

Key Stage 5 Curriculum Map 2025-26

Autumn Term 1	Autumn Term 2	Spring term 1	Spring term 2	Summer term 1	Summer term 2
Approx: 7 weeks	Approx: 7 weeks	Approx: 6 weeks	Approx: 6 weeks	Approx: 6 weeks	Approx: 7 weeks

Autumn Term 1

Year 12 - Paper 1 – Exercise Physiology	Year 12 - Paper 2 – Sports Psychology	Year 12 - Paper 3- Contemporary issues in physical activity & sport
<u>Skeletal and Muscular Systems</u> 1. Joints, movements and muscles - Shoulder: - Flexion, extension, abduction, adduction, horizontal flexion/ extension, medial and lateral rotation, circumduction - Deltoid, latissimus dorsi, pectoralis major, trapezius, teres minor - Elbow: - Flexion, extension - Biceps brachii, triceps brachii - Wrist: - Flexion, extension - Wrist flexors, wrist extensors - Hip: - Flexion, extension, abduction, adduction, medial and lateral rotation - Iliopsoas, gluteus maximus, medius and minimus, adductor longus, brevis and magnus - Knee: - Flexion, extension - Hamstring group: biceps femoris, semi-membranosus, semi-tendinosus - Quadriceps group: rectus femoris, vastus lateralis, vastus intermedius and vastus medialis	<u>Individual Differences</u> 1. Personality - Definition of personality - Theories of personality: - Trait (extroverts/introverts; stable/unstable; Type A/Type B) - Social learning - Interactionist 2. Attitudes - Definition of attitude - Factors affecting attitude formation - Components of attitude: cognitive; affective; behavioural - Methods of attitude change: persuasive communication & cognitive dissonance 3. Motivation - definitions of: intrinsic motivation &	<u>Emergence & Evolution of sport</u> 1. Socio-cultural factors - Definition of social - Definition of cultural 2. Identify the 7 socio-cultural factors: - Social class - Gender - Time & money - Transport - Law and order - Education and literacy - Influence of public schools 3. Mob football in pre-industrial Britain - Which social class?

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• Ankle: - Dorsi flexion, plantar flexion - Tibialis anterior, soleus, gastrocnemius • Planes of movement: - frontal - transverse - sagittal 2. Functional roles of muscles and types of contraction • Roles of muscles: - agonist - antagonist - fixator • Types of contraction: - isotonic - concentric - eccentric - isometric 3. Analysis of movement • Analyse movement with reference to: - joint type - movement produced - agonist and antagonist muscles involved - type of muscle contraction taking place. 4. Skeletal muscle contraction • Structure and role of motor units in skeletal muscle contraction • Nervous stimulation of the motor unit: - motor neuron - action potential	extrinsic motivation • Uses and effects of: intrinsic motivation & extrinsic motivation 4. Arousal • Definition of arousal • Effects of arousal: drive theory; inverted U theory; catastrophe theory 5. Anxiety • Definition of anxiety • Types of anxiety: state and trait • Response to anxiety: somatic and cognitive; zone of optimal functioning. 6. Aggression • Definition of aggression • Theories of aggression: instinct; social learning; frustration-aggression hypothesis; aggressive cue hypothesis 7. Social Facilitation • Definition of social facilitation and social inhibition	• Which gender? • What about rules? (law and order /education) • When played? (availability of time) • How was it played? (availability of money, law and order, education) • Where and how often was it played? (availability of time and transport) • Give real-life examples of mob football 4. Background of popular recreation in pre-industrial Britain • Sport and pastimes reflected society and the life people at the time led. • Social class system influenced everything • Role of the church was important at the time • Peasants led a tough life and had very little free time • Drinking public houses were a hub for socialising and activities • Activities that existed at this time were: bear baiting, cock fighting, dog fighting, billiards,
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- neurotransmitter - 'all or none' law. 5. Muscle contraction during exercise of differing intensities and during recovery • Muscle fibre types: - slow oxidative - fast oxidative glycolytic - fast glycolytic recruitment of different fibre types during exercise of differing intensities and during recovery.	• The effect of an audience on: introverts/extroverts; beginners/experts; simple/complex skills; gross/fine skills • Evaluative apprehension • Strategies to minimise social inhibition.	bowls and skittles. • Country pursuits such as hunting, coursing (chasing hares) and shooting were done by the upper classes. • Militaristic activities such as archery and fencing also grew at this time.
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Autumn 2

