Module Descriptor

Title	Clinical Exercise Physiology		
Session	2024/25	**Status**	
Code	SPOR10043	**SCQF Level**	10
Credit Points		**ECTS (European Credit Transfer Scheme)**	5
School	**Please select**		
Module Co-ordinator	Prof. Nick Sculthorpe		

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

Module Delivery Method	On-Campus[1] ☒	Hybrid[2] ☐	Online[3] ☐	Work -Based Learning[4] ☐
Campuses for Module Delivery	☐ Ayr ☐ Dumfries	☒ Lanarkshire ☐ London ☐ Paisley	☐ Online / Distance Learning ☐ Other (specify)	

Terms for Module Delivery	Term 1	☒	Term 2	☐	Term 3	☐
Long-thin Delivery over more than one Term	Term 1 – Term 2	☐	Term 2 – Term 3	☐	Term 3 – Term 1	☐

Learning 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.
L3	
L4	
L5	

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. Demonstrating an ability to critically analyse exercise data in reference to a specific condition.
Practice: Applied Knowledge and Understanding	**SCQF 10** Deploying and interpreting a range of both field and?laboratory skills to evaluate the influence of exercise on the physiological responses to exercise.

[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

	Designing appropriate exercise taking into account the potential limitations imposed by specific conditions.
Generic Cognitive skills	**SCQF 10** 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, ICT and Numeracy Skills	**SCQF 10** 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, Accountability and Working with Others	**SCQF 10** 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.	
Learning Activities During completion of this module, the learning activities undertaken to achieve the module learning outcomes are stated below:	**Student Learning Hours** (Note: Learning hours include both contact hours and hours spent on other learning activities)
Laboratory / Practical Demonstration / Workshop	18
Independent Study	82
Please select	
Please select	
Please select	
Please select	
TOTAL	

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 Student Attendance and Engagement Procedure, Students are academically engaged if they are regularly attending and participating in timetabled on-campus 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:

In this module, there is a high degree of student-led flexibility. You are academically engaged if you are regularly engaged with scheduled live sessions on-campus and online, including engaging with online learning activities in your own time, course-related learning resources, and with timely completion and submission of assessments.

While there may be times when conflicting priorities make participation challenging, for you to gain the most from this module it is recommended that you participate in all scheduled live classes and complete your self-directed learning activities in a timely manner.

It may be difficult to pass the assessment associated with this module if you are not regularly engaging with the module work and live classes. We may reach out to check how things are going and offer support if we observe that you have not been attending sessions or completing online activities.

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 and/or laboratory based learning or assessment required to meet accrediting body requirements the University will make reasonable adjustment such as adjustable height benches or assistance of a 'buddy' or helper.

(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 Programme Board	**Sport Exercise Health**
Overall Assessment Results	☐ **Pass / Fail** ☒ **Graded**
Module Eligible for Compensation	☒ **Yes** ☐ **No** **If this module is eligible for compensation, there may be cases where compensation is not permitted due to programme accreditation requirements. Please check the associated programme specification for details.**
School Assessment Board	Health and Life Sciences
Moderator	M Sanderson
External Examiner	A Tocknell
Accreditation Details	None
Module Appears in CPD catalogue	☒ **Yes** ☐ **No**
Changes / Version Number	V1

Assessment (also refer to Assessment Outcomes Grids below)
Assessment 1
Assessment 2
Assessment 3
(N.B. (i) Assessment Outcomes Grids for the module (one for each component) can be found below which clearly demonstrate how the learning outcomes of the module will be assessed. (ii) An indicative schedule listing approximate times within the academic calendar when assessment is likely to feature will be provided within the Student Module Handbook.)

Component 1							
Assessment Type	**LO1**	**LO2**	**LO3**	**LO4**	**LO5**	**Weighting of Assessment Element (%)**	**Timetabled Contact Hours**
Class test	☒	☒	☐	☐	☐	100	2

Component 2							
Assessment Type	**LO1**	**LO2**	**LO3**	**LO4**	**LO5**	**Weighting of Assessment Element (%)**	**Timetabled Contact 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