AQA qualification training

AS and A-level Physical Education

An introduction to the new specification

Resources

BOOKLET 2

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Contents

Page

3 Subject content

3.1 Factors affecting participation in physical activity and sport

3.1.1 Applied anatomy and physiology

Students should develop knowledge and understanding of the changes within the body systems prior to exercise, during exercise of differing intensities and during recovery.

Students should be able to interpret data and graphs relating to changes within the musculo-skeletal, cardio-respiratory and neuro-muscular systems, and the use of energy systems during different types of physical activity and sport, and the recovery process.

3.1.1.1 Cardio-respiratory system

Students should understand the relationship between the cardiovascular and respiratory systems and how changes within these systems prior to exercise, during exercise of differing intensities and during recovery allow the body to meet the demands of exercise.

3.1.1.2 Cardiovascular system

Content	Additional information
Understanding of the impact of physical activity and sport on cardiac output and its components.	Trained and untrained individuals. Maximal and sub-maximal exercise.
The hormonal, neural and chemical regulation of responses during physical activity and sport.	Anticipatory rise. Redistribution of blood (vascular shunting vasoconstriction, vasodilation). Cardiac conduction system. Sympathetic and parasympathetic. Carbon dioxide.
Receptors involved in regulation of responses during physical activity.	Chemoreceptor, proprioceptor, baroreceptor.
Transportation of oxygen.	Haemoglobin. Myoglobin. Oxyhaemoglobin disassociation curve. Bohr shift.

Content	Additional information
Venous return.	Mechanisms. Relationship with blood pressure (systolic, diastolic).
Starling's law of the heart.	
Cardiovascular drift.	
Arterio-venous oxygen difference (A-VO2 diff).	

3.1.1.3 Respiratory system

Content	Additional information
Understanding of lung volumes and the impact of and on physical activity and sport.	Residual volume. Expiratory reserve volume. Inspiratory reserve volume. Tidal volume. Minute Ventilation.
Gas exchange systems at alveoli and muscles.	Oxygen and carbon dioxide. Principles of diffusion and partial pressures.
The hormonal, neural and chemical regulation of pulmonary ventilation during physical activity and sport.	Adrenaline. Sympathetic and parasympathetic. Carbon dioxide.
Receptors involved in regulation of pulmonary ventilation during physical activity.	Chemoreceptor, proprioceptor, baroreceptor.

3.1.1.4 Neuromuscular system

Students should understand the relationship between the nervous and muscular systems and how changes within these systems prior to exercise, during exercise of differing intensities and during recovery allow the body to meet the demands of exercise.

Content	Additional information
Characteristics and functions of different muscle fibre types for a variety of sporting activities.	Slow twitch (type I). Fast glycolytic (type IIx). Fast oxidative glycolytic (type IIa).
Nervous system.	Sympathetic and parasympathetic.

Content	Additional information
Role of proprioceptors in PNF.	Muscle spindles. Golgi tendon organ.
The recruitment of muscle fibres.	Motor units. Spatial summation. Wave summation. All-or-none law. Tetanic.

3.1.1.5 The musculo-skeletal system and analysis of movement in physical activities

Students should understand the relationship between the muscular and skeletal systems to meet the demands of exercise. Students should be able to apply their knowledge and understanding to specific sporting actions and movement in a range of physical activities.

Content	Additional information
Joint actions in the sagittal plane/transverse axis.	Shoulder and hip (flexion, extension and hyperextension). Elbow and knee (flexion and extension). Ankle (plantar and dorsi flexion).
Joint actions in the frontal plane/sagittal axis.	Shoulder and hip (adduction and abduction).
Joint actions in the transverse plane/longitudinal axis.	Shoulder and hip (horizontal abduction and adduction).
Types of joint, articulating bones, main agonists and antagonists, types of muscle contraction.	Isotonic (concentric and eccentric) Isometric.

