**Applied Exercise Physiology**

Unit 1 - Factors affecting optimal performance in physical activity and sport – Diet & Nutrition

This unit will be the first physiological unit covered within the A level course. You will investigate the components of a balanced diet, the impact of supplementation upon performance and the principles by which training programmes for specific athletic disciplines are created.

An athletes’ diet should be designed to provide the energy required during exercise and should also provide the necessary nutrients for tissue growth and repair.

With reference to the following dietary components, explain their primary functions and justify why specific athletes might benefit from their inclusion:

- Carbohydrates (Simple & Complex)
- Fats
- Proteins
- Vitamins
- Minerals
- Fibre
- Water

In conjunction with the correct diet, the use of supplements has become more prominent in recent years, with a range of methods available to enhance performance.

Research the following methods of supplementation, explaining the processes involved, whilst considering the advantages and disadvantages each may have for an athlete.

Glycogen Loading, Creatine Monohydrate, Sodium Bicarbonate, Caffeine

**Skill Acquisition**

Unit 1 - Skill and skill continuum

This unit focuses on how skill is acquired and the impact of psychological factors on performance. You will develop your knowledge and understanding of the principles required to optimise learning of new, and the development of existing, skills in a range of physical activities.

What are the characteristics of skill? Skills can be classified onto a continuum. What does this mean? Give examples.

Unit 2 - Impact of skill classification on the structure of practice for learning

This unit looks at how skills are learned through different methods of presenting practice and different types of practice.

Research the different methods of presenting practice (whole, progressive part, whole-part-whole) and the different types of practice (massed, distributed, variable, mental practice). Write up your findings.

**Sport and Society**

3.1.3.1 Emergence of globalisation of sport in the 21st century- Pre-industrial (pre-1780)

In this section, students develop an understanding of popular and rational recreation leading to the emergence of modern sport through to the globalisation of sport in the 21st century.

Research the characteristics of popular and rational recreation linked to the two-tier class system.

Research mob football and real tennis

3.1.3.2 The impact of sport on society and of society on sport

This unit introduces some of the key terms, key concepts and benefits of physical activity to both the individual and society.

Research the following key terms in sport and society:

- Society
- Socialisation
- Social processes
- Social issues
- Social structures/stratification

Explain their impact on equal opportunities in sport and society.

**Practical performance**

At the start of Year 12 you must bring evidence of your practical sport via DVD/USB footage for the A Level Team to initially assess.