



Curriculum Plan *PE (A Level)*



Year 13	Golden Treads: State the big ideas that will be taught across the year (Threshold concepts)				Enrichment: What is offered through the year to support learning in the classroom?		Review and evaluation: Give date for review of the curriculum
	Topics	Assessment	Substantive Knowledge	Disciplinary Knowledge	Misconceptions	Key Vocabulary	Knowledge tracking
Term 1	List the key topics taught in this term. Have you checked that the curriculum the department is teaching links to the National Curriculum where this is appropriate?	Give the name, nature/content and date of the assessment in this term.	List the key facts that students need to learn. Substantive vs disciplinary knowledge	What skills, procedures, thinking is required to use substantive knowledge to progress understanding and application. Substantive vs disciplinary knowledge	What are the key misconceptions that students have in this curriculum area?	List the Tier 2 and Tier 3 words that will be encountered in this term.	What prior learning does this term's curriculum link to and what future learning does this term's curriculum link to?
	Physiological Concepts 1.1.c Energy for Exercise	Energy for Exercise Short recall questions and exam past paper questions Week 7 MCQs	ATP and energy transfer Resynthesis of ATP using energy systems: ATP/PC System Glycolytic system Aerobic System The energy continuum; predominant energy system used during exercise; interplay of energy systems during intermittent exercise and factors that affect this interplay; The recovery process; how the body returns to its pre-exercise state; Fast and slow component; Effect of exercise on EPOC	Learners will develop their knowledge and understanding of Adenosine Triphosphate (ATP) as energy currency, along with the principle of the coupled reactions and resynthesis of ATP. The detail of the different energy systems will be known and learners will understand the energy continuum and factors that affect the interplay of the energy systems. Learners will be able to interpret figures relating to the contribution of the three energy systems to exercise of different intensities and durations. The recovery process will be known, along with an understanding of interpretation of figures relating to the contribution of the three energy systems to exercise of different intensities and durations.	Energy systems work in isolation – they often work at the same time, one will be more predominant.	<u>Tier 2</u> Maximal Submaximal Intermittent Resynthesis Threshold <u>Tier 3</u> ATP ADP PC Exothermic reaction Endothermic reaction Coupled reaction Glycogen Glucose Sarcoplasm Creatine Kinase Enzyme PFK LDH Anaerobic glycolysis OBLA Kreb's cycle Electron Transport Chain Mitochondria Lipase Myoglobin Haemoglobin VO2 max	Cardiovascular and respiratory systems Muscle fibre types



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				Learners will develop their knowledge and understanding of the effect of exercise intensity on excess post exercise oxygen consumption (EPOC) and implications of the recovery process for planning exercise or training sessions related to physical activities and sports. Evaluation of different sports and their predominant energy system. Gathering heart rate data during various intensity exercise and during recovery to determine predominant energy systems and EPOC		Work:relief ratio EPOC Oxygen deficit Fast alactacid recovery Slow lactacid recovery Gluconeogenesis Glyconeogenesis	
	Psychological Concepts	End of term assessment MCQs	Understanding the impact of confidence on performance and self-esteem Vealy's Model of sports confidence Bandura's model of self-efficacy		Self-efficacy is the same as state confidence.	Tier 2 Describe, Apply, Understand, Interpret Tier 3 Confidence, Self-efficacy, Trait, State, Performance accomplishments, Vicarious Experiences, Verbal Persuasion, Emotional Arousal	The terms 'state' and trait' are covered in the anxiety module
	Physiological Concepts (Additional)	End of term assessment MCQs	Injuries and Rehabilitation Understanding the difference between acute injuries and chronic injuries and give examples Outline immediate responses to injury RICE 6 R's (concussion) Understanding ways of preventing injuries			Tier 2 Describe, Explain, Apply, List, Identify Tier 3 Acute Chronic Fracture Concussion Contusion Tendons Muscles Bones Abrasions Surgery Rehabilitation Heat treatment Cold treatment	



