Curriculum Progression Pathway - Sport

OCR Level 1/2 Cambridge National Certificate in Sport Science

Why is the study of Sport Science important?

Elite sport has evolved hugely in the past few decades and has embraced sport science disciplines wholeheartedly. Sports Science considers every minute detail of an athlete's training programme, rest time, environment and psychology in the pursuit of excellence. The OCR Cambridge National award in Sport Science offers students the opportunity to study key areas of Sport 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. Sport is a high-profile and expanding industry and there is a growing need for qualified professionals and capable volunteers. It is also widely recognised that regular participation in sport and physical activity is beneficial both to individuals and to society as a whole. This course provides a perfect foundation for students who wish to move into this form of employment post education and will motivate students to carry on participating in physical activity long after they leave.

What skills will the study of Sport Science teach you?

The Cambridge National in Sport Science offers students the solid foundation required for further study or progression into industry. Students will develop a wide range of highly desirable and transferable skills such as:

- Communication
- Problem solving
- Team work
- Independent study
- Performing under pressure.

What will you know and understand from your study of Sport Science?

Students will study two mandatory units (M) and then individual centres will pick from two further options.

Reducing the risk of sports injuries (M): Taking part in sport and physical activity puts the body under stress. Students will learn how to reduce the risk of injury when taking part in sport through activities such as warm-ups, and knowing how to respond to injuries and medical conditions in a sport setting are all vital skills within the sport and leisure industry

Applying principles of training (M): The role of a coach is to keep their performers in peak condition by monitoring individuals' fitness and designing bespoke training programmes. Students will learn the principles of training and how different methods target different components of fitness. They will also learn how to conduct fitness tests, interpret the results and design and evaluate fitness programmes.

The body's response to physical activity: Understanding how the body changes and responds to physical activity means that body systems can be optimised to improve sports performance and healthier lifestyles. Students will learn about the key components of the muscular-skeletal and cardio-respiratory systems, their functions and roles in physical activity and how to measure and record short-term and long-term effects of physical activity.

Sport psychology in elite sport: The key success factor is often the ability to perform under competitive pressure. Sport psychologists support top performers to ensure they can perform at their best under pressure. Students will learn about the relationship between personality and sports performance, the effect of motivation, understand the impact of aggression, arousal and anxiety on performance and learn how to apply sport psychology strategies.

Sports nutrition: Correct nutrition is a vital part of a sport person's preparation; incorrect nutrition can lead to deterioration in performance and overall health. Students will learn about different nutrients and supplements and their importance to different activity types. They will also learn about the effects of a poor diet on performance and health and will develop and evaluate diet plans for performers.

Technology in sport: Optimising new technology can give sports performers an advantage over their competitors. Students will consider ways technology is used to enhance sports performance and experience for both spectators and performers and will evaluate the impact of technology in sport, considering the downsides as well as its advantages.

How can you deepen your understanding of Sport Science?

The English Institute of Sport (EIS) located in Sheffield is a perfect environment for students to see how an elite sporting facility functions as well as the opportunities it provides. We try where possible to visit as part of the course. We also work closely with Sports Science experts from local football clubs who depending on availability can share their experiences by visiting the students and delivering lecture based material. After school enrichments are regularly offered to catch up, improve or extend knowledge. Useful websites and further reading include:

- OCR Past papers
- RO41 Injuries Simplified Guide
- Use of www.theeverlearner.com
- Follow the department Twitter Account

How are you assessed in Sport Science?

There are 6 assessment points each year that we term Praising Stars©. We assess how students, at their current stage of study, are on track to reach their end of stage targets which are formulated on aspirational expectation from their KS2 starting points. We make an informed prediction from our holistic assessments based on our subject mapping of expectation across the Sports Science curriculum.

The Sports Injuries unit is a timetabled exam. The question paper consists of short-answer questions, extended-response questions and some use of multiple-choice questions. The other units are centre-assessed and OCR moderated tasks.

Key Assessment Objectives

Two mandatory units:

Unit R041: Reducing the risk of sports injuries

Unit R042: Applying principles of training

Any two from:

Unit R043: The body's response to physical activity

Unit R044: Sport psychology

Unit R045: Sports nutrition

Unit R046: Technology in sport

Study of Sport Science can lead to a wide range of careers:

- Exercise physiologist
- Fitness centre manager
- Personal trainer
- Secondary school teacher
- Sports administrator
- Sports coach
- Sports development officer
- Sports therapist

Students First
OUTWOOD
GRANGE ACADEMIES TRUST

OCR Level 1/2 Cambridge National Certificate in Sport Science Course Overview		
Term	**Year 1**	**Year 2**
Autumn 1	Applying the principles of training	Reducing the risk of injury
Autumn 2	Applying the principles of training	Reducing the risk of injury
Spring 1	Applying the principles of training	Reducing the risk of injury
Spring 2	Nutrition	Technology in Sport
Summer 1	Nutrition	Technology in Sport
Summer 2	Nutrition	Technology in Sport