

OCR Level 1/2 Cambridge National Certificate in Sports Science (600/5121/8)

Who is this qualification for?

This qualification is for students aged 14–16 who wish to develop applied knowledge and practical skills in Sports Science.

What will the student study as part of this qualification?

All students will study two, mandatory, topics. The first topic of study is on reducing the risk of sports injuries. This will cover:

- the different factors that can influence the risk of injury, such as weather, equipment and age
- how to reduce these risks through, among other things, assessment of equipment or playing surface, coaching techniques and warm-ups and cool-downs in training
- different types of common sports injuries, such as fractures, cuts and bruises, and how to respond to a variety of common injuries and medical conditions that can be caused or aggravated during participation in sport.

In the second topic of study, applying the principles of training, students will learn about:

- the components of fitness, such as flexibility and power, and the difference between aerobic and anaerobic exercise
- the different types of fitness training, such as resistance and interval training, how to test fitness levels, and how to design, implement and evaluate a fitness training programme.

In addition, students will have a choice of two optional topics to study from a selection covering:

- the musculoskeletal and cardio-respiratory systems and how these respond to practical activity
- psychology in sport and psychological strategies that can be used to enhance an athlete's performance
- the importance of a balanced diet for everyday life and sports performance and the negative effects of poor nutrition on health and fitness
- the use of technology in sport, how it has developed over time and the impact it can have.

What knowledge and skills will the student develop as part of this qualification and how might these be of use and value in further studies?

In the first two topics, students will develop knowledge of the different types of injuries that can occur in sport and of the factors that can influence the risk of these injuries occurring. Students will also learn about the principles of fitness training such as progression, specificity and reversibility and the different types of training methods that an athlete can use, dependent on their training goals. Through these two topics students will develop practical skills in assessing and minimising risks that could cause injury, and in how to respond to common injuries and medical conditions. Students will carry out fitness tests and learn how to interpret the results of these tests so that they can then go on to design and implement fitness training programmes. The knowledge, understanding and skills students develop here will support their learning in the optional topics.

Depending on the options chosen, students will develop a range of other skills and knowledge.

Students who study the body's response to physical activity will learn about the major muscle groups and key components of the skeleton as well as how the lungs and the circulatory system work together and their importance in everyday health and fitness, not just in sport. They will then develop practical skills in measuring the impact of physical activity on the body and its systems.

Students can develop knowledge of how sports performance can be improved through both sports nutrition and sports psychology; they can learn how to apply psychological strategies to enhance performance or to design and implement diet plans to help improve participants' health, fitness and performance.

In technology in sport, students will develop knowledge about the different types of technology used in sport and how they can enhance performance, game play or spectatorship. Students will also learn to evaluate the positive and negative impacts that technology can have in sport.

The sport-based skills and knowledge that students will acquire through this qualification provide a valuable foundation for students who want to develop a career in the sports industry. In addition, students will develop a number of transferable skills, including planning, research and analysis, working with other people and communicating effectively that will be relevant to work or further study in other areas.

Which subjects will complement this course?

The Cambridge National Certificate in Sport is equivalent in size to a GCSE and will take 120 guided learning hours (GLH) to deliver.

The qualification is complemented by a wide range of GCSEs, including Physical Education, Biology, Chemistry, Sociology, Maths and English. It can also be delivered alongside other vocational courses in subjects such as ICT and Health and Social Care.

This qualification is part of a larger suite of Level 1/2 Cambridge Nationals in Sports Science. The suite consists of this Certificate and an Award.

The Award is 60 GLH, which is only half of the time it takes to deliver a GCSE and made up of only two topics. The two topics are the same as those required for the Certificate, which are, *Reducing the risk of injuries* and *Applying principles of training*. These two topics will give a student an introduction to human anatomy and physiology and the impacts and effects that sport and physical activity can have on a person. It is designed to be taken alongside other qualifications. The two topics covered in the Award also meet aspects of the National Curriculum for Physical Education Key Stage 4 by promoting an active and healthy lifestyle and developing personal fitness. It is designed to be taken alongside other qualifications.

This suite is also part of a wider suite of Level 1/2 Cambridge Nationals Sport qualifications that also includes the Level 1/2 Cambridge Nationals in Sports Studies, which focuses on the social, economic and cultural impacts of sport, and the development of sports skills and performance.

Schools and Colleges should note that the Certificate-sized qualification is the only qualification in this suite that is eligible for inclusion in Performance Tables.