



A Level PE Year 12 and 13 Curriculum Map

Aims and Rationale:

To enable students to:

- Be equipped with both a depth and breadth of knowledge, understanding and skills relating to scientific, psychological, socio-cultural and practical aspects of physical education and use this knowledge to improve performance
- Improve as effective and independent learners and as critical and reflective thinkers with curious and enquiring minds
- Refine their ability to perform effectively in physical activity and sport (as a performer or coach, chosen from a wide variety of sporting activities) by developing skills and techniques and selecting and using tactics, strategies and/or compositional ideas
- Critically analyse and evaluate their physical performance and apply their experience of practical activity in developing their knowledge and understanding of the subject.
- Prepare for the further study of PE or sports science courses as well as other related subject areas such as psychology, sociology and biology.
- Become confident, independent thinkers and effective decision makers who can operate effectively as individuals or as part of a team – all skills that will enable them to stand out and effectively promote themselves as they progress through life.
- Develop these transferable skills that are in demand by further education, Higher Education and employers in all sectors of industry.

Theory	
Prior Learning:	KS3 basic anatomy theory and range of practical activities, GCSE PE – basics of physiology, socio-culture and sports psychology
Skills: What will students be able to do	Work independently and in groups Research and present findings visually and verbally Revise and consolidate notes (whilst maintaining detail) Answer and structure short and longer (10 and 20) mark questions Analyse and interpret data and graphs
Other: Literacy/ Numeracy/ Ethos	Key words, definitions, descriptions, explanations and analysis/evaluation Analysing data and graphs
Assessment	Practice questions - homework/lesson tasks. End of unit and mock assessments (Theory Final Exam 3x papers - 70%)
Additional support	Learning buddies 1x Saturday revision morning (outside speakers), additional revision sessions



Year 12	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Content: What will students know						
Science 1	<ul style="list-style-type: none"> ● Skeletal Systems - The skeleton - Joint type - Planes of movement ● Muscular Systems - Origin and insertion - Antagonistic muscle action - Muscle contraction – isotonic, concentric, eccentric, isometric - Movement analysis – ankle, knee, hip, shoulder, elbow, wrist - The motor unit and skeletal muscle contraction 	<ul style="list-style-type: none"> ● Aerobic Training - Aerobic capacity/VO2 max - Factors affecting VO2 max - Aerobic capacity tests - Training zones - Training methods - Adaptations ● Strength Training - Types of strength - Factors affecting strength - Strength tests - Training methods - Adaptations ● Flexibility Training - Types of flexibility - Factors affecting flexibility - Flexibility tests - Training methods - Adaptations 	<ul style="list-style-type: none"> ● Biomechanical Principles 1: Newton's laws of motion, force and the use of technology - Newton's Laws of motion: first, second and third - Calculations – velocity, momentum, acceleration, force - Force and its effects; net force, vertical forces, horizontal forces - Free body diagrams - Analysis through the use of technology – limb kinematics, force plates, wind tunnels 	<ul style="list-style-type: none"> ● Biomechanical Principles 2: Stability and Lever Systems - Centre of mass and stability - Lever systems – component parts, classification, efficiency, - Year 1 content recap - Year 1 exam technique focus 	<ul style="list-style-type: none"> ● Energy for exercise - ATP - breakdown and resynthesis - Energy systems – ATP – PC, glycolytic system, aerobic system - ATP resynthesis during exercise of differing intensities and durations 	<ul style="list-style-type: none"> - Energy Continuums - Intermittent exercise - Recovery periods - Fitness level ● The recovery process - EPOC - Fast alactacid component of recovery - Slow lactacid component of recovery - Implications of recovery on training

