Module Descriptor

Title	Exercise in Extreme Environments		
Session	2024/25	**Status**	Published
Code	SPOR10046	**SCQF Level**	10
Credit Points	10	**ECTS (European Credit Transfer Scheme)**	5
School	**Health and Life Sciences**		
Module Co-ordinator	L Forrest		

Summary of Module

This module advances knowledge and practical skills developed in previous exercise physiology modules. Students will explore the impact of extreme environments (e.g. heat, cold, and altitude) on the physiological responses to exercise and critically evaluate strategies to aid performance. The module will equip students with the theoretical knowledge and practical skills that are required to support athletes preparing for competition in extreme conditions.

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
- Collaborative
- Research-minded

Work Ready:

- Problem-solver
- Motivated
- Potential Leader

Successful:

- Innovative
- Resilient
- Driven

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	Assess the effects of environmental factors on the physiological responses to exercise.
L2	Critically evaluate strategies to aid sport and exercise performance in extreme environments.
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 in extreme environments. Demonstrating critical understanding of strategies to enhance exercise performance in extreme environments.
Practice: Applied Knowledge and Understanding	**SCQF 10** Using a significant range of laboratory skills to evaluate the influence of extreme environments on the physiological responses to exercise. Designing practical preparation and interventions strategies to minimise the impact of extreme environments on exercise performance.

[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

Generic Cognitive skills	**SCQF 10** Critically identifying, defining, conceptualising and analysing complex problems and issues
Communication, ICT and Numeracy Skills	**Please select SCQF Level** Presenting or conveying, formally and informally, information about contemporary issues in exercise physiology. Using a range of ICT applications to support and enhance work at this level and adjust features to suit purpose. Interpreting, using and evaluating 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 practical sessions 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 approach delivery.? Core theoretical content will be predominantly delivered through a series of online materials, including recorded lectures via the virtual learning environment. Face to face sessions will comprise applied practical sessions in the laboratory and workshops. Much of the learning will be achieved through formative practical challenges, directed independent study tasks, group work and/or class discussion, and creative problem solving.	
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	12
Asynchronous Class Activity	6
Independent Study	82
Please select	
Please select	
Please select	
TOTAL	100

Indicative Resources

The following materials form essential underpinning for the module content and ultimately for the learning outcomes: The most recent versions of: Cheung, S. and Ainslie, P. Advanced Environmental Exercise Physiology. Champaign, IL: Human Kinetics. McArdle, W.D., Katch, F.I., and Katch, V.L. Exercise Physiology: Nutrition, Energy, and Human Performance. Baltimore: Lippincott Williams and 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:** Attending on-campus timetabled teaching sessions and particpating in additional laboratory-based sessions for assessment purposes. Regularly engaging with course-related learning resources including those in the Library and on the relevant learning platform, and complete assessments and submit these on time.

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 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	Sport and Exercise L7-11
Moderator	D Buchan

External Examiner	A Tocknell
Accreditation Details	
Module Appears in CPD catalogue	☐ **Yes** ☒ **No**
Changes / Version Number	

Assessment (also refer to Assessment Outcomes Grids below)
Assessment 1
Written report of practical work
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**
Report of practical/ field/ clinical work	☒	☒	☐	☐	☐	100	0

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%	0 hours

Change Control

What	**When**	**Who**