3.1.2 Skill acquisition

This section focuses on how skill is acquired and the impact of psychological factors on performance. Students should develop knowledge and understanding of the principles required to optimise learning of new, and the development of existing, skills.

Students should be able to understand and interpret graphical representations associated with skill acquisition theories.

3.1.2.1 Skill, skill continuums and transfer of skills

Content	Additional information
Characteristics of skill.	

Content	Additional information
Use of skill continua.	Open – closed. Discrete – serial – continuous. Gross – fine. Self-paced – externally paced. High – low. Simple – complex.
Justification of skill placement on each of the continua.	
Transfer of learning.	Positive. Negative. Zero. Bilateral.
Understanding of how transfer of learning impacts on skill development.	

3.1.2.2 Impact of skill classification on structure of practice for learning

Content	Additional information
Methods of presenting practice.	Whole. Progressive part. Whole–part–whole.
Types of practice.	Massed. Distributed. Variable. Mental practice.
Understanding how knowledge of skill classification informs practice structure (presentation and type) to allow learning/ development of skills.	

3.1.2.3 Principles and theories of learning and performance

Content	Additional information
Stages of learning and how feedback differs between the different stages of learning.	Cognitive, associative, autonomonous.

Content	Additional information
Learning plateaux.	Causes and solutions.
Cognitive theories.	Insight learning (Gestalt).
Behaviourism.	Operant conditioning (Skinner).
Social learning.	Observational learning (Bandura).
Constructivism.	Social development theory (Vygotsky).
Understanding of how theories of learning impact on skill development.	

3.1.2.4 Use of guidance and feedback

Content	Additional information
Methods of guidance.	Verbal. Visual. Manual. Mechanical.
Understand the different purposes and types of feedback.	Knowledge of performance. Knowledge of results. Positive and negative. Intrinsic. Extrinsic.
Understanding of how feedback and guidance impacts on skill development.	

3.1.3 Sport and society

Students should develop knowledge and understanding of the interaction between, and the evolution of, sport and society.

Students should be able to understand, interpret and analyse data and graphs relating to participation in physical activity and sport.

3.1.3.1 Emergence of globalisation of sport in the 21st century

In this section, students develop an understanding of popular and rational recreation leading to the emergence of modern sport through to the globalisation of sport in the 21st century.

Specifically students should understand the impact of the following social factors on the development of football, tennis and athletics.

3.1.3.1.1 Pre-industrial (pre-1780)

Content	Additional information
Characteristics and impact on sporting recreation.	Rural, local, two-tier class system. Limited to mob football, real tennis and Much Wenlock Olympic Games.
Characteristics of popular and rational recreation linked to the two-tier class system.	Upper and lower.

3.1.3.1.2 Industrial and post-industrial (1780–1900)

Content	Additional information
Characteristics and impact on sport (limited to development of association football, lawn tennis and rationalisation of track and field events).	Industrial Revolution. Urbanisation. Transport and communication. The British Empire. Provision through factories. Churches and local authorities. Three-tier class system (emphasis on middle class and working class). Development of national governing bodies. Characteristics of sport. Consideration of the changing role of women in sport. The status of amateur and professional performers.

3.1.3.1.3 Post World War II (1950 to present)

Content	Additional information
Characteristics and impact on sport (limited to development of association football, tennis and athletics).	Golden triangle – the interrelationship between commercialisation (including sponsorship), media (radio, TV, satellite, internet and social media) and sports and governing bodies. The changing status of amateur and professional performers. Factors affecting the emergence of elite female performers in football (players and officials), tennis and athletics in the late 20th and early 21st century.

3.1.3.2 The impact of sport on society and of society on sport

This section introduces some of the key terms, key concepts and benefits of physical activity to both the individual and society.

