Module Title	**Environmental Exercise Physiology**
Level	6
Reference No.	ASC_6_469
Credit Value	20 CAT points
Student Study Hours	Total Learning Hours: 200 Contact hours: 51 Lecture / tutorial 36 Practical 15 Student managed learning hours: 149
Pre-requisite learning	Exercise Physiology and laboratory Testing (Level 5) Exercise Nutrition (Level 5)
Co-requisites	None
Excluded Combinations	None
Module Coordinator	Steve Hunter
School/Division	Applied Science/Human Sciences
Short Description	This module is designed to develop students' understanding of the role of environment on performance and that of technological aids in optimising performance in different environments. Students will critically strategies used to support athletes in optimising their training and performance.
Aims	This unit aims to equip students to discriminate between effective and ineffective ergogenic strategies for different environment stressors (e.g. high altitude, heat and humid, circadian rhythms) by critically evaluating available evidence. The focus will be on new technologies that support athletic performance in different performance environments. It will also enable students to evaluate the impact of environmental conditions and technologies on performance through a series of laboratory sessions.
Learning Outcomes	• Critically evaluate nutritional strategies for optimising training and performance in different environmental conditions. • Develop a scientific understanding of the physiological challenges associated with different environmental conditions • Apply theoretical and research knowledge to design fit for purpose ergogenic strategies • Critically evaluate emerging technologies
Employability	The unit is designed to equip students with the skills to design ergogenic strategies that will deliver specific desired outcomes. In addition students will be able to explain the challenges imposed by training and performing in different environmental conditions. This will enable them to be effective providers of conditioning support in competitive sport arenas.

Teaching & Learning Pattern	Keynote lectures will be supported by seminar and group discussion work.
Indicative Content	• Challenges imposed by different environmental settings e.g. high altitude, hot and humid conditions • The role for nutritional ergogenic aids in optimising training and performance • Critical evaluation of emerging technologies • Laboratory session to illustrate the effects of environmental conditions on performance
Assessments *Elements and Weightings*	Mind map arguing a well-reasoned and scientifically justified outline for a particular ergogenic strategy for a scenario of the student's choice. (30%) Design a detailed evidence-based ergogenic strategy for the presented outline that will provide clear evidence on coping/adapting to the selected environmental condition. (2000 words). (70%)
Indicative Sources	Antonio, J, Stout, J.R. (2002) Supplements for Strength-Power Athletes. Human Kinetics, Leeds, UK. Antonio, J, Stout, J.R. (2002) Supplements for Endurance Athletes. Human Kinetics, Leeds, UK. Armstrong. L.E., (2000) Performing in extreme environments. Human Kinetics. Champaign Ill Burke, L. (2007) Practical Sports Nutrition. Human Kinetics, Leeds, UK. Bernadot, D. (2006) Advanced Sports Nutrition. Human Kinetics, Leeds, UK. Reilly T. and Waterhouse J., (2005) Sport, Exercise & Environmental Physiology Elsevier Reilly. .T., Atkinson. G., and Waterhouse. J., (1997): Biological Rhythms and Exercise Oxford University Press; Oxford. Wilber. R.L., (2004) Altitude training and athletic performance. Human Kinetics. Champaign Ill

Attendance	Minimum attendance is 80% of all sessions.