

Year 10 GCSE PE

Overall Intent:

In Year 10, students study component 1 from the Edexcel GCSE Physical Education specification. In doing so, they build the understanding to explore Fitness and Body Systems and Practical Performance. They develop skills including numeracy, communication, and an understanding of practical performances to support progression to the next level of study. There is a blend of scientific and social knowledge. By looking at a range of bones, muscles, fitness components and fitness tests students begin to develop their ability to respond, and to think and to be able to articulate their ideas. The GCSE course is designed to build upon and embed the physical development and skills learned in Key Stage 3. This should encourage learners to become more competent, confident, and expert in their techniques. Students should then be able to apply skills across different sports and physical activities whilst deepening their knowledge of content studied previously.

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Topic/Area of study	APPLIED ANATOMY AND PHYSIOLOGY STRUCTURE AND FUNCTIONS OF THE MUSCULO-SKELETAL SYSTEM	APPLIED ANATOMY AND PHYSIOLOGY STRUCTURE AND FUNCTIONS OF THE CARDIO-RESPIRATORY SYSTEM ANAEROBIC AND AEROBIC EXERCISE EFFECTS OF EXERCISE USE, ANALYSIS, PRESENTATION AND EVALUATION OF DATA	MOVEMENT SYSTEMS LEVER SYSTEMS PLANES AND AXES OF MOVEMENT PHYSICAL TRAINING: THE RELATIONSHIP BETWEEN HEALTH AND FITNESS THE COMPONENTS OF FITNESS	PHYSICAL TRAINING: THE PRINCIPLES OF TRAINING LONG-TERM EFFECTS OF EXERCISE USE, ANALYSIS, PRESENTATION AND EVALUATION OF DATA	PHYSICAL TRAINING: HOW TO OPTIMISE TRAINING AND PREVENT INJURY	PHYSICAL TRAINING: HOW TO OPTIMISE TRAINING AND PREVENT INJURY EFFECTIVE USE OF WARM-UP AND COOL-DOWN USE, ANALYSIS, PRESENTATION AND EVALUATION OF DATA

<p>Key learning aims – knowledge and skills</p>	<p>Functions of the skeleton. Classification of bones. Structure of the skeletal system. Classification of joints. Movement possibilities at joints Role of ligaments and tendons. Classification and characteristics of muscle types. Location and role of voluntary muscular system. Antagonistic pairs. Characteristics of fast and slow twitch muscle fibre types. How the skeletal and muscular system work together.</p>	<p>Functions of the cardiovascular system applied to performance in physical activities. Structure of the cardiovascular system and their role in maintaining blood circulation during performance. Structure of arteries, capillaries, and veins. The mechanisms required for the redistribution of blood flow during exercise and at rest. Functions of red and white blood cells. Composition of blood. Vital capacity and tidal volume. Location of main components of the respiratory system. Structure of alveoli to enable gas exchange. How the cardiovascular and respiratory systems work together.</p>	<p>First, second and third class levers and their use in physical activity. Mechanical advantage and disadvantage. Movement patterns using body planes and axes, frontal, sagittal, vertical axes. Movement patterns in planes and axes for tucked and piked somersault, cartwheel and a full twist jump in trampolining. Definitions of fitness, health, exercise and performance and the relationship between them. Components of fitness and the relative importance of these in relation to physical activity.</p>	<p>Planning training using the principles of training. Training thresholds and the Karvonen formula. Training methods, fitness classes for specific components of fitness. Advantages and disadvantages of these. Long-term effects of anaerobic and aerobic training on the Musculo-skeletal and cardio-respiratory systems. Benefits of long term training.</p>	<p>Use of Par-q injury prevention Injuries that occur in physical activity and sport. Treatment of injuries (RICE) Performance enhancing drugs (PEDs)</p>	<p>Purpose and importance of warm-ups and cool-downs. Phases of warm-up and their significance in preparation for physical activity and sport. Activities to include in warm-ups and cool downs. Developing knowledge and understanding of data analysis. Using qualitative and quantitative methods of data collection. Analyse and evaluating statistical data and interpreting it against normative data within sport.</p>
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Assessment	<p>End of topic assessment</p> <p>Ongoing practical assessment</p>	<p>End of topic assessment</p> <p>End of term in-class exam</p> <p>Ongoing practical assessment</p>	<p>End of topic assessment</p> <p>Ongoing practical assessment</p>	<p>End of topic assessment</p> <p>End of term in-class exam</p> <p>Ongoing practical assessment</p>	<p>End of topic assessment</p> <p>Ongoing practical assessment</p>	<p>End of topic assessment</p> <p>End of year exam</p> <p>Ongoing practical assessment</p>