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			Understanding various treatments of injury and the process of rehabilitation				
	Socio-Cultural Concepts 3.2 Ethics and Deviance	Mid topic assessment – exam questions	Ethics and Deviance in Sport • drugs and doping in sport • legal supplements versus illegal drugs and doping • reasons why elite performers use illegal drugs/doping • consequences/implications to: – society – sport – performers • strategies to stop the use of illegal drugs and doping	Learners will develop their knowledge and understanding of the positive and negative impacts of commercialisation and the media on physical activity and sport. The routes to sporting excellence in the UK will be known and the roles of key organisations to develop excellence will also be understood.	Understanding the consequences to the performer AND society Confusion between the 2 areas above	Tier 2 Drugs Doping Consequence Implications Strategies Gambling Illegal Tier 3 Ethics Deviance Viscosity Pulmonary Embolism Anabolic Narcotic Diuretics Peptide hormones Blood Doping Glucocorticosteroids	Links to GCSE theory – Drugs in Sport
Term 2	Physiological Concepts 1.1.d Environmental effects on body systems	Environmental effects on body systems Past paper questions Week 11	Effect of altitude on the CV and respiratory systems Acclimatisation, including the importance of timing arrival, at altitude (above 2400m) Effect of heat on the CV and respiratory systems	Learners will develop their knowledge and understanding of the effect of altitude on the cardiovascular and respiratory systems and the performance of exercise at different intensities at altitude. Knowledge of acclimatisation will also be developed. Learners will develop their knowledge and understanding of exercise in the heat and recognise the effect of heat on the cardiovascular and respiratory systems. The understanding of the performance of exercise of different intensities in the heat will also be developed in this topic.	There is less oxygen at altitude – the composition of air is the same but the partial pressure of oxygen in the air decreases which decreases the saturation of oxygen in the blood.	Tier 2: Altitude Humidity Temperature Acclimatisation Dehydration Tier 3: Barometric pressure Partial pressure Diffusion Erythropoietin Thermoregulation Thermoreceptors Hyperthermia Cardiovascular Drift	Cardiovascular & Respiratory systems: Gas exchange Diet and nutrition: Hydration



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				Drawing conclusions from CV and respiratory knowledge on the impact on these systems of the changes in environment and its immediate and long-term effect. Application of effects on performance			
	NEA Work	EAPI mock	Term 2 is devoted to preparing for the EAPI element of the NEA moderated assessment Students need to watch a performance and discuss the strengths and weaknesses of that performance and then provide an action plan for improving one of the major weaknesses Students need to prepare coaching points and drills for their chosen discipline. They also need to consider what theoretical elements from the course they will use to justify the points they make				
	Socio-Cultural Concepts 3.2 Ethics and Deviance	End of Topic assessment – 60 marks	Ethics and Deviance in Sport • violence in sport • causes in relation to players and spectators • implications to: – society – sport – performers • strategies to prevent violence in relation to players and spectators • gambling in sport • match fixing/bribery • illegal sports betting.	The ethics involved in sport and deviance that affects sport and sporting behaviour will be understood and applied using practical examples.	Understanding the consequences to the performer AND society Confusion between the 2 areas above	Tier 2 Violence Consequence Implications Strategies Gambling Illegal Bribery Tier 3 Ethics Deviance Deindividuation Socialisation Normalising Match Fixing Spot Fixing	No prior learning



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Term 3	Physiological Concepts 1.3.b Biomechanics	Biomechanics 20 marker (term 4)	Linear Motion: definition, creation of linear motion by the application of a direct force through the centre of mass; definitions, calculations and units of measurement for each of the following quantities of linear motion; plot and interpret graphs of linear motion. Angular Motion; definitions, creation of angular motion through the application of an eccentric force about one (or more) of the three axes of rotation, definitions, calculations and units of measurement for each quantity of angular motion; factors affecting the size of the moment of inertia of a rotating body; the relationship between moment of inertia and angular velocity; the conservation of angular momentum during flight in relation to the angular analogue of Newton's first law of motion; the conservation of angular momentum during flight in relation to the angular analogue of Newton's first law of motion Fluid Mechanics. factors that impact the magnitude of air resistance (on land) or drag (in water) on a body or object. Projectile Motion; factors affecting, free body diagrams; parallelogram of forces; flight paths Bernoulli's principle, design, spin	Applying to aspects of sport. Analysing and evaluating performances using biomechanical knowledge. Learners will develop their knowledge and understanding of linear motion by being able to define linear motion and be able to apply it as well as being able to calculate quantities of linear motion. They will also be able to define angular motion and know about the creation of angular motion through the application of an eccentric force about one (or more) of the three axes of rotation. Again, learners will also be able to calculate angular motion and interpret graphs of angular velocity, moment of inertia and angular momentum. Learners will develop their knowledge and understanding of fluid mechanics and the factors that impact the magnitude of air resistance (on land) or drag (in water) on a body or object. Projectile motion will also be understood with factors affecting the horizontal distance travelled by a projectile, as well as patterns of flight paths as a consequence of the relative size of air resistance and weight. Bernoulli's principle will be understood along with		Tier 2: Distance Speed Acceleration Deceleration Tier 3: Linear motion Direct force Centre of mass Displacement Velocity Gradient Angular motion Eccentric Force Torque Axis of rotation Radian Angular Velocity Moment of inertia Angular momentum Air resistance Drag Streamlining Aerofoil Projectile motion Projectile Bernoulli Principle Lift force Magnus effect Magnus force Hook Slice	Biomechanics year 12



