

Cambridge National Sports Science– Key Stage 4

Intent:

This qualification seek to build upon the core PE provision at key stages 3 and 4. It will also enable them to make informed decisions about further learning opportunities and career pathways.

This qualification aims to enable learners to:

- develop a range of skills through involvement in sport and physical activity in different contexts and roles
- develop their ability to apply theoretical knowledge to practical situations
- gain a better understanding of the complexity of different areas of sport and the sports industry
- increase their awareness of different ways to stay involved in sport and physical activity and of different careers and roles within sport.

Term		Year 10 & 11		
		Topic	Knowledge	Skills
Term 1	RO42 - Applying Principles of Training			
	LO1 Know the principles of training in a sporting context		Progression, specificity, reversibility, moderation and variance	For this task learners need to examine and describe the principles of training and how their application will help in the design of a training programme. The learner should also relate the principles to sport and give a range of relevant and developed sporting examples throughout.
	LO2 Know how training methods target different fitness components		Aerobic and anaerobic exercise The components of fitness Specific training methods for each component of fitness	For this task learners are asked to describe aerobic and anaerobic exercise and describe the training methods for the different fitness components. It would also be beneficial if learners were to experience the training by participating in the different methods in order to gain a better understanding. The learner should ensure that they use appropriate examples and describe them in detail. They should also explain how the training methods target fitness components both individually and in combination.
	LO3 Be able to conduct fitness tests		Tests which assess fitness How to interpret the results of fitness tests	For this task learners are asked to carry out fitness tests to assess a squad members' fitness.
	LO4 Be able to develop fitness training programmes		Design a fitness training programme	The learner should design a fitness training programme to address specific needs identified in Task 3. The learner must also evaluate the programme's effectiveness.

Term	Year 10 & 11		
	Topic	Knowledge	Skills
	RO41 – Reducing the risk of sports injuries	Extrinsic factors which can influence the risk of injury Intrinsic factors which can influence the risk of injury	Identify and describe the different factors that can influence the risk of injury. Apply knowledge to sporting examples.
	LO1 Understand different factors which influence the risk of injury	The physical benefits of a warm-up The psychological benefits of a warm-up Key components of a warm-up Physical benefits of a cool down	Identify components and benefits of a warm-up and cool down. Describe the different components giving practical examples. Identify specific needs and explain why they need to be considered. Explain the influence on the risk of injury
	LO2 Understand how appropriate warm-up and cool down routines can help to prevent injury	Key components of a cool down Specific needs which a warm-up and cool down must consider	
	LO3 Know how to respond to injuries within a sporting context	Acute and chronic injuries Types, causes and treatment of common sports injuries How to respond to injuries and medical conditions in a sporting context	Identify different sporting injuries and categorise them as Acute or Chronic. Describe what acute and chronic injuries are. Give examples of how common injuries could occur. Describe symptoms on injuries. Explain how common injuries are treated.
	LO4 Know how to respond to common medical conditions	Symptoms of common medical conditions How to respond to these medical conditions	Identify common medical conditions. Describe what they are and any common symptoms. Explain how to treat common medical conditions. Apply to examples.
Term 2	RO46 – Technology in sport		
	LO1 Know how technology is used in sport	How technology is used to enhance performance. How technology is used to enhance game play. How technology is used to enhance spectatorship.	For this task learners need to demonstrate their knowledge on sports technology. They need to comprehensively describe and demonstrate their knowledge on how technology is used in sport and how it has enhanced various aspects of the sport using a range of specific sporting examples.
	LO2 Understand the positive effects of sports technology LO3 Understand the negative effects of sports technology	The positive effects of sports technology. In performance, game play, spectatorship and other areas. The negative effects of sports technology. In performance, game play, spectatorship and other areas.	Learners are asked to produce a document which shows their understanding of the positive and negative effects of sports technology. The learners need to ensure that their research is supported by examples. This requires them to research a range of sports.

Term	Year 10 & 11		
	Topic	Knowledge	Skills
	LO4 Be able to evaluate the impact of technology in sport	The factors affecting the use of technology in sport. The impact the technology has had.	For this task learners are asked to evaluate the impact of technology in sport. Learners must also make an overall judgement on whether or not the technology has been successful.
Term 3	RO43 The body's response to physical activity		
	LO1 Know the key components of the musculo-skeletal and cardio-respiratory systems, their functions and roles	Key components of the musculo-skeletal system and its function Key components of the cardio-respiratory system and its function The role of the musculo-skeletal system The role of the cardio-respiratory system	For this task learners need to be able to identify and locate the key components of the musculo-skeletal system. They also need to be able to identify and locate the key components of the cardio-respiratory system. Learners should underpin theoretical knowledge with practical activity in order to be able to identify situations where key components are in action.
	LO2 Understand the importance of the musculo-skeletal and cardio-respiratory systems in health and fitness	Benefits of cardio-respiratory fitness in everyday life Benefits of muscular strength and flexibility Benefits of muscular endurance	Learners could research information which links cardio-respiratory fitness to the prevention of disease and illness and to the maintenance of healthy levels of stress and weight (the emphasis needs to be on the benefits of cardio-respiratory fitness rather than a detailed description of the condition) Muscular strength and flexibility could be linked to ease of completion of everyday tasks and injury avoidance. The need for muscular endurance could be investigated in relation to participation in sports activities and to carry out work based tasks.
	LO3 Be able to assess the short-term effects of physical activity on the musculo-skeletal and cardio-respiratory systems	Different short-term effects of physical activity on the musculo-skeletal and cardio-respiratory systems and reasons for these. Ways to measure and record the short-term effects of physical activity on the musculo-skeletal and cardiorespiratory systems.	Learners need to be able to identify, measure and record the short-term effects of physical activity which occur to the specified body systems. They could observe or take part in a range of tests and activities. They should keep a record of pre- and post-activity results in order to be able to identify changes. Learners will need to review the changes observed and give specific explanations.
LO4 Be able to assess the long-term effects of physical activity on the musculo-skeletal and cardio-respiratory systems	Long-term effects of physical activity on the musculo-skeletal and cardio-respiratory systems and reasons for these. Ways to measure and record the long-term effects of physical activity on the musculo-skeletal and cardiorespiratory systems.	Learners are required to participate themselves or monitor another individual's involvement in a regular long-term activity programme. Learners will need to review the adaptations and give explanations as appropriate.	