	<ul style="list-style-type: none"> - Muscle fibre type and exercise intensity - Muscle fibre type and recovery rates 					
Science 2	<ul style="list-style-type: none"> ● Cardiovascular system - Structure of the heart, valves, blood vessels - Pulmonary and systemic circuit - The conduction system - The Cardiac Cycle - Heart rate, stroke volume, cardiac output - Cardiac response to exercise and recovery – graphs 	<ul style="list-style-type: none"> - Heart rate regulation – CCC, Neural, intrinsic and hormonal control - The Vascular system: - Mechanisms of venous return - Redistribution of cardiac output - Vascular shunt mechanism - Vascular control – VCC ● Cardiovascular diseases - Atherosclerosis, CHD, heart attack, stroke - The effects of training to minimise risk 	<ul style="list-style-type: none"> ● Respiratory system - The structure of the respiratory system - Functions of the pulmonary system - ventilation and gaseous exchange - Gas transport – oxygen and carbon dioxide - Breathing rate, tidal volume and minute volume - Respiratory volume response to exercise and recovery – graphs 	<ul style="list-style-type: none"> - Mechanics of breathing – inspiration/expiration, rest/exercise - Respiratory regulation – RCC – Inspiratory and expiratory centre - Gaseous exchange – external and internal respiration 	<ul style="list-style-type: none"> - Dissociation of oxygen from haemoglobin - The Bohr shift ● Respiratory diseases - Asthma, COPD - The effects of training to minimise risk 	<ul style="list-style-type: none"> ● Environmental effects on the cardio-respiratory systems and performance - The effects if altitude, humidity and heat on the cardiovascular and respiratory systems - Impact on performance - Acclimatisation and its impact on performance
Skill Acquisition	<ul style="list-style-type: none"> ● What is Skill? ● Classification of Motor Skills and their justification 	<ul style="list-style-type: none"> ● Phases of Learning ● Types of Guidance - Advantages and disadvantages of 	<ul style="list-style-type: none"> ● Transfer of Learning - Optimising the effect of positive transfer 	<ul style="list-style-type: none"> ● Theories of Learning 1 - Operant Conditioning - Trial and Error 	<ul style="list-style-type: none"> ● Theories of Learning 3 - Cognitive Theory of Learning 	<ul style="list-style-type: none"> ● Past paper questions and exam technique



	<ul style="list-style-type: none"> ● Methods of Practice - Methods of Manipulating Practice 	<p>using each type of guidance.</p> <ul style="list-style-type: none"> ● Feedback - Advantages and disadvantages of using each type of feedback. 	<ul style="list-style-type: none"> - Limiting the effect of negative transfer - Atkinson and Shiffren's multi-store memory model - Craik and Lockhart's Levels of Processing model - Application of Memory 	<ul style="list-style-type: none"> - +ve/-ve reinforcement - Punishment ● Theories of Learning 2 - Bandura's theory of social/observational learning. - Demonstration - Attention - Retention - Motor Reproduction - Motivation 		
Sport Psychology	<ul style="list-style-type: none"> ● What is psychology - How can it be useful to athletes and teams - Case study of England football team and Rugby Union team ● Personality: - Definition, theories of personality trait - Type A and Type B - Eysenck's trait theory - Introvert Vs Extrovert - Social learning 	<ul style="list-style-type: none"> ● Attitudes: - Definition, factors affecting attitude formation - Components of attitude: Cognitive, affective, behavioural - Methods of attitude change: persuasive communication, cognitive dissonance ● Motivation: - Intrinsic and extrinsic 	<ul style="list-style-type: none"> ● Arousal: - Definition and effects of arousal - drive theory, inverted U theory, catastrophe theory ● Anxiety: - Definition and types of anxiety: state and trait - Response to anxiety: somatic and cognitive, zone of optimal functioning. ● Aggression: - Definition and theories of aggression: 	<ul style="list-style-type: none"> ● Social facilitation: ● Definition of social facilitation and social inhibition ● The effect of an audience on: introverts/extroverts, beginners/experts, simple/complex skills, gross/fine skills, evaluative apprehension ● Group Dynamics - Strategies to minimise social inhibition ● Stages of group formation - Definition of a group the formation of groups and sports 	<ul style="list-style-type: none"> ● Importance and effectiveness of goal setting for attentional focus and persistence on tasks - Raising confidence and self-efficacy - Control of arousal and anxiety to monitor performance 	<ul style="list-style-type: none"> ● The SMART principle (Specific, Measurable, Achievable, Recorded, Time phased) ● Exam technique, revision, mock exam