Paper 1 – Exercise Physiology	Year 12 - Paper 2 – Sports Psychology	Year 12 - Paper 3- Contemporary issues in physical activity & sport
<u>Cardiovascular and Respiratory Systems</u> 1. Cardiovascular system at rest • The relationship between, and resting values for: - heart rate - stroke volume - cardiac output - methods of calculating the above • Cardiac cycle: - diastole - systole • Conduction system of the heart linked to the	<u>Group and Team Dynamics in Sport</u> 1. The formation of groups and sports teams using stages of group development: • forming • storming • norming • performing 2. Steiner's model of group effectiveness	<u>Popular recreation in pre-industrial Britain</u> • Natural/simple: lack of technology, lack of purpose-built facilities, lack of money for majority of population. • Rural: Prior to industrial revolution, Britain was mainly rural and agricultural. • Simple unwritten rules: organisation was basic, literacy was poor and results and rules were passed on by word of mouth, no NGBs had been

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cardiac cycle. 2. Cardiovascular system during exercise of differing intensities and during recovery • Effects of different exercise intensities and recovery on: - heart rate - stroke volume - cardiac output - methods of calculating the above • Redistribution of cardiac output during exercise of differing intensities and during recovery: - vascular shunt mechanism - role of the vasomotor centre - role of arterioles - role of pre-capillary sphincters • mechanisms of venous return during exercise of differing intensities and during recovery regulation of heart rate during exercise: - neural factors - hormonal factors - intrinsic factors. 3. Respiratory system at rest • Relationship between resting values for: - breathing frequency - tidal volume - minute ventilation • Methods of calculating the above mechanics of breathing at rest and the muscles involved: - diaphragm - external intercostals - at the alveoli	3. Ringelmann effect and social loafing. <u>Leadership in Sport</u> 1. Characteristics of effective leaders 2. Emergent or prescribed leaders 3. Leadership styles; • autocratic • democratic • laissez-faire 4. Theories of leadership; • trait perspective • social learning • interactionist 5. Chelladurai's multi-dimensional model of sports leadership.	formed. • Local: Limited transport and communication meant that sport had to be local. It wasn't until newspapers were created that sport became widely advertised and promoted. • Cruel/violent: reflected harshness of society at time. • Occasional: generally took part as part of holy days, village fairs or Christmas celebrations. • Courtly: affected by the two class system. • Occupational: work often became the basis for sport. E.g. competitive rowing came out of Thames ferryman racing • Wagering: was an obsession. For wealthy, betting was a display of financial and social status. <u>Post-1850 Industrial Britain</u> 1. Social class • Upper/lower vs. upper/middle/working • Professionalism & amateurs 2. Time & transport
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- at the muscles. 4. Respiratory system during exercise of differing intensities and during recovery • Effects of differing intensities of exercise and recovery on: - breathing frequency - tidal volume - minute ventilation • Mechanics of breathing during exercise of differing intensities and during recovery, including additional muscles involved: - inspiration – sternocleidomastoid, pectoralis minor - expiration – internal intercostals, rectus abdominis. • Regulation of breathing during exercise of different intensities and during recovery - neural control - chemical control • Effect of differing intensities of exercise and recovery on gas exchange at the alveoli and at the muscles - changes in pressure gradient - changes in dissociation of oxyhaemoglobin.		• Changes • Railways 3. Sport in post-1850 industrial Britain was increasingly: • Urban • Regular • Regional • With written rules • More controlled/sophisticated/respectable • Less wagering 4. Gender: changing status of women. 5. Availability of money 6. Law and order 7. Education and literacy
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Spring 1

