

A level Physical Education Year 13 Revision

Exam Sections	Topic Areas	Revision List
Exercise and Sport Physiology	Energy	<p>Concepts</p> <ul style="list-style-type: none"> define energy (to include chemical, kinetic and potential), work and power and identify the units they are expressed in.
Exercise and Sport Physiology	Energy	<p>Adenosine triphosphate (ATP)</p> <ul style="list-style-type: none"> explain the role of ATP; the breakdown and resynthesis of ATP; the principle of coupled reactions and exothermic and endothermic reactions.
Exercise and Sport Physiology	Energy	<p>ATP re-synthesis</p> <ul style="list-style-type: none"> explain the three energy systems: adenosine triphosphate phosphocreatine (ATP/PC) (alactic); the lactic acid system; the aerobic system; (to include the type of reaction (aerobic or anaerobic), the chemical or food fuel used, the specific site of the reaction, the controlling enzyme, energy yield, specific stages within a system, and the by-products produced); explain the contribution made by each energy system in relation to the duration and intensity of exercise.
Exercise and Sport Physiology	Energy	<p>Energy continuum</p> <ul style="list-style-type: none"> identify the predominant energy system used related to the type of exercise (duration and intensity); explain the inter-changing between thresholds during an activity (eg the onset of blood lactate accumulation (OBLA)); the effect of level of fitness, availability of oxygen and food fuels, and enzyme control on energy system used.
Exercise and Sport Physiology	Energy	<p>The recovery process</p> <ul style="list-style-type: none"> explain how the body returns to its pre-exercise state: the oxygen debt/excess post exercise oxygen consumption (EPOC); the alactacid and lactacid debt components (to include the processes that occur and the duration of each component); replenishment of myoglobin stores and fuel stores and the removal of carbon dioxide; explain the implications of the recovery process for planning physical activity sessions (eg training intensities, work/relief ratios).
Exercise and Sport Physiology	Components of physical fitness and the benefits of a sustained balanced, active and healthy lifestyle	<p>Aerobic capacity</p> <ul style="list-style-type: none"> define aerobic capacity and explain how a performer's VO₂ max is affected by individual physiological make-up, training, age and sex; describe and apply methods of evaluating aerobic capacity (eg multi-stage fitness test, PWC170 test); candidates should assess their own VO₂ max, comparing their result with the aerobic demands of their chosen activities; describe different types of training used to develop aerobic capacity (continuous running; repetition running; fartlek and interval training); explain the use of target heart rates as an intensity guide; describe the energy system and the food/chemical fuels used during aerobic work; explain the physiological adaptations that take place after prolonged periods of aerobic physical activity (eg an increase in stroke volume); plan a programme of aerobic training based on their own assessment of their aerobic capacity and the requirements of their activity.
Exercise and Sport Physiology	Components of physical fitness and the benefits of a sustained balanced, active and healthy lifestyle	<p>Strength</p> <ul style="list-style-type: none"> define types of strength (to include strength endurance, maximum strength, explosive/elastic strength, static and dynamic strength); demonstrate knowledge and understanding of factors that affect strength (fibre type and cross sectional area of the muscle); describe and apply methods of evaluating each type of strength (eg grip strength dynamometer); describe and evaluate different types of training used to develop strength (the repetition, sets and resistance guidelines used to improve each

		<p>type of strength); use of multigym, weights, plyometrics and circuit/interval training (with reference to work intensity; work duration; relief interval; number of work/relief intervals); • describe the energy system and the food/chemical fuels used during each type of strength training;</p> <ul style="list-style-type: none"> • explain the physiological adaptations that take place after prolonged periods of physical activity (to include neural and physiological changes to skeletal muscle); • plan a programme of strength training based on their own assessment of their strength and the strength requirements of their activity.
Comparative	Cultural Context (Australia / UK)	<ul style="list-style-type: none"> • Historical determinants (impact of 19th-century public schools on organisation; codification and attitudes towards sport; late 19th-century notion of amateurism and professionalism; traditions of hierarchical society, especially class system); • geographical determinants (size; topography; climate; urbanisation; population density; transport) and their impact on opportunity in physical education and sport; • government policy (national and local government agendas for sport); • commercialisation of sport (sport, sponsorship and media); • social determinants (discrimination and minority groups; opportunity, provision and esteem); • values (democracy; teamwork; individuality; fair play; competitiveness; participation; overcoming discrimination).
	Physical Education and School Sport	<p>Describe organisation, status and ethos and inter- and intra-school sport;</p> <ul style="list-style-type: none"> • demonstrate knowledge and understanding of health, fitness and obesity levels among young people; • outline contemporary initiatives to promote Physical Education and school sport.
	Mass participation	<ul style="list-style-type: none"> • Participation rates; • National fitness levels; • Strategies to promote participation and ensure lifelong involvement and healthy lifestyles.
	Sport and the pursuit of excellence	<p>Explain opportunity, provision and esteem (UK Sport; UK Sports Institute (UKSI) and the increasing commercialisation of sport).</p> <ul style="list-style-type: none"> • Case studies of: <ul style="list-style-type: none"> o Cricket (tradition; ashes mythology; growth of commercialism and development of the game); o Rugby League (high level competitions; history of professionalism; north/south divide); o Rugby Union (as middle-class game; professionalism and commercialism; influence of Rugby World Cup); o Association football (history as a working class game; amateurism and professionalism; contemporary popularity – spectator and media interest).
	Cultural Context (USA / UK)	<p>Historical determinants (isolationism; marginalisation of UK sports; promotion of ‘big four’ sports (American football, baseball, basketball, ice hockey); frontierism). • Geographical determinants (size; topography; climate; urbanisation; population density; transport) and their impact on opportunity in Physical Education and sport. • Government Policy (Federal, State and local government agendas for sport; decentralisation).</p>

