



### Physical Education - EdExcel

Approximate available lessons based on 5 lessons per week over 37 week year; assuming approximately 16 lessons missed for holidays/other subject activities/PSHE/exams

Exact curriculum timings are approximate due to holidays/ other subject trips and activities / PHSE / internal examinations

All topics across KS5 will have ongoing formative assessment including:

- Questioning techniques
- Peer/self-marking and assessments
- Written exercises
- Presentations
- Class activities
- Practical work
- Everlearner Learning Platform

All topics will have some form of summative assessment to test the knowledge and skills covered within the topic. These will take the forms of:

- End of topic tests
- Everlearner Learning Platform

All topics will include practical work to ensure that the links between practical and theory are encouraged and emphasised.

Year 12 Physical Education		Year 13 Physical Education	
Teacher 1 - Component 1: Scientific Principles of Physical Education	Teacher 2 - Component 2: Psychological and Social Principles of Physical Education	Teacher 1 - Component 1: Scientific Principles of Physical Education	Teacher 2 - Component 2: Psychological and Social Principles of Physical Education
<b>Term 1</b>		<b>Term 1</b>	
<p><b>Topic 1: Applied anatomy and physiology</b> <b>Musculoskeletal System</b></p> <ul style="list-style-type: none"> <li>• Key muscles and bones; types of movement</li> <li>• The stretch-shortening cycle</li> <li>• The concept of agonist, prime mover, antagonist, fixator, synergist</li> <li>• Movements during physical activities and sporting movement</li> <li>• Characteristics and anatomical make-up of fibre types</li> <li>• Structure of fibre types</li> <li>• Fibre recruitment patterns for endurance and power based events</li> <li>• Acute responses of the muscular and skeletal systems</li> </ul> <p><b>Biomechanics</b></p> <ul style="list-style-type: none"> <li>• Levers and movement</li> <li>• Newton's Three Laws of Motion</li> <li>• Principles related to the stability of the body in relation to the centre of mass and its implication in physical activities</li> <li>• The calculation of force and resultant force</li> </ul>	<p><b>Topic 4: Sport psychology</b> <b>Personality</b></p> <ul style="list-style-type: none"> <li>• Personality theories</li> <li>• Interactionist theory</li> <li>• Wood's Triadic Model</li> <li>• Understanding how attitudes are formed and shape behaviour</li> <li>• Changing attitudes: negative to positive – 'cognitive dissonance'</li> </ul> <p><b>Arousal, Anxiety and Aggression</b></p> <ul style="list-style-type: none"> <li>• Arousal and its effect on performance</li> <li>• Arousal and achieving optimal levels for performance</li> <li>• Inverted-U hypothesis, Hull's Drive Theory</li> <li>• Anxiety and its effect on performance.</li> <li>• Strategies to control anxiety: somatic and cognitive techniques.</li> <li>• Relationship between arousal and anxiety</li> <li>• Aggression v. Assertion</li> <li>• Key theories</li> </ul> <p><b>Stress</b></p> <ul style="list-style-type: none"> <li>• Stress and stressors leading to anxiety – symptoms of physiological, psychological, and behavioural anxiety</li> </ul>	<p><b>Topic 1: Applied anatomy and physiology</b> <b>Energy Systems</b></p> <ul style="list-style-type: none"> <li>• Forms of energy to include: mechanical, electrical, potential, chemical and kinetic.</li> <li>• Review of aerobic and anaerobic energy production</li> <li>• The role of energy as adenosine triphosphate (ATP)</li> <li>• The characteristics and physiology of the three energy pathways</li> <li>• The energy continuum when based around athletic running events.</li> <li>• Positioning of athletic running events on the energy continuum</li> </ul> <p><b>Fatigue &amp; Recovery</b></p> <ul style="list-style-type: none"> <li>• Factors that contribute to fatigue: EPOC and the stages of recovery.</li> <li>• The fast component - re-phosphorylation; the speed and rate of phosphogen replenishment.</li> <li>• The slow component of recovery</li> <li>• Energy systems and how they respond acutely to the demands of warming up/priming exercise.</li> </ul> <p><b>Topic 2: Applied Movement Analysis</b> <b>Linear Motion</b></p> <ul style="list-style-type: none"> <li>• Factors associated with linear</li> <li>• Motion</li> </ul>	<p><b>Topic 3: Skill acquisition</b> <b>Coach and performer</b></p> <ul style="list-style-type: none"> <li>• Coaching styles</li> <li>• Tactics and strategies in a game/competition/performance</li> <li>• Analysis of skills</li> <li>• How to compare to higher level</li> <li>• Performer</li> </ul> <p><b>The classification and transfer of skills</b></p> <ul style="list-style-type: none"> <li>• Classification continuums of skills</li> <li>• The uses of transfer of skills</li> </ul> <p><b>Learning theories</b></p> <ul style="list-style-type: none"> <li>• The associative theories</li> <li>• Reinforcement - and its application to learning skills</li> <li>• Thorndike's three laws in relation to learning</li> <li>• Fitts and Posner's three stages of learning and the role of feedback at each stage</li> </ul> <p><b>Practices</b></p> <ul style="list-style-type: none"> <li>• Practice methods</li> <li>• Practice structure</li> <li>• Measuring effectiveness</li> </ul> <p><b>Guidance &amp; Feedback</b></p> <ul style="list-style-type: none"> <li>• The types, purpose and effectiveness of guidance methods</li> <li>• Uses of technology to underpin guidance methods</li> </ul>