Paper 1 – Exercise Physiology	Year 12 - Paper 2 – Skill Acquisition	Year 12 - Paper 3- Contemporary issues in physical activity & sport
<u>Energy for Exercise</u> - Adenosine Triphosphate (ATP) and energy transfer - ATP as ‘energy currency’ - Principle of energetically coupled reactions: - breakdown of ATP to ADP (Adenosine Diphosphate) + P (phosphate) - resynthesis of ATP from ADP + P. - Energy systems and ATP resynthesis - Energy systems: - ATP-PC (Phosphocreatine) system - glycolytic system - aerobic system - For each system: - type of reaction (aerobic or anaerobic) - chemical or food fuel used - specific site of the reaction - controlling enzyme - ATP yield - specific stages within the system - by-products - ATP resynthesis during exercise of differing	<u>Classification of skills</u> - Justification of placement of skills on continua: - difficulty (simple/complex) - environmental influence (open/closed) - pacing (self-paced/externally paced) - muscular involvement (gross/fine) - continuity (discrete/serial/continuous) - organisation (low/high). <u>Types and methods of practice</u> - Characteristics and uses of each: - part practice - whole practice - whole/part-whole practice - progressive/part practice - massed practice - distributed practice - fixed practice - varied practice - Transfer of skills - Types of transfer: - positive - negative - proactive	<u>Influence of public schools:</u> - The promotion and organisation of sports and games. - The promotion of ethics through sports and games. - The cult of athleticism. - The spread and export of games and the game ethic. - Thomas Arnold <u>20th Century Sport</u> - Many developments took place during the 20th century in the UK: - There was a massive development of scientific and technological innovation. - Many societies became hugely rich, but wealth was still unequally shared. - There was considerable growth of cities (urbanisation).

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intensities and durations • The energy continuum • Predominant energy system used during exercise: - how intensity and duration of exercise influence which energy system is predominantly used to resynthesise ATP - interpretation of figures relating to the contribution of the three energy systems to exercise of different intensities and durations • Interplay of energy systems during intermittent exercise and factors that affect this interplay - intensity of exercise - duration of exercise - recovery periods - fitness levels. 4. The recovery process How the body returns to its pre-exercise state: - Excess Post-exercise Oxygen Consumption (EPOC) • Fast components of EPOC, the processes that occur and the duration: - replenishment of blood and muscle oxygen stores - re-synthesis of ATP and PC • Slow components of EPOC, the processes that occur and the duration: - elevated circulation - elevated ventilation	- retroactive - bilateral • Know and understand the ways of optimising the effect of positive transfer • Know and understand the ways of limiting the effect of negative transfer. 2. Principles and theories of learning movement skills • Theories of learning: - operant conditioning - cognitive theory of learning - Bandura's theory of social/observational learning.	• Communications technology made great advances. This allowed ideas to spread rapidly and sports and pastimes to become more globalised. • There was more time for leisure, less time spent on work, and therefore more participated in sport. • Stress due to wars and terrorism, the undermining of traditional values and the rapid pace of life took a great toll on people's general health and well-being. 2. Changes in socio-cultural factors 3. Growth in spectatorship and money in sport 4. Growth in professionalism 5. Sport during the war <u>21st Century Sport</u> 1. Characteristics: • High performance sport now a global product • Highly structured • It is 'big business' involving huge investment
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- elevated body temperature - lactate removal and conversion to glycogen • Effect of exercise intensity on EPOC and implications of the recovery process for planning exercise or training sessions. <u>Environmental Effects on Body Systems</u> 1. Exercise at altitude • Effect of altitude on the cardiovascular and respiratory systems: - reduced arterial PO₂ (partial pressure of oxygen) leading to impaired muscle O₂ delivery - elevated heart rate and ventilation • Acclimatisation, including the importance of timing arrival, at altitude (above 2400m). 2. Exercise in the heat • Effect of heat on the cardiovascular and respiratory systems: - temperature regulation - cardiovascular drift.		• Driven by media • Higher standards & expectations • Great impact of modern technology • Globalisation & commercialisation • Tighter links between sport & law • Elements of deviance & drugs 2. Social class & social mobility 3. Social class in 21st Century 4. Gender 5. Other socio-cultural factors 6. Globalisation of sport: • Definition of globalisation • Freedom of movement and greater exposure of people to sport • Possible reasons for the globalisation of sports people. 7. Media Coverage • Types of media
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		• Golden triangle • Impacts of media coverage
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Spring 2

Paper 1 – Exercise Physiology	Year 12 - Paper 2 – Skill Acquisition	Year 12 - Paper 3- Contemporary issues in physical activity & sport
<u>Diet & Nutrition and their Effect on Physical Activity & Performance</u> 1. Diet and Nutrition • Function and importance of the components of a healthy, balanced diet: - carbohydrates - proteins - fats - minerals - vitamins - fibre - water • Energy intake and expenditure and energy balance in physical activity and performance. 2. Ergogenic aids • Use of ergogenic aids; potential benefits and	<u>Principles and theories of learning movement skills</u> • Theories of learning: - operant conditioning; - cognitive theory of learning - Bandura’s theory of social/observational learning <u>Stages of learning</u> • Characteristics of the stages of learning: - cognitive - associative - autonomous.	<u>Global sporting events:</u> 1. The modern Olympic games: • History • Philosophy • Pierre de Coubertin • Aims of Olympic games and values • British Olympic Association • The Paralympics 2. Politic exploitation of the Olympic games: • Berlin 1936 – Third Reich Ideology

