

Sport Science KS4 Learning Journey



What is the course about?

Elite sport has embraced sport science disciplines wholeheartedly in the past few decades, moving from a perspective which assumed the primacy of natural talent in producing outstanding performance, to one which considers every minute detail of an athlete's training programme, rest time, environment and psychology in the pursuit of excellence. The Cambridge National in Sports Science offers learners the opportunity to study key areas of sports science including anatomy and physiology linked to fitness, health, injury, and performance. The science of training and application of training principles, and psychology in sport, and sports performance are also studied.



What will I do and how will I be assessed?

75% Coursework, assessed in 3 units:

1. *R042: Applying Principles of Training* - by completing this unit, learners will develop knowledge and understanding of the principles and methods of training, and the application of these in the design of training programmes along with practical skills in fitness training.
2. *R045: Sports Nutrition* - by completing this unit, learners will consider the composition of a healthy, balanced diet. They will also consider the necessity of certain nutrients in particular quantities and the effects of a poor diet. They will reflect upon the role that diet plays in different sports and activities, and use the knowledge gained to produce an appropriate, effective diet plan for a performer.
3. *R043: The Body's Responses to Physical Activity* - by completing this unit, learners will understand key aspects of the structure and function of the musculoskeletal and cardio-respiratory systems, and investigate some of the changes which occur to them in response to short and long term physical activity.

25% Examination assessed in one unit:

1. *R041: Reducing the Risk of Sports Injuries* - by completing this unit, learners will know how to prepare participants to take part in physical activity in a way which minimises the risk of injuries occurring, how to react to common injuries that can occur during sport, and how to recognise the symptoms of some common medical conditions, providing a good foundation to undertake formal first aid training and qualifications.
This exam can be retaken if required which can be a way of removing some of the pressure from exam situations. Exams will be taken at the end of Year 10, and half way through Year 11.



What can I do afterwards?

The Cambridge Technical Level 3, BTEC Sport Level 3 are good pathways following this course and for those that earn a Distinction, then A Level PE is an option, as well as entry-level job roles within the sector.



Electronic Links

[Bitesize](#)

[Teams](#)

[Tate Resources](#)

[AQA Specification](#)

R043

LO1: Know key components of Musculoskeletal and cardiovascular systems
LO2: Musculoskeletal and cardiovascular systems in health and fitness
LO3: Short Term effects of Physical Activity
LO4: Long Term effects of Physical Activity

R041

LO1: Factors that influence risk of injury
LO2: Understand how Warm up and Cool down prevent Injury
LO3: How to respond to injuries in sport context
LO4: Know how to respond to common medical conditions

R045

LO1: Know about nutrients for a healthy/ balanced diet
LO2: Understand importance of nutrition in sport
LO3: Effects of a poor diet on performance
LO4: Develop a Diet Plan

R042

LO1: Know the Principles of Training in Sport
LO2: Know how training methods target different fitness components
LO3: Be able to conduct fitness tests
LO4: Develop a fitness training programme

Yr11

Yr10