	<ul style="list-style-type: none"> <li>• Cognitive/Somatic Stress management techniques to optimise performance</li> </ul>		<ul style="list-style-type: none"> <li>• Types, purpose and effectiveness of feedback</li> <li>• Use of technology to support feedback</li> </ul>
<b>Term 2</b>		<b>Term 2</b>	
<p><b>Cardiorespiratory System</b></p> <ul style="list-style-type: none"> <li>• The structure and function of the respiratory system</li> <li>• The physiology of the respiratory system</li> <li>• Respiratory values and capacities</li> <li>• The anatomical components and structure of the cardiovascular system</li> <li>• The physiology of the cardiovascular system</li> <li>• Bradycardia</li> <li>• Acute responses of the cardio respiratory and cardiovascular systems</li> <li>• Unhealthy lifestyles</li> </ul> <p><b>Neuromuscular System</b></p> <ul style="list-style-type: none"> <li>• The anatomy of the neuromuscular system</li> <li>• The physiology of a muscular contraction</li> <li>• Acute responses of the neuromuscular system</li> <li>• Chronic adaptations of cardiorespiratory, cardiovascular, muscular-skeletal and neuro-muscular systems</li> </ul>	<p><b>Motivation</b></p> <ul style="list-style-type: none"> <li>• Motivation</li> <li>• Key theories and their application of to optimise performance</li> <li>• Social facilitation</li> <li>• The role of and effect of 'others'</li> <li>• Strategies to combat social inhibition</li> <li>• Characteristics of a successful and cohesive group/team</li> <li>• Task and social cohesion</li> <li>• Key theories:</li> <li>• Carron</li> <li>• Steiner</li> <li>• Group dynamics</li> <li>• Social loafing</li> <li>• Ringlemann Effect</li> </ul> <p><b>Goal Setting</b></p> <ul style="list-style-type: none"> <li>• SMART(ER) targets</li> <li>• The importance and relevance of goal setting and the different types used to optimise performance</li> </ul> <p><b>Self Efficacy</b></p> <ul style="list-style-type: none"> <li>• Self-confidence and the self-concept (Humanist)</li> <li>• Vealey's model of sport specific confidence including relevant sporting examples</li> <li>• Bandura's Self-Efficacy Theory</li> <li>• Learned helplessness and its impact on performance</li> </ul>	<p><b>Angular Motion</b></p> <ul style="list-style-type: none"> <li>• Factors associated with angular momentum</li> <li>• Factors affecting moment of inertia</li> <li>• Application and understanding of how angular motion is applied in a sporting context</li> <li>• Effects of increasing or decreasing the moment of inertia when rotating about an axes</li> </ul> <p><b>Projectile Motion</b></p> <ul style="list-style-type: none"> <li>• Forces acting during flight that affect projectile motion</li> <li>• Knowledge of the factors that determine the horizontal displacement of a projectile</li> <li>• Application of projectile motion in refining technique in different sporting contexts</li> <li>• Technique modification through the application of technology</li> <li>• Forces acting during flight that affect projectile motion</li> <li>• Knowledge of the factors that determine the horizontal displacement of a projectile</li> <li>• Application of projectile motion in refining technique in different sporting contexts</li> </ul>	<p><b>Memory Models</b></p> <ul style="list-style-type: none"> <li>• Open and closed loop control models</li> <li>• Application of each loop control model</li> <li>• An overview of the components of information processing</li> <li>• Welford and Whiting models, to include: Input, stimulus identification, perception, selective attention, response selection, response, programming and output.</li> <li>• The role of detection, comparison and recognition (DCR) phases when processing information</li> <li>• The characteristics and functions of the three memory systems</li> <li>• The link between STSS, STM and LTM</li> <li>• Processing information in terms of retrieval and rehearsal and how this affects output</li> <li>• Different types of Reaction time</li> <li>• Factors affecting reaction time and ways a coach and performer can improve reaction time so as to optimise performance</li> <li>• Measuring reaction, movement and response time using appropriate technology.</li> <li>• Using data to understand reaction times and Hick's Law</li> <li>• Plotting, interpreting and analysing relevant data</li> </ul>