	- Interactionist approach		instinct, social learning, frustration, aggression hypothesis, aggressive cue hypothesis	- Teams using stages of group development: forming, storming, norming, performing ● Group and team dynamics in sport - Steiner's model of group effectiveness - Ringelmann effect and social loafing		
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Year 13	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer
Content: What will students know					
Science 1	<ul style="list-style-type: none"> Energy systems Recap 	<ul style="list-style-type: none"> Linear motion <ul style="list-style-type: none"> Distance, displacement, speed, velocity, acceleration/deceleration Graphs <ul style="list-style-type: none"> Distance/time Speed/time Velocity/time Angular motion <ul style="list-style-type: none"> Axes of rotation Angular velocity Moment of inertia 	<ul style="list-style-type: none"> Fluid mechanics <ul style="list-style-type: none"> Air resistance/Drag Projectile motion <ul style="list-style-type: none"> Projectile release Speed of release Angle of release Height of release Aerodynamic factors Flight path Free body diagrams Parallelogram of forces 	<ul style="list-style-type: none"> Revision & Exam technique 	Exam



		<ul style="list-style-type: none"> - Angular momentum 	<ul style="list-style-type: none"> - Lift and the Bernoulli principle - Spin and the Magnus force ● Revision & Exam technique 		
Science 2	<ul style="list-style-type: none"> ● Energy balance - Energy intake, expenditure and balance in physical activity and performance ● Diet - 7 components: Carbohydrates, fats, protein, vitamins, minerals, fibre, water - Diet and performance 	<ul style="list-style-type: none"> ● Injury: - Acute/chronic, soft/hard tissue injury - Specific injuries: Signs and symptoms, cause, prevention and treatment - Injury prevention: Intrinsic and extrinsic risk factors - Effectiveness of a warm up & cool down - Injury response: Assessment - SALTAPS, acute management - PRICE, recognising signs of concussion - using the 6 R's - Injury rehabilitation: - treatment methods, and the timing of these (early, mid, late stage) ● Training programme design - Periodisation cycles - Phases of training - Tapering training to optimum perf. - Principles of training 	<ul style="list-style-type: none"> ● Ergogenic aids - Pharmacological aids – anabolic steroids, erythropoietin, human growth hormone - Physiological aids – Blood doping, intermittent hypoxic training, cooling aids - Nutritional aids – amount, composition and timing of meals, glycogen loading, hydration, creatine, caffeine, bicarbonate, nitrate - Legal status, impact of the above on performance – benefits and risks 	<ul style="list-style-type: none"> ● 20 mark question - structure ● Revision 	Exam
Sport Psychology	<ul style="list-style-type: none"> ● Attribution in sport - Weiner's model of attribution, self-serving bias, controllability, learned helplessness, 	<ul style="list-style-type: none"> ● Confidence and self-efficacy - Sports confidence, self-efficacy - Sports performance, participation and self-esteem - Vealey's sport confidence model - Bandura's theory of self-efficacy ● Leadership in sport - Effective leadership - Emergent and prescribed 	<ul style="list-style-type: none"> ● Stress management to optimise performance - Stress and its causes - Physical response to stress - Stressors - Stress/anxiety management techniques: - Cognitive – positive thinking/self talk, negative thought stopping, rational 	<ul style="list-style-type: none"> ● 10 mark question – structure/practice ● Revision 	Exam