		<ul style="list-style-type: none"> • Commercialisation of sport (capitalism; sport and multinational companies; sport, sponsorship and media). • Social determinants (discrimination and minority groups; opportunity, provision and esteem; stacking and centrality; 'American Dream'). • Values ('land of opportunity'; claim of cultural pluralism and assimilation vs. social discrimination and stacking; centrality; hegemony and White Anglo-Saxon Protestant (WASP) domination in society; Lombardianism; counter culture and radical ethics applied to physical recreation and sport).
		<ul style="list-style-type: none"> • Health, fitness and obesity levels among young people; status of and attitudes towards Physical Education in schools; testing and measuring; 'curriculum crisis,' strategies to promote Physical Education. • Equality: Title IX (benefits, drawbacks and impact on participation); young disabled people and adapted Physical Education programmes. • Outdoor education: summer camps for young people (types and values; emphasis on promoting physical activity and healthy, active and balanced lifestyles); impact of environmental factors. • High school (inter-mural) sport (organisation; status and ethos; incentives for young participants and coaches). • Intra-mural school sport and its role in promoting participation in physical activity (organisation, status and ethos). • Outline contemporary initiatives to promote Physical Education and school sport.
	<p>Mass Participation</p>	<hr/> <p>Participation rates.</p> <p>National fitness levels.</p> <p>Amateur sports clubs (lack of tradition).</p> <p>Community participation (midnight leagues; other contemporary community initiatives)</p> <p>Strategies to promote participation and ensure lifelong involvement and healthy lifestyle</p> <hr/>
	<p>Sport and the pursuit of excellence</p>	<hr/> <p>Little League(s) (participation in competitive sport for young people).</p> <p>Pathways to professional sport (the college system; scholarships; special admit programmes; the Pro-Draft).</p> <p>Equality and discrimination: history of WASP domination; African Americans (discrimination and contemporary success);</p> <p>tokenism;</p> <p>stacking and centrality;</p> <p>the 'glass ceiling' and contemporary ethnic sport stars;</p> <p>opportunity, provision and esteem.</p> <p>A case study of the 'big four' American sports with reference to origins, nature of game, impact of universities sport as an industry, the relationship between high level sport, sponsorship and the media ('golden triangle'); and the concept of 'sport space'.</p> <hr/>

	Personality	<ul style="list-style-type: none"> • Demonstrate knowledge and understanding of the theories of personality: trait perspectives (the characteristics of extroversion/introversion, neuroticism/stability, Type A/Type B); social learning perspectives; interactionist approaches; • explain the effects of personality profiling on the adoption of balanced, active and healthy lifestyles; • evaluate critically personality profiling in sport.
	Attitudes	<ul style="list-style-type: none"> • describe and explain the nature of attitudes, inconsistencies and prejudice in sporting situations; • explain the origins of attitudes, and their influence on performance and lifestyles (including the effects of socialisation); • describe the components of attitudes (cognitive, affective, behavioural); • evaluate critically attitudes (and behaviour) in sport and lifestyle choice; • describe methods of changing attitudes from negative to positive to promote participation in physical activity and a balanced, active and healthy lifestyle; • demonstrate knowledge and understanding of
	Achievement motivation	<ul style="list-style-type: none"> • Atkinson and McClelland's theory of achievement motivation (need to achieve and need to avoid failure); • sport-specific achievement motivation (eg competitiveness).
	Aggression	<ul style="list-style-type: none"> • describe the nature of aggression and assertion; • define channelled aggression; • explain the causes of aggressive behaviour; • evaluate critically theories of aggression (instinct theories; frustration-aggression hypothesis; aggressive-cue hypothesis (Berkowitz); social learning theories); • describe methods of eliminating aggressive tendencies of performers and explain the effects of these methods