3.1.3.2.1 Sociological theory applied to equal opportunities

Content	Additional information
Understanding of the definitions of the following key terms in relation to the study of sport and their impact on equal opportunities in sport and society: • society • socialisation • social processes • social issues • social structures/stratification.	Primary and secondary. Social control and social change. Causes and consequences of inequality. Eg schools/sports clubs.
Understanding social action theory in relation to social issues in physical activity and sport.	Interactionist approach, impact of sport on society and of society on sport.
Understanding the terms equal opportunities, discrimination, stereotyping and prejudice.	
Benefits of raising participation.	
Under represented groups in sport.	Disability. Ethnic group. Gender. Disadvantaged.
The barriers to participation in sport and physical activity and possible solutions to overcome them for under-represented groups in sport.	
The interrelationship between Sport England, local and national partners to increase participation at grass roots level and under represented groups in sport.	

3.1.4 Exercise physiology

Students should understand the adaptations to the body systems through training or lifestyle, and how these changes affect the efficiency of that system.

3.1.4.1 Diet and nutrition and their effect on physical activity and performance

Content	Additional information
Understand the exercise-related function of food classes.	Carbohydrate. Fibre. Fat [saturated fat, trans fat and cholesterol], protein, vitamins (C, D, B-12, B-complex), minerals [sodium, iron, calcium], water (hydration before, during and after physical activity).
Positive and negative effects of dietary supplements/manipulation on the performer.	Creatine, sodium bicarbonate, caffeine, Glycogen loading.

3.1.4.2 Preparation and training methods in relation to maintaining physical activity and performance

Students should understand quantitative methods, the types and use of data for planning, monitoring and evaluating physical training, and to optimise performance.

Content	Additional information
Understanding key data terms for laboratory conditions and field tests.	Quantitative and qualitative. Objective and subjective. Validity and reliability.
Physiological effects and benefits of a warm-up and cool down.	Stretching for different types of physical activity (static and ballistic).
Principles of training.	Specificity, progressive overload, reversibility, recovery, Frequency Intensity Time Type of Training (FITT) principles.
Application of principles of periodisation.	Macro cycle, Meso cycle, Micro cycle. Preparation, competition, transition. Tapering, peaking.
Training methods to improve physical fitness.	Interval training (anaerobic power). Continuous training (aerobic endurance). Fartlek (aerobic endurance). Circuit training (muscular endurance). Weight training (strength). Proprioceptive Neuromuscular Faciliation (PNF) (flexibility).

3.1.5 Biomechanical movement

Students should develop knowledge and understanding of motion and forces, and their relevance to performance in physical activity and sport.

Students should have a knowledge and use of biomechanical definitions, equations, formulae and units of measurement and demonstrate the ability to plot, label and interpret biomechanical graphs and diagrams.

3.1.5.1 Biomechanical principles

Content	Additional information
Newton's Three Laws of linear motion applied to sporting movements.	First law (inertia), second law (acceleration), third law (action/reaction). Force.
Definitions, equations and units of example scalars.	Speed, distance.
Centre of mass.	
Factors affecting stability.	Height of centre of mass, area of base of support, position of line of gravity and body mass.

3.1.5.2 Levers

Content	Additional information
Three classes of lever and examples of their use in the body during physical activity and sport.	
Mechanical advantage and mechanical disadvantage of each class of lever.	

3.1.6 Sport psychology

In this section students develop knowledge and understanding of the role of sport psychology in optimising performance in physical activity and sport.

Students should be able to understand and interpret graphical representations associated with sport psychology theories.

3.1.6.1 Psychological factors that can influence an individual in physical activities

3.1.6.1.1 Aspects of personality

Content	Additional information
Understanding of the nature vs nurture debate in the development of personality.	Trait, social learning.

Content	Additional information
Interactionist perspective.	Hollander, Lewin.
How knowledge of interactionist perspective can improve performance.	

3.1.6.1.2 Attitudes

Content	Additional information
Triadic model.	Components of an attitude. Formation of attitudes. Changing attitudes through cognitive dissonance and persuasive communication.

