Abertay University

<https://www.abertay.ac.uk/>

Module details for Key Concepts in Sport and Exercise Physiology

Module Details

SCQF Level:

08

Module Code:

SPS203

Credit Value:

20

Year:

2020/1

Term:

Term 1

School:

School of Applied Sciences

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Description

This module is to provide the student with an understanding of the core concepts of sport and exercise physiology and the application to sport and exercise.

Aims

The aim of this module is to provide the student with an understanding of the core concepts of sport and exercise physiology and the application to sport and exercise.

Learning Outcomes

By the end of this module the student should be able to:

1. Explain the role of the endocrine system in exercise and performance.

2. Demonstrate an understanding of core bioenergetic processes related to sport and exercise.

3. Develop an understanding of fatigue in relation to exercise performance.

4. Understand and explain the cardiovascular and respiratory response during exercise.

5. Develop an understanding of exercise testing with various populations

6. Develop key skills in research through data collection, analysis and interpretation.

Indicative Content

1 Fundamentals of bioenergetics

Students will further explore the core concepts of energy production during exercise, examining the interaction of the different energy systems during exercise, how these change with intensity of activity and the role of the endocrine system. Students will also begin to explore protein metabolism

2 Neuromuscular adaptations to exercise

Students will learn about how the body adapts to different types of exercise (endurance, resistance and high intensity).

3 Fatigue

Students will learn about how the cardiovascular systems adapts to ensure training and how this can influence performance.

4 Cardiovascular adaptations to endurance training

Students will learn about how the cardiovascular systems adapts to ensure training and how this can influence performance.

5 Physiological Testing

Students will explore a number of physiological tests that are used routinely for health and fitness assessment. They will develop an understanding of the tests and their limitations and will be introduced to ethical and practical considerations when working with individuals with protected characteristics. Students will also learn how to analyse and interpret the results of physiological tests.

Teaching and Learning Work Loads

For session 2020/21 the expectation is that the teaching and learning hours stated in this descriptor will form a mix of synchronous and asynchronous student/staff activity, with the majority of this being online. The exact pattern of this activity is likely to vary from the standard face-to-face hours listed below but the overall student effort remains the same. Up-to-date information on the delivery of the module can be found on the relevant module MLS site and on your student timetable.

TEACHING AND LEARNING METHOD	HOURS
Lecture	13
Tutorial/Seminar	18
Practical Activity	18
Assessment	30
Independent	121
Total	200

Guidance notes

SCQF Level - The Scottish Credit and Qualifications Framework provides an indication of the complexity of award qualifications and associated learning and operates on an ascending numeric scale from Levels 1-12 with SCQF Level 10 equating to a Scottish undergraduate Honours degree.

Credit Value – The total value of SCQF credits for the module. 20 credits are the equivalent of 10 ECTS credits. A full-time student should normally register for 60 SCQF credits per semester.

Disclaimer

We make every effort to ensure that the information on our website is accurate but it is possible that some changes may occur prior to the academic year of entry. The modules listed in this catalogue are offered subject to availability during academic year 2020/21 , and may be subject to change for future years.

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