	<ul style="list-style-type: none"> <li>• Reasons for success and failure in sport</li> </ul>		<ul style="list-style-type: none"> <li>• Schema theory as an organised package of information stored in LTM that updates and modifies motor programmes using four sources of information</li> </ul>
<b>Term 3</b>		<b>Term 3</b>	
<p><b><u>Topic 2: Exercise physiology and applied movement analysis</u></b>  <b>Nutrition &amp; Supplementation</b></p> <ul style="list-style-type: none"> <li>• Dietary manipulation for performance pre, during and post physical activity</li> <li>• Optimal weight for performance</li> <li>• Electrolytes, hypotonic, hypertonic and isotonic solutions</li> <li>• The role and use of supplementation</li> <li>• Contemporary supplements for enhancing performance</li> <li>• Strategies for ensuring optimal food, fuel and fluid intake</li> </ul> <p><b>Fitness Testing &amp; Components of Fitness</b></p> <ul style="list-style-type: none"> <li>• Fitness testing</li> <li>• Plotting, calculating and interpreting fitness test results</li> <li>• Determinants of movement/running</li> <li>• Components of fitness</li> <li>• Principles of training</li> </ul> <p><b>Methods of Training, Periodisation &amp; Altitude</b></p> <ul style="list-style-type: none"> <li>• Measuring and calculating intensity</li> <li>• Target Heart Rate and Karvonen's theory</li> <li>• Contemporary technologies</li> <li>• Periodisation</li> </ul>	<p><b><u>Topic 5: Sport and society</u></b>  <b>The factors leading to the emergence and development of modern day sport</b></p> <ul style="list-style-type: none"> <li>• Factors leading to the emergence and development of modern day sport</li> <li>• Historical and social context of mob activities and popular recreation</li> <li>• The effect of the Industrial Revolution on British society and the impact on recreational activities</li> <li>• The socio-cultural factors that influenced the rationalisation of sport</li> <li>• The emergence of competing for corporations</li> <li>• ParaSport movement and improved opportunities for women in global sport</li> </ul> <p><b>Globalisation of sport</b></p> <ul style="list-style-type: none"> <li>• Migration patterns of sporting labour</li> <li>• Colonial diffusion across the British Empire</li> <li>• The creation, development and impact of national and international governing bodies</li> <li>• The ideals, context and impact of the modern Olympic Games and other international sporting competitions</li> </ul>	<p><b>Fluid Mechanics</b></p> <ul style="list-style-type: none"> <li>• Technique modification through the application of technology</li> <li>• Types of spin</li> <li>• Magnus effect</li> <li>• Technology: how fluid mechanics has influenced technological advancements in technique modification, clothing/suits, equipment/apparatus.</li> </ul> <p><b>Revision</b></p>	<p><b><u>Topic 5: Sport and society</u></b>  <b>Commercialisation</b></p> <ul style="list-style-type: none"> <li>• Commercialisation of sport and its impact on society</li> <li>• Commercialisation and commodities</li> <li>• The historical and social context of commercialisation: broken time payments; spectatorism; developments in the media</li> <li>• The events of the 1968, 1972 and the 1976 Olympics and their impact on the 1984 games</li> <li>• Commercialisation of future sport created by Peter Ueberroth at the 1984 Olympic Games</li> <li>• Franchises in sport (USA and UK), the power shift from the governing bodies to the media, the concept of the golden triangle Sports stars as global stars.</li> <li>• The concept of competitive sports fixtures and events being played on other continents</li> </ul> <p><b>Revision</b></p>

