

Module Specification

Module Summary Information

1	Module Title	Environmental Physiology
2	Module Credits	20
3	Module Level	6
4	Module Code	SPX6001

5	Module Overview
<p>In this module you will build upon your knowledge acquired in level 5 Sport and Exercise Physiology and Nutrition. This will include applying both theoretical and practical knowledge on how different environments affect human physiology in reference to both sports performance and health. In particular, this module considers the human capability to exercise in, tolerate, and adapt to, the conditions encountered in various environments. There will be a special focus on how hypoxic training methods can be used to enhance training adaptations. Some of the environments covered include hypoxic, hot, cold, and humid conditions.</p> <p>The skills gained in this module will support you to advise individuals/teams on the necessary preparations to perform in extreme environments on placements or future employment. As the 'international athlete' is a growing concept, this module ensures contemporary knowledge is covered. You will be expected to engage with lecture material, whilst also demonstrating data collection skills within the human performance laboratory. This will expose you to the challenges of collecting data in extreme environments and the issues practitioners face. The latter will also inform a laboratory report for your first assessment, whilst there will also be a second separate face-to-face assessment, which requires you to apply some of the concepts covered to a case study.</p>	

6	Indicative Content
<p>This module will cover the physiology of:</p> <ul style="list-style-type: none"> • Training and adaptation in extreme environments • Hot and cold climates • Altitude • Aviation • Diving 	

7	Module Learning Outcomes
On successful completion of the module, students will be able to:	
1	Critically evaluate the effect of the environment on an individual's ability to perform exercise.
2	Demonstrate a systematic understanding of the physiological mechanisms underpinning the effect of the environment on exercise performance.
3	Use and synthesise a variety of physiological measurement techniques to quantify the environmental effect on exercise performance.

8 Module Assessment			
Learning Outcome			
	Coursework	Exam	In-Person
1, 3	X		
2			X

9 Breakdown Learning and Teaching Activities	
Learning Activities	Hours
Scheduled Learning (SL) includes lectures, practical classes and workshops, peer group learning, Graduate+, as specified in timetable	60
Directed Learning (DL) includes placements, work-based learning, external visits, on-line activity, Graduate+, peer learning, as directed on VLE	74
Private Study (PS) includes preparation for exams	66
Total Study Hours:	200