

Module Descriptor

Title	Clinical Exercise Physiology					
Session	2025/26	Status	Published			
Code	SPOR10043	SCQF Level	10			
Credit Points	10	ECTS (European Credit Transfer Scheme)	5			
School	Health and Life Sciences					
Module Co-ordinator	Mia Burleigh					

Summary of Module

This module will advance understanding of the application of exercise physiology to clinical populations. The module has a specific focus on the dual role of exercise as both a method of assessment for prognosis, tracking changes in physical capacity due to adaptation or disease progression. Teaching on the module will include reviewing the underpinning epidemiology and pathophysiology of different conditions, analysing the underpinning physiology of different types of exercise testing, and the interpretation of exercise test data. The module will also explore the skills required to undertake assessments, and students will cover the main techniques associated with laboratory and field assessments of different populations.

This module will assist the student in the development of key I am UWS Graduate Attributes' to allow those that complete this module to be:

Universal:

Critical Thinker

Emotionally Intelligent

Collaborative

Work Ready:

Problem -solver

Motivated

Potential Leader

Successful:

Innovative

Resilient

Transformational

Successful completion (including achieving a pass) of this module SPOR10043 Clinical Exercise Physiology by BSc (Hons) Sport & Exercise Science students* partially fulfils CIMSPA (the Chartered Institute for the Management of Sport and Physical Activity) endorsement for the professional standard: Working with People with Long Term Conditions (along with other modules, at L9 and L10, also required to achieve endorsement). CIMSPA have career advice and further learning resources available for members. From September 2025, UWS students can receive free membership of the student category. To use the professional standard in practice, practitioner membership is required.

*The Working with People with Long Term Conditions is only available to BSc (Hons) Sport &
Exercise Science (and those on the Physical Activity & Health pathway) students as it aligns
with modules which are specific to this programme; students on other programmes can
obtain CIMSPA professional standards across specific modules.

Mod	ule Delivery	On-Cam	-Campus ¹ Hybr		Hybrid ²	Online	e ³		rk -Based	
Method								Learning⁴		
										
1	puses for	Ayr	Ayr		\(\) Lanarkshire			Online / Distance		
Mod	ule Delivery	☐ Dumfri	es		London			Learning		
					Paisley	Other (specify)				
	ns for Module	Term 1		\leq	Term 2		Term	13		
Deli										
_	g-thin Delivery	Term 1 – Term 2	L		Term 2 – Term 3		Term Term			
over more than one Term		ierm z			iem 3		rem	1 1		
Lear	rning Outcomes									
L1	Critically review the limitations to exercise of a specific disease based on pathophysiology									
L2	Perform specified exercise testing protocols and critically interpret and apply the									
	results to selected conditions, with specific reference to the role of exercise as either an assessment or treatment.							is either		
L3										
L4										
L5										
Emp	Employability Skills and Personal Development Planning (PDP) Skills									

Employability Skills and Personal Development Planning (PDP) Skills						
SCQF Headings During completion of this module, there will be an opportunity to achieve core skills in:						
Knowledge and Understanding (K and U)	SCQF 10 Demonstrating a comprehensive knowledge of the physiological responses to exercise and predict the main effects of specific conditions on the exercise response.					

¹ Where contact hours are synchronous/ live and take place fully on campus. Campus-based learning is focused on providing an interactive learning experience supported by a range of digitally-enabled asynchronous learning opportunities including learning materials, resources, and opportunities provided via the virtual learning environment. On-campus contact hours will be clearly articulated to students.

² The module includes a combination of synchronous/ live on-campus and online learning events. These will be supported by a range of digitally-enabled asynchronous learning opportunities including learning materials, resources, and opportunities provided via the virtual learning environment. On-campus and online contact hours will be clearly articulated to students.

³ Where all learning is solely delivered by web-based or internet-based technologies and the participants can engage in all learning activities through these means. All required contact hours will be clearly articulated to students.

⁴ Learning activities where the main location for the learning experience is in the workplace. All required contact hours, whether online or on campus, will be clearly articulated to students

	Demonstrating an ability to critically analyse exercise data in reference to a specific condition.							
Practice: Applied	SCQF 10							
Knowledge and Understanding	Deploying and interpreting a range of both field and?laboratory skills to evaluate the influence of exercise on the physiological responses to exercise.							
	Designing appropriate exercise taking into account the potential limitations imposed by specific conditions.							
Generic	SCQF 10							
Cognitive skills	Undertaking critical analysis, evaluation and synthesis of ideas, concepts, information and issues that are within the common understandings in the related disciplines.							
	Critically identifying, defining, conceptualising and analysing complex problems and issues							
Communication,	SCQF 10							
ICT and Numeracy Skills	Presenting or conveying, formally and informally, information about contemporary issues in talent development.							
	Using a range of ICT applications to support and enhance work at this level and adjust features to suit purpose.							
	Interpreting, use and evaluate a wide range of numerical and graphical data to set and achieve goals/targets.							
Autonomy,	SCQF 10							
Accountability and Working with Others	Exercising autonomy and initiative in tutorials & workshops but also work as part of a team.							

