

## Sport Science Curriculum Intent

### Our ambitious aims

***By the end of their time with us at Gloucester Academy, our students will be able to:***

- To understand and have a keen interest in the scientific world of sport, whilst putting theories and concepts into practice.
- Inspire a love of sport so students become more active and understand how this impacts their physical and mental fitness.
- Continue their study of sport Post-16 by completing A-Levels or Level 3 courses which will enable them to go onto study sport based courses at the very best universities, allowing them to access the very best careers.

### Big ideas

***To achieve our aims, students will be exposed to and develop a deep understanding of several powerful Sport Science concepts***

Concept	Definition	Rationale
<b>Sporting injuries</b>	A sporting injury is any damage caused to the body as a result of physical activity, sport or exercise.	Students will learn how to reduce the risk of sports injuries and how to respond to any such injuries.
<b>Common medical conditions</b>	Common medical conditions are health impairments that are caused as a result of disease, illness or injury.	Students will understand how to recognise the symptoms of common medical conditions.
<b>Components of fitness</b>	A way of identifying a particular aspect of a person's physical fitness.	Students need to understand the different components of fitness so that they are able to then conduct a range of fitness tests.
<b>Fitness testing</b>	A method of evaluating a person's physical fitness based on their performance in relation to their peers.	Students will complete a range of fitness tests to evaluate their performance whilst also understanding the advantages and disadvantages of each test.
<b>Training programme</b>	A plan put in place to help an individual improve an aspect(s) of their physical fitness.	Students will plan, implement and evaluate a training programme as well as interpret test results to inform the design of their programme.
<b>Response of the body to exercise</b>	What happens to the body during and after exercise as a result of taking part in activity.	Students need to be able to explain how the cardiorespiratory and musculoskeletal systems provide energy and movement during physical exercise.
<b>Technology in sport science</b>	This is the technical means by which an individual enhances their performance in sport using items such as watches, cameras etc.	Students will learn how the use of technology can inform the changes taking place within their body and guide their training/participation.

## Curriculum journey

***In Sport Science, our students will study an ambitious curriculum that is both challenging for all and broad and balanced in scope.***

Year	Summary of study	Narrative & Rationale
<b>10</b>	<ul style="list-style-type: none"> <li>- Components of fitness</li> <li>- Principles of training</li> <li>- Planning a fitness training programme.</li> <li>- Use of technology in sport</li> <li>- The cardio-respiratory system</li> <li>- The musculo-skeletal system</li> </ul>	<p>Students are able to use KS3 knowledge from Science, Physical Education and Character Education to support their learning of this qualification.</p> <p>In Year 10, students begin by learning about the components of fitness and how they relate to different sports. Students are able to understand the main aspects required for a sport or activity in order to be successful and therefore can better prepare themselves or individuals they support in the future to be successful sports people. This knowledge is then used to assess which areas a person needs to train to improve. We use this knowledge to support the learning of the principles of training. These principles of training are able to be applied to a fitness training programme. Students learn to plan, participate in and evaluate a fitness programme which they are then able to use after education to continue a love of Sport and Physical Activity. After this, we then look at the physiological science of sport. Students study content on the cardio-respiratory system and the musculo-skeletal system so they are better able to understand how the body works and apply this knowledge to their own performance in sport. They are also able to understand what hinders a person's ability to be successful or enjoy participation in sport. Students then begin to draw these sections of knowledge together to understand how exercise can have an impact on these body systems. This understanding is then used to assess improvements in a person's physical health from a range of starting points. Next we address the issues related to injury in sport. We identify the factors that can influence injury and ways of preventing sporting injuries from occurring. This links seamlessly to the causes and treatments of sports injuries. Students will need to use this knowledge to determine the best cause of action for the injury presented to them.</p>
<b>11</b>	<ul style="list-style-type: none"> <li>- Short-term effects of exercise on the cardio-respiratory and musculo-skeletal systems</li> <li>- Long-term effects of exercise on the cardio-respiratory and musculo-skeletal systems</li> <li>- Factors that influence the risk and severity of injury</li> <li>- Warm up and cool down routines</li> <li>- Types of sports injuries</li> <li>- Causes of sport injuries</li> <li>- Treatment and rehabilitation of sports injuries</li> <li>- Causes, symptoms and treatment of medical conditions</li> </ul>	