3.1.6.1.3 Arousal

Content	Additional information
Theories of arousal.	Drive theory, inverted U theory, catastrophe theory and zone of optimal functioning theory.
Practical applications of theories of arousal and their impact on performance.	
Characteristics of peak flow experience.	

3.1.6.1.4 Anxiety

Content	Additional information
Types of anxiety.	Somatic, cognitive, competitive trait and competitive state.
Advantages and disadvantages of using observations, questionnaires and physiological measures to measure anxiety.	

3.1.6.1.5 Aggression

Content	Additional information
Difference between aggression and assertive behaviour.	
Theories of aggression.	Instinct theory, frustration-aggression hypothesis, social learning theory and aggressive cue theory.

Content	Additional information
Strategies to control aggression.	

3.1.6.1.6 Motivation

Content	Additional information
Motivation.	Intrinsic, extrinsic, tangible and intangible.

3.1.6.1.7 Social facilitation

Content	Additional information
Social facilitation and inhibition.	Zajonc's model.
Evaluation apprehension.	
Strategies to eliminate the adverse effects of social facilitation and social inhibition.	

3.1.6.1.8 Group dynamics

Students should understand how group dynamics can influence the performance of an individual and/or team.

Content	Additional information
Group formation.	Tuckman's model.
Cohesion.	Task and social.
Steiner's model of potential and actual productivity, faulty group processed.	Including cooperation and coordination.
Ringelmann effect and social loafing.	
Strategies to improve cohesion, group productivity and overcome social loafing to enhance team performance.	

3.1.6.1.9 Importance of goal setting

Content	Additional information
Benefits of types of goal setting.	Outcome goals, task orientated. Performance related goals, process goals.
Principles of effective goal setting.	SMARTER (specific, measurable, achievable, realistic, time bound, evaluate, re-do).

3.1.7 Sport and society and the role of technology in physical activity and sport

Students should develop knowledge and understanding of the interaction between, and the evolution of, sport and society and the technological developments in physical activity and sport.

3.1.7.1 The role of technology in physical activity and sport

Students should understand the types of and use of data analysis to optimise performance.

In this section, students should be able to select and justify their selection of technology for analysis of physical activity and sport to optimise performance by:

Content	Additional information
Understanding of technology for sports analytics.	Use of technology in data collection (quantitative and qualitative, objective and subjective, validity and reliability of data). Video and analysis programmes. Testing and recording equipment (metabolic cart for indirect calorimetry). Use of GPS and motion tracking software and hardware. Maintaining data integrity.

3 Subject content

3.1 Factors affecting participation in physical activity and sport

3.1.1 Applied anatomy and physiology

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Transportation of oxygen.	Haemoglobin. Myoglobin. Oxyhaemoglobin disassociation curve. Bohr shift.

Content	Additional information
Venous return.	Mechanisms. Relationship with blood pressure (systolic, diastolic).
Starling's law of the heart.	
Cardiovascular drift.	
Arterio-venous oxygen difference (A-VO_2 diff).	Variations in response to an excercise session. Variations between trained and untrained individuals. Adaptations to body systems resulting in training effect.

3.1.1.3 Respiratory system

Content	Additional information
Understanding of lung volumes and the impact of and on physical activity and sport.	Residual volume. Expiratory reserve volume. Inspiratory reserve volume. Tidal volume. Minute Ventilation.
Gas exchange systems at alveoli and muscles.	Oxygen and carbon dioxide. Principles of diffusion and partial pressures.
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Joint actions in the transverse plane/longitudinal axis.	Shoulder and hip (horizontal abduction and adduction).
Types of joint, articulating bones, main agonists and antagonists, types of muscle contraction.	Isotonic (concentric and eccentric) Isometric.

3.1.1.6 Energy systems

Students should develop knowledge and understanding of energy systems prior to exercise, during exercise of differing intensities and during recovery.