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risks: ○ pharmacological aids: – anabolic steroids – erythropoietin (EPO) – human growth hormone (HGH) ○ physiological aids: – blood doping, – intermittent hypoxic training (IHT) – cooling aids ○ nutritional aids: – amount of food – composition of meals – timing of meals – hydration – glycogen/carbohydrate loading – creatine – caffeine – bicarbonate – nitrate.		• Mexico City 1968 – ‘Black Power’ demonstration • Munich 1972 – Palestinian terrorism • Moscow 1980 – boycott led by the USA • Los Angeles 1984 – boycott by Soviet Union
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Summer 1

Paper 1 – Exercise Physiology	Year 12 - Paper 2 – Skill Acquisition	Year 12 - Paper 3- Contemporary issues in physical activity & sport
<u>Preparation & Training Methods in Relation to Improving and Maintaining Physical Activity & Performance</u> 1. Aerobic Training • Aerobic capacity and maximal oxygen uptake (VO₂max) • How VO₂max is affected by: - individual physiological make-up - training - age - gender • Methods of evaluating aerobic capacity: - laboratory test of VO₂max using direct gas analysis - NCF multi-stage fitness test - Queen's College step test - Cooper 12-minute run • Intensity and duration of training used to develop aerobic capacity: - continuous training - high intensity interval training (HIIT) - the use of target heart rates as an intensity guide • Physiological adaptations from aerobic training: - cardiovascular - respiratory - muscular	<u>Guidance</u> • Types and uses of guidance: - verbal guidance - visual guidance - manual guidance - mechanical guidance • Advantages and disadvantages of using each type of guidance. <u>Feedback</u> • Types and uses of feedback: - intrinsic - extrinsic - positive - negative - knowledge of performance - knowledge of results • Advantages and disadvantages of using each type of feedback. <u>Memory models</u> • Atkinson and Shiffrin's multi-store memory model - use of selective attention	<u>Hosting Global sporting events:</u> 1. The impacts of hosting a global sports events on the host country/city ○ Sporting impacts ○ Social impacts ○ Economic impacts ○ Political impacts <u>Revision</u>

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- metabolic • Activities and sports in which aerobic capacity is a key fitness component. 2. Strength training • Types of strength: - strength endurance - maximum strength - explosive/elastic strength - static and dynamic strength • Factors that affect strength: - fibre type - cross sectional area of the muscle • Methods of evaluating each type of strength: - grip strength dynamometer - 1 Repetition Maximum(1RM) - press up or sit-up test - vertical jump test • Training to develop strength: - repetitions - sets - resistance guidelines used to improve each type of strength - use of multi-gym - weights - plyometrics - circuit/interval training: – work intensity – work duration – relief interval – number of work/relief intervals • Physiological adaptations from strength training: - muscle and connective tissues - neural - metabolic	• Craik and Lockhart's levels of processing model • Relate both models to learning and performing physical activity skills. <u>Revision</u>	
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• Activities and sports in which strength is a key fitness component. 3. Flexibility training • Types of flexibility: - static flexibility (active and passive) - dynamic flexibility • Factors that affect flexibility: - type of joint - length of surrounding connective tissue - age - gender • Methods of evaluating flexibility: - sit and reach test - goniometer • Training used to develop flexibility: - passive stretching - proprioceptive neuromuscular facilitation (PNF) - static stretching - dynamic stretching - ballistic stretching - isometric stretching • Physiological adaptations from flexibility training: • muscle and connective tissues • Activities and sports in which flexibility is a key fitness component. 4. Periodisation of training Periodisation cycles: - macrocycle - mesocycle - microcycle		
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Phases of training: - Preparatory - Competitive - transition • Tapering to optimise performance • How to plan personal health and fitness programmes for aerobic, strength and flexibility training. 5. Impact of training on lifestyle diseases • The effect of training on lifestyle diseases: - cardiovascular system: – coronary heart disease (CHD) – stroke – atherosclerosis – heart attack - respiratory system – asthma – chronic obstructive pulmonary disease (COPD). <u>Revision</u>		
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