<ul style="list-style-type: none"> <li>• Methods of training and their appropriateness for different activities</li> <li>• Advantages and disadvantages of different methods of training</li> <li>• Preparation for performance at altitude, in heat and in humidity</li> <li>• Strategies for speeding up recovery</li> </ul>	<p><b>Participation and health of the nation</b></p> <ul style="list-style-type: none"> <li>• Barriers to participation, the benefits of mass participation on the health of the nation and the impact of wearable technology on participation</li> <li>• Mass participation and initiatives/programmes</li> <li>• Participation trends in the UK in the 21<sup>st</sup> century</li> </ul>		
<p><b>Term 4</b></p>		<p><b>Term 4</b></p>	
<p><b>Injuries</b></p> <ul style="list-style-type: none"> <li>• Classifying two types of injuries: <ul style="list-style-type: none"> <li>• Acute injuries</li> <li>• Overuse injuries</li> </ul> </li> <li>• Strategies to prevent injuries</li> <li>• Contemporary recovery methods and timescales for return to play for the acute and overuse injuries</li> <li>• POLICE – Protection, Optimal Loading, Ice, Compression, Elevation.</li> <li>• RICE – Rest, Ice, Compression, Elevation.</li> <li>• Advantages and disadvantages of rehabilitation strategies.</li> </ul> <p><b>Component 3: Practical performance</b>  <b>Component 4: Performance Analysis and Performance Development Programme</b></p> <ul style="list-style-type: none"> <li>• Introduction to NEA work, Performance Analysis</li> <li>• NEA work, Performance Analysis - Prepare to make draft over Summer break</li> </ul>	<p><b>Ethics &amp; Deviance</b></p> <ul style="list-style-type: none"> <li>• Ethics and deviance in sport</li> <li>• The impact of commercialisation on the sportsmanship ethic and the growth of gamesmanship in the UK</li> <li>• Types of deviance in sport</li> <li>• Different responses of governing bodies, governments and the law</li> <li>• Establishment of the World Anti-Doping Agency (WADA) and its effectiveness in combating drug use</li> </ul> <p><b>Relationship between sport and the media</b></p> <ul style="list-style-type: none"> <li>• Sport and the media.</li> <li>• The impact of technology on the viewing experience</li> </ul> <p><b>Talent identification routes</b></p> <ul style="list-style-type: none"> <li>• Understanding of development routes from talent identification through to elite performance</li> <li>• Systems of the identification and development of talent in the UK with specific reference to the approaches of former East Germany and Australia</li> </ul>	<p><b>Revision</b></p>	<p><b>Revision</b></p>

**Topic 4: Sport psychology**

**Attribution Theory**

- Weiner's attribution theory and the four attributions
- The three main dimensions of attribution
- Strategies to allow for attribution retraining.

**Leadership**

- Effective leadership and its impact on performance
- The different types of leadership styles
- The advantages and disadvantages of each leadership style
- Theories of how leaders are created

**Assessment Objectives**

Students must:		% in GCE A Level
<b>A01</b>	Demonstrate knowledge and understanding of the factors that underpin performance and involvement in physical activity and sport.	23
<b>A02</b>	Apply knowledge and understanding of the factors that underpin performance and involvement in physical activity and sport.	23
<b>A03</b>	Analyse and evaluate the factors that underpin performance and involvement in physical activity and sport.	24
<b>A04</b>	<ul style="list-style-type: none"><li>• Demonstrate and apply relevant skills and techniques in physical activity and sport.</li><li>• Analyse and evaluate performance.</li></ul>	30
<b>Total</b>		<b>100</b>

Projects  
Presentations  
End of Topic Tests  
Everlearner Learning Platform

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Public Examinations in June