	<p>mastery orientation, attribution retraining</p>	<ul style="list-style-type: none"> - Leadership styles – autocratic, democratic and laissez-faire – explanation and use - Theories of leadership – trait perspective, social learning theory, interactionist theory - Chelladurai’s multidimensional model of sports leadership 	<p>thinking, mental rehearsal and imagery, mindfulness, goal setting</p> <ul style="list-style-type: none"> - Somatic – relaxation, progressive muscular relaxation, biofeedback, centring technique, breathing control 		
Socio-culture	<ul style="list-style-type: none"> - Socio – cultural factors and characteristics ● Emergence and Evolution of Sport: - Sports and pastimes in pre-industrial and post-industrial Britain - Influence of the public schools on sport and pastimes - Sports and pastimes in 20th century Britain 	<ul style="list-style-type: none"> - Sports and pastimes in 21st century Britain ● Global Sporting events: - The Olympic Games - Background and aims - Political exploitation - Positive and negative impacts on the host country/city ● Ethics and Deviance - Drugs and Doping - Violence in Sport - Gambling in Sport 	<ul style="list-style-type: none"> ● Commercialisation and the media - Factors leading to commercialisation - Positive and negative impacts of commercialisation on sport - Coverage of sport by the media today and reasons for changes since the 1980s. - Positive and negative effects of the media on sport 	<ul style="list-style-type: none"> - Relationship between sport and the media ● Routes to sporting excellence in the UK - The role of schools, clubs and universities. - Development routes - talent Id to elite performance. - Strategies to address dropout - Routes to sporting excellence - UK Sport/The National Institutes of Sport ● Modern Technology and Sport - Elite performance - General Participation - Fair outcomes - Entertainment 	Exam



Practical and EAPI	
Prior Learning:	Various practical activities taught through KS3 and GCSE PE and evaluative opportunities
Skills: What will students be able to do	Perform effectively in main physical activity by developing skills and techniques and selecting and using tactics, strategies and/or compositional ideas - to avail students of the information required to complete video evidence of their practical activity To enable students to have sufficient knowledge and understanding to complete their EAPI oral assessment
Other: Literacy/ Numeracy/ Ethos	EAPI – key words, links to other areas of the course Analysing performance/data – strengths and weaknesses Fair play and sportsmanship
Assessment	EAPI oral assessment – 15% Practical assessment (video) – 15% (Hand in video's Dec/Feb in Year 12 and 13) as well as practical log of training and competitions/matches as supporting evidence
Additional support	Mock EAPI in Year 12 and before final assessment in Year 13. Opportunity to watch previous EAPI talks

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 12	<ul style="list-style-type: none"> Intro to EAPI talk Watch an EAPI Section 1: Analysis of performance <ul style="list-style-type: none"> Watch video clip of main sport and start to pick out <i>skills</i> Look at the perfect model for a number of skills (preparation, execution and recovery) Compare skills in the video clip to the perfect model – positives and negative and the 	<ul style="list-style-type: none"> List the <i>fitness</i> components - and when they could be seen in main sport Watching video clip of main sport and pick out fitness elements – positives and negatives and the impact on the performance Talk through in pairs 	<ul style="list-style-type: none"> List the <i>tactics</i> - and when they could be seen in main sport Watching video clip of main sport and pick out tactics – positives and negatives and the impact on the performance Talk through in pairs 	Section 2: Action Plan <ul style="list-style-type: none"> Timescale – and reasons why it should take this time (psychological and physiological) Sessions – how often, how long, focus Research coaching points for a key skill Research practices for this key skill Look at how the practice could progress, including conditioned games 	Practice talking through section 1 and section 2	Mock EAPI



	impact on the performance					
Year 13	<ul style="list-style-type: none">Recap structure of the whole talkWatch video clip of main sport and pick out strengths and weaknesses of skills, fitness and tactics – talk through in pairsIntroduce the third component of the talk - links to the theory aspects of the course – Physiology, psychology and socio-cultureStart to write short linksWatch an EAPI and create a timeline of where links could be brought in	<ul style="list-style-type: none">Writing links from each area of the courseLearn and speak out these linksWatch different video clips and talk through analysis with links	<ul style="list-style-type: none">Final practices – through the whole talkMock EAPI and feedbackEAPI assessment	<ul style="list-style-type: none">Revision	<ul style="list-style-type: none">Exams	