

# YEAR 10 GCSE PE Curriculum Overview



## Year 10 Overview

The aim of GCSE PE is designed to help students develop their understanding and knowledge through practical involvement in sporting and physical activities. Students will be equipped with the skills and knowledge to design their own Personal Exercise Program (PEP) which allows them to improve their own performance in their chosen sport. Taking GCSE PE has many benefits including:

- **Real applied** focus where students will be encouraged to put the theory they are learning into context and apply what they have learned to their own practical performance.
- Reflecting today's **global world** – the issues and topics students will learn about are up to date and will help them understand some of the key global influences in the world of sport today.
- Gaining a **well-rounded understanding of PE** – through an engaging introduction to the world of PE, sport and sport science, students will begin to appreciate how the human body allows us to perform amazing sporting feats and how fitness and physical training contribute to a healthy lifestyle, as well as improved performance.

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Week Number	Themes/ Topics	Key Knowledge & Skills	Key Assessments
<p><b>1-6</b> <b>(Autumn 1)</b></p>	<p>Paper 1: Fitness and body systems.</p> <p>Topic 1 – Applied anatomy and physiology</p>	<p>In this topic, students will develop their knowledge and understanding of the key body systems and how they impact on health, fitness and performance in physical activity and sport through the following content;</p> <ol style="list-style-type: none"> <li>1. Functions of the skeleton</li> <li>2. Classification of bones</li> <li>3. Structure of the skeleton</li> <li>4. Classification and movements at joints</li> <li>5. Role of ligaments and tendons</li> <li>6. Classification and characteristics of muscle types</li> <li>7. Location of voluntary muscles</li> </ol>	<p>End of unit test</p> <p>Exam question homeworks</p>
<p><b>7-13</b> <b>(Autumn 2)</b></p>	<p>Paper 1: Fitness and body systems</p> <p>Topic 1 continued – Applied anatomy and physiology</p>	<p>For this unit students will continue with Topic one and continue to learn about key body systems and their application to sport.</p> <ol style="list-style-type: none"> <li>1. Antagonistic muscle pairs</li> <li>2. Characteristics of slow/ fast twitch muscle fibres</li> <li>3. How the skeletal/ muscular system work together in physical activity/ sport</li> <li>4. Functions and importance of red, white, platelets and plasma cells</li> <li>5. Composition of inhaled/ exhaled air</li> <li>6. Vital capacity and tidal volume</li> <li>7. Location of main components of respiratory system</li> <li>8. Structure of alveoli to enable gas exchange 2</li> <li>9. How the cardiovascular and respiratory system work together during physical activity/ sport</li> <li>10. Energy – use of glucose and oxygen</li> <li>11. Energy sources – fats and carbohydrates as fuel</li> <li>12. Short and term effects of exercise</li> </ol>	<p>End of unit test of all body systems</p> <p>Exam question homeworks</p>
<p><b>14-18</b> <b>(Spring 1)</b></p>	<p>Paper 1: Fitness and body systems</p> <p>Topic 2: Movement analysis</p>	<p>In this topic students will learn about levers, planes and axes. Movements will be analysed referring to the 3 classes of levers and the identifying and explaining the role of the load, effort and fulcrum for:</p> <ul style="list-style-type: none"> <li>• First class lever</li> <li>• Second class lever</li> <li>• Third class lever</li> </ul>	<p>End of topic 1 test</p> <p>Exam question homeworks</p>

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		<p>Students will then go on to classify the three types of levers into mechanical advantage or mechanical disadvantage.</p> <p>Planes and axes of movement will be explored through identifying 3 planes of movement: transverse, sagittal and frontal, and the 3 axes of rotation: vertical, frontal, sagittal. They will look at how they work together to produce different movements in sport.</p>	<p>End of topic 1 and topic 2 test</p>
<p><b>19-24 (Spring 2)</b></p>	<p>Paper 1: Fitness and body systems</p> <p>Topic 3: Physical training</p>	<p>Students need to learn all the components of skill-related fitness including agility, balance, Coordination, Power and Reaction time:</p> <p>Students also need to apply the different fitness components to the appropriate sport. Students also need to understand why fitness components are important for successful participation in given sports in terms of; being able to successfully meet the physical demands of the sport in order to reach optimal performance, being able to successfully meet the skill-related demands of the sport in order to reach optimal performance, being able to perform efficiently and giving due consideration to the type of event/position played.</p> <ul style="list-style-type: none"> <li>• Flexibility: sit and reach test (usually measured in cm or inches)</li> <li>• Strength: grip dynamometer (usually measured in KgW)</li> <li>• Aerobic Endurance: o multi-stage fitness test, known as the bleep test (usually predicted in ml/kg/min)</li> <li>• Speed: 35m sprint (usually measured in s)</li> <li>• Agility: Illinois agility run test (usually measured in s)</li> <li>• Anaerobic power: vertical jump test (usually measured in kgm/s)</li> <li>• Muscular endurance: one-minute press-up, one-minute sit-up (usually measured in number of reps/minute)</li> <li>• Body composition: Body Mass Index (BMI). Bioelectrical Impedance Analysis (BIA).</li> </ul> <p>Students will then focus on the Requirements to successfully take part in each fitness test: Students will need to know about pre-test procedures (informed consent, calibration of equipment). Students will also need to have knowledge of published standard test methods and equipment/ resources required. Linked the this, students will be able to explain the purpose of each fitness test as well as being able to accurately measure and record of test results. Students will then be able to process the test results for interpretation. Finally, students will be able to explain the advantages and disadvantages of fitness test methods.</p>	<p>Fitness testing practical to arrive at baseline data for PEP.</p> <p>Analysis of fitness testing results against normative data and highlighting strengths and weaknesses.</p> <p>Exam questions for homework and deliberate practice in books</p>

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<p><b>25-30</b> <b>(Summer 1)</b></p>	<p>Topic 3: Reducing risk and improving performance</p>	<p>Students will explore the different ways in which performance can be enhanced. This involves through:</p> <ul style="list-style-type: none"> <li>• Use of principles of training</li> </ul>	<p>Exam questions for homework and deliberate practice in books</p>

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		<ul style="list-style-type: none"> <li>• Diet and diet manipulation</li> <li>• Performance enhancing drugs</li> <li>• Parts of a training session</li> <li>• Efficient warm up and cool down</li> <li>• Preventing injury</li> <li>• Possible injuries and treatment</li> </ul>	
<p><b>31-38</b> <b>(Summer 2)</b></p>	<p>Paper 1: Fitness and body systems</p>	<p>In preparation for the end of year assessment, revision will take place of all component one content. This will then lead to the full paper 1 mock exam being sat by students which is 1hr.30mins and equates to 35% of the course marks. This does not go towards their final grade as it is a mock exam.</p> <p>Students will then apply all this knowledge from component one to complete a PEP for component 4 of the specification. Students will have already collected baseline data for this and will begin section A which is analysing their fitness test data and collecting and analysing their performance data for a sport of their choice. They will then use this analysis to arrive at a component of fitness to improve for a specific area of weakness in their sport and then choose the most appropriate method of training to do this. Finally, they will produce a plan, ready to complete at the start of year 11.</p>	<p>Paper 1 mock exam – full paper sat in exam conditions</p>