Prerequisites	Module Code	Module Title
	Other	
Co-requisites	Module Code	Module Title

Learning and Teaching

In line with current learning and teaching principles, a 20-credit module includes 200 learning hours, normally including a minimum of 36 contact hours and maximum of 48 contact hours.

The teaching and learning approach will utilise a flexible, hybrid delivery. Synchronous sessions will focus on, practical skills development, data interpretation, problem-based learning sets, and informal discussion and debate. This will be supported via asynchronous activities and online materials, including recorded lectures via the virtual learning environment.

Learning Activities	Student Learning
During completion of this module, the learning activities undertaken to achieve the module learning outcomes are stated below:	Hours (Note: Learning hours include both contact hours and hours spent on other learning activities)
Laboratory / Practical Demonstration / Workshop	18

Independent Study	82
n/a	
n/a	
n/a	
n/a	
TOTAL	100

Indicative Resources

The following materials form essential underpinning for the module content and ultimately for the learning outcomes:

LeMura, Linda M., and Serge P. Von Duvillard, eds. Clinical exercise physiology: application and physiological principles. Lippincott Williams & Wilkins.

Skinner, James S., ed. Exercise testing and exercise prescription for special cases: theoretical basis and clinical application. Lippincott Williams & Wilkins.

Ward S, and Palange, P (Eds) Clinical Exercise Testing. European Respiratory Society.

Ehrman, Jonathan K., et al. Clinical exercise physiology. Human Kinetics.

American College of Sports Medicine. ACSM's Clinical Exercise Physiology. Lippincott Williams & Wilkins.

(N.B. Although reading lists should include current publications, students are advised (particularly for material marked with an asterisk*) to wait until the start of session for confirmation of the most up-to-date material)

Attendance and Engagement Requirements

In line with the <u>Student Attendance and Engagement Procedure</u>, Students are academically engaged if they are regularly attending and participating in timetabled oncampus and online teaching sessions, asynchronous online learning activities, course-related learning resources, and complete assessments and submit these on time.

For the purposes of this module, academic engagement equates to the following:

100% Attendance at all module events and consistent weekly engagement with online materials.

Equality and Diversity

The University's Equality, Diversity and Human Rights Procedure can be accessed at the following link: UWS Equality, Diversity and Human Rights Code.

In line with current legislation (Equality Act, 2010) and the UWS Equality, Diversity, and Human Rights Code, our modules are accessible and inclusive, with reasonable adjustment for different needs where appropriate. Module materials comply with University guidance on inclusive learning and teaching, and specialist assistive equipment, support provision and adjustment to assessment practice will be made in accordance with UWS policy and regulations. Where modules require practical learning or assessment, alternative formats and/or roles will be provided for students with physical disabilities which impact participation.

(N.B. Every effort will be made by the University to accommodate any equality and diversity issues brought to the attention of the School)

Supplemental Information

Divisional Programn	ne Board	Sport Exercise Health							
Overall Assessment	Results	☐ Pass / Fail ☐ Graded							
Module Eligible for			☐ Yes ☑ No						
Compensation					_	r compensation,	_		
		cases where compensation is not permitted due to programme accreditation requirements. Please check							
		the	the associated programme specification for details.						
School Assessment	Board	d Sport, Exercise & Health							
Moderator		U CI	hris Ugb	olue					
External Examiner		A To	cknell						
Accreditation Detail	ls								
Module Appears in C catalogue	CPD	N N	∕es 🗌 I	No					
Changes / Version N	lumber	1							
		1							
Assessment (also re	fer to Ass	essm	ent Out	comes (Grids be	low)			
Assessment 1									
Class test (practical)									
Assessment 2									
Assessment 3									
(N.B. (i) Assessment of below which clearly of					•	-	•		
(ii) An indicative sche									
assessment is likely to feature will be provided within the Student Module Handbook.)									
Component 1	1		ı			1			
Assessment Type	LO1 I	LO2	LO3	LO4	LO5	Weighting of Assessment Element (%)	Timetabled Contact Hours		
Class test		\boxtimes				100	2		
(practical)									
Component 2									
Assessment Type	LO1 I	LO2 LO3 LO4 LO5 Weighting of Timetabled Assessment Contact Element (%) Hours							
Component 3									

Assessment Type	LO1	LO2	LO3	LO4	LO5	Weighting of Assessment Element (%)	Timetabled Contact Hours
Combined total for all components						100%	2 hours

Change Control

What	When	Who
E&D and A&E as per SEH. MC TBC.	18/03/2025	Sarah Darroch