. Seen Case Study Examination (2 hours)	100%
If a student is permitted a retake of the module under the University Regulations and Procedures, the assessment will be that indicated by the Module Description at the time that retake commences.	