MODULE DESCRIPTOR

Module Title

Exercise Physiology

Reference	HS1116	Version	4
Created	September 2023	SCQF Level	SCQF 7
Approved	September 2015	SCQF Points	30
Amended	September 2023	ECTS Points	15

Aims of Module

The aim of this module is to examine the structure and function of the major physiological systems of the human body and its responses to exercise.

Learning Outcomes for Module

On completion of this module, students are expected to be able to:

1	Describe the structure of the human body's major physiological systems.
2	Explain the function of the human body's major physiological systems.
3	Describe the responses of the human body to exercise.
4	Explain the mechanisms behind the responses of the human body to exercise.
5	Demonstrate the necessary professionalism through attendance at learning opportunities required for safe practice.

Indicative Module Content

The structure and function of the key physiological systems including: cardiovascular, respiratory, muscular, nervous, endocrine, digestive and urinary systems; the physiological responses to exercise focusing on cardiorespiratory variables (e.g. heart rate, stroke volume, cardiac output, redistribution of blood, extraction of oxygen [a-VO2 difference], blood pressure, respiratory frequency, tidal volume, pulmonary ventilation), neuromuscular adaptation, hormone production and release, mechanisms of fatigue, the body?s main energy systems and their relative contribution to exercise (in relation to intensity and duration).

Module Delivery

The module will be delivered in a blended learning format Fundamental content outlined by asynchronous online resources supported with interactive tutorial sessions. Practical sessions will be used further consolidate the students learning.

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Indicative Student Workload	Full Time	Part Time
Contact Hours	70	N/A
Non-Contact Hours	230	N/A
Placement/Work-Based Learning Experience [Notional] Hours	N/A	N/A
TOTAL	300	N/A
Actual Placement hours for professional, statutory or regulatory body		

ASSESSMENT PLAN

If a major/minor model is used and box is ticked, % weightings below are indicative only.

Component 1

Type:	Examination	Weighting:	100%	Outcomes Assessed:	1, 2, 3, 4
Description:	Closed book examination				

Component 2

Type:	Coursework	Weighting:	0%	Outcomes Assessed:	5
Description:	Minimal module attendance of 80%				

MODULE PERFORMANCE DESCRIPTOR

Explanatory Text

Component 1 grade based on grading proforma. Component 2 is a minimum modular attendance requirement of 80%

Module Grade	Minimum Requirements to achieve Module Grade:
A	Component 1 A; Component 2 Pass
B	Component 1 B; Component 2 Pass
C	Component 1 C; Component 2 Pass
D	Component 1 D; Component 2 Pass
E	Component 1 E; Component 2 Pass
F	Component 1 F and/or fails Component 2
NS	Non-submission of work by published deadline or non-attendance for examination

Module Requirements

Prerequisites for Module	None, in addition to course entry requirements
Corequisites for module	None.
Precluded Modules	None.

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INDICATIVE BIBLIOGRAPHY

1	KENNEY, W.L., WILMORE, J. H. & COSTILL, D. L., 2022. Physiology of sport and exercise. 8th ed. Champaign, IL: Human Kinetics.
2	MCARDLE, W. D., KATCH, F. I. & KATCH, V. L., 2023. Exercise physiology, energy, nutrition and human performance. 9th ed. London: Lippincott Williams & Wilkins.
3	MARTINI, J.L., NATH, J.L. & BARTHOLOMEW, E.F., 2018. Fundamentals of Anatomy and Physiology. 11th ed. Harlow: Pearson Education.
4	POWERS, S.K., HOWLET, E.T & QUINDRY, J. 2021. Exercise physiology : theory and application to fitness and performance. 11th ed. New York: McGraw Hill
5	TORTORA, G. J. & DERRICKSON, B. H., 2019. Introduction to the Human Body 11th ed. New York: Wiley.