Content	Additional information
Energy transfer in the body.	Aerobic energy system (glycolosis, kreb/citric acid cycle, beta oxidation, electron transport chain). Anaerobic energy systems (ATP-PC system, anaerobic glycolytic system).
Energy continuum of physical activity.	Consideration for physical activity and sport of different intensities and durations. Differences in ATP generation between fast and slow twitch muscle fibre.
Energy transfer during short duration/high intensity exercise.	Anaerobic energy system. ATP-PC system. Short term lactate anaerobic system (lactate accumulation, lactate threshold, OBLA, lactate-producing capacity and sprint/power performance).
Energy transfer during long duration/lower intensity exercise.	Aerobic energy system. Oxygen consumption during exercise (maximal and submaximal oxygen deficit). Oxygen consumption during recovery (excess post-exercise oxygen consumption EPOC).
Factors affecting VO_2 max/aerobic power.	
Measurements of energy expenditure.	Indirect calorimetry. Lactate sampling. VO2 max test. Respiratory exchange ratio (RER).
Impact of specialist training methods on energy systems.	Altitude training. High Intensity Interval Training (HIIT). Plyometrics. Speed Agility Quickness.

3.1.2 Skill acquisition

This section focuses on how skill is acquired and the impact of psychological factors on performance. Students should develop knowledge and understanding of the principles required to optimise learning of new, and the development of existing skills.

Students should be able to understand and interpret graphical representations associated with skill acquisition theories.

3.1.2.1 Skill, skill continuums and transfer of skills

Content	Additional information
Characteristics of skill.	
Use of skill continua.	Open – closed. Discrete – serial – continuous. Gross – fine. Self-paced – externally paced. High – low. Simple – complex.
Justification of skill placement on each of the continua.	
Transfer of learning.	Positive. Negative. Zero. Bilateral.
Understanding of how transfer of learning impacts on skill development.	

3.1.2.2 Impact of skill classification on structure of practice for learning

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Methods of presenting practice.	Whole. Progressive part. Whole–part–whole.
Types of practice.	Massed. Distributed. Variable. Mental practice.
Understanding how knowledge of skill classification informs practice structure (presentation and type) to allow learning/ development of skills.	

3.1.2.3 Principles and theories of learning and performance

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Stages of learning and how feedback differs between the different stages of learning.	Cognitive, associative, autonomonous.
Learning plateaux.	Causes and solutions.
Cognitive theories.	Insight learning (Gestalt).
Behaviourism.	Operant conditioning (Skinner).
Social learning.	Observational learning (Bandura).
Constructivism.	Social development theory (Vygotsky).
Understanding of how theories of learning impact on skill development.	

3.1.2.4 Use of guidance and feedback

Content	Additional information
Methods of guidance.	Verbal. Visual. Manual. Mechanical.
Understand the different purposes and types of feedback.	Knowledge of performance. Knowledge of results. Positive and negative. Intrinsic. Extrinsic.
Understanding of how feedback and guidance impacts on skill development.	

3.1.2.5 Memory models

3.1.2.5.1 General information processing model, to include:

Content	Additional information
Input.	Senses. Receptors. Proprioception. Perception. Selective attention.
Decision making.	Baddeley and Hitch, working memory model memory system. Functions and characteristics of components of working memory model.
Output.	
Feedback.	

3.1.2.5.2 Efficiency of information processing to include:

Content	Additional information
Application of Whiting's information processing model to a range of sporting contexts.	
Applied understanding of information processing terms within a sporting context.	Environment. Display. Sensory organs. Perceptual mechanism. Translatory mechanism. Effector mechanism. Muscular system output data. Feedback data.
Definitions of and the relationship between reaction time, response time, movement time.	Simple reaction time. Choice reaction time.
Factors affecting response time.	Hick's law. Psychological refractory period. Single channel hypothesis.

Content	Additional information
Definitions of anticipation.	Temporal. Spatial.
Strategies to improve response time.	
Schmidt's schema theory.	Recall. Recognition. Initial conditions. Response specifications. Sensory consequences. Response outcomes. Parameters.
Application of schema theory in sporting situations.	
Strategies to improve information processing.	Input – selective attention decision making process – chunking, chaining, response time, schema.