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				the application of projectile motion on the design of equipment and the use of spin in sport.			
	NEA Work	EAPI Final assessment (February)	Using feedback from their mock EAPI, students prepare for their assessed EAPI. This assessment will be videoed, marked and externally moderated.				
	Socio-Cultural Concepts 3.2 Commercialisation and the Media	End of topic assessment – 20 marks	Commercialisation and the Media • factors that influence the commercialisation of contemporary physical activity and sport: • growing public interest and spectatorship • more media interest • professionalism • advertising • sponsorship • positive and negative impacts of the commercialisation of physical activity and sport on • society • individual sports • performers • spectators • coverage of sport by the media today and reasons for changes since the 1980s • television – terrestrial – free-to-air – satellite – subscription – pay-per-view • radio – dedicated sports stations – local and national radio • written press	Learners will develop their knowledge and understanding of the positive and negative impacts of commercialisation and the media on physical activity and sport. The routes to sporting excellence in the UK will be known and the roles of key organisations to develop excellence will also be understood.	Differences between the key areas Commercialisation / sponsorship are not the same How to link changes in modern day sport to historical events	<u>Tier 2</u> Media Performer Spectator Terrestrial Satellite Professionalism <u>Tier 3</u> Commercialisation Spectatorship Sponsorship Commodity Golden Triangle	No prior learning



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			– newspapers – magazines • internet • positive and negative effects of the media on sport • individual sports • performers • spectators • relationship between sport and the media • sport as a commodity • links with advertising and sponsorship ('golden triangle').				
Term 4	Physiological Concepts Biomechanics & revision	End of topic test Revision Exam questions Past papers MCQ's	Complete the biomechanics section started in Term 3.				
	Psychological Concepts Skill Acquisition Revision Psychology of sport Revision	Class tests Exam questions MCQ / Revision homework	Students will revisit skill acquisition topics and sport psychology topics looking at various A01, A02 and A03 type questions until study leave				
	Socio-Cultural Concepts 3.2 Routes to Sporting Excellence in the UK	End of topic assessment – 20 marks	Routes to Sporting Excellence • development routes from talent identification through to elite performance • the role of school, clubs, universities in contributing to elite sporting success • the role of UK Sport and National Institutes in developing sporting excellence/high performance sport • strategies to address drop-out/failure rates from elite development programmes/at elite level.	Learners will develop their knowledge and understanding of the positive and negative impacts of commercialisation and the media on physical activity and sport. The routes to sporting excellence in the UK will be known and the roles of key organisations to develop excellence will also be understood.	Understanding the routes and how athletes can access them How do athletes qualify for the programmes Key organisations and their influence on Elite performance	Tier 2 Performance Potential Apprenticeship NGBs Tier 3 Podium Initiative	No prior learning
Term 5	Physiological Concepts						



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	Psychological Concepts Skill Acquisition Revision Psychology of sport Revision	Class tests Exam questions MCQ / Revision homework	Students will revisit skill acquisition topics and sport psychology topics looking at various A01, A02 and A03 type questions until study leave				
	Socio-Cultural Concepts 3.2 Modern technology in Sport – its impact on Elite level sport, participation, fair outcomes and entertainment	End of topic assessment – 20 marks	Elite performance: - the extent to which modern technology has affected elite level sport including increased/improved: - access - facilities - equipment - monitoring of exercise - safety General participation: - the extent to which modern technology has increased participation including increased/improved: - access - facilities - equipment - monitoring of exercise - safety - the extent to which modern technology has limited or reduced participation including: - cost - the range of alternatives to physical activity and sport Fair outcomes: - the extent to which modern technology has increased fair outcomes including: - better timing devices - increased accountability of officials - more accurate decision making	The important and developing influences of modern technology in physical activities and sport will be understood as well as its impact on participation, fair outcomes and entertainment.	Ability to assess and exemplify the impact of technology on elite performance vs everyday participation Barriers between cost and accessibility – is it fair?	Tier 2 Performance Technology Tier 3 Prothetics Hypoxic Chamber Precision Hydration Gene Therapy Punditry Motion Capture	No prior learning



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			– improved detection of foul play – improved detection of doping • the extent to which modern technology has limited or decreased fair outcomes including: – access to modern technology can be limited – performance enhancing drug testing technology cannot keep up with new drug development – pressure on officials due to the exposure and scrutiny of their decisions - Entertainment: • the extent to which modern technology has increased entertainment including: – action replays – multiple camera angles – slow motion technology – improved analysis – punditry • the extent to which modern technology has reduced or limited entertainment including: – interruption and delay – reduced live attendances.				
Term 6	Physiological Concepts	Formal Exam (Paper 1 90 marks 2 hours)					
	Psychological Concepts	Formal Exam (Paper 2 60 marks 1 hour)					
	Socio-Cultural Concepts	Formal Exam (Paper 3 60 marks 1 hour)					