3.1.3 Sport and society

Students should develop knowledge and understanding of the interaction between, and the evolution of, sport and society.

Students should be able to understand, interpret and analyse data and graphs relating to participation in physical activity and sport.

3.1.3.1 Emergence of globalisation of sport in the 21st century

In this section, students develop an understanding of popular and rational recreation leading to the emergence of modern sport through to the globalisation of sport in the 21st century.

Specifically students should understand the impact of the following social factors on the development of football, tennis and athletics.

3.1.3.1.1 Pre-industrial (pre-1780)

Content	Additional information
Characteristics and impact on sporting recreation.	Rural, local, two-tier class system. Limited to mob football, real tennis and Much Wenlock Olympic Games.
Characteristics of popular and rational recreation linked to the two-tier class system.	Upper and lower.

3.1.3.1.2 Industrial and post-industrial (1780–1900)

Content	Additional information
Characteristics and impact on sport (limited to development of association football, lawn tennis and rationalisation of track and field events).	Industrial Revolution. Urbanisation. Transport and communication. The British Empire. Provision through factories. Churches and local authorities. Three-tier class system (emphasis on middle class and working class). Development of national governing bodies. Characteristics of sport. Consideration of the changing role of women in sport. The status of amateur and professional performers.

3.1.3.1.3 Post World War II (1950 to present)

Content	Additional information
Characteristics and impact on sport (limited to development of association football, tennis and athletics).	Golden triangle – the interrelationship between commercialisation (including sponsorship), media (radio, TV, satellite, internet and social media) and sports and governing bodies. The changing status of amateur and professional performers. Factors affecting the emergence of elite female performers in football (players and officials), tennis and athletics in late 20th and early 21st century.

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This section introduces some of the key terms, key concepts and benefits of physical activity to both the individual and society.

3.1.3.2.1 Sociological theory applied to equal opportunities

Content	Additional information
Understanding of the definitions of the following key terms in relation to the study of sport and their impact on equal opportunities in sport and society: • society • socialisation • social processes • social issues • social structures/stratification.	Primary and secondary. Social control and social change. Causes and consequences of inequality. Eg schools/sports clubs.
Understanding social action theory in relation to social issues in physical activity and sport.	Interactionist approach, impact of sport on society and of society on sport.
Benefits of raising participation.	
Underrepresented groups in sport.	Disability. Ethnic group. Gender. Disadvantaged.
Understanding the terms equal opportunities, discrimination, stereotyping and prejudice.	
The barriers to participation in sport and physical activity and possible solutions to overcome them for under represented groups in sport.	
The interrelationship between Sport England, local and national partners to increase participation at grass roots level and under represented groups in sport.	

3.2 Factors affecting optimal performance in physical activity and sport

3.2.1 Exercise physiology

Students should understand the adaptations to the body systems through training or lifestyle, and how these changes affect the efficiency of those systems.

3.2.1.1 Diet and nutrition and their effect on physical activity and performance

Content	Additional information
Understand the exercise-related function of food classes.	Carbohydrate. Fibre. Fat [saturated fat, trans fat and cholesterol], protein, vitamins (C,D, B-12, B-complex), minerals [sodium, iron, calcium], water (hydration before, during and after physical activity).
Positive and negative effects of dietary supplements/manipulation on the performer.	Creatine, sodium bicarbonate, caffeine, Glycogen loading.

3.2.1.2 Preparation and training methods in relation to maintaining physical activity and performance

Students should understand quantitative methods, the types and use of data for planning, monitoring and evaluating physical training, and to optimise performance.

Content	Additional information
Understanding key data terms for laboratory conditions and field tests.	Quantitative and qualitative. Objective and subjective. Validity and reliability.
Physiological effects and benefits of a warm-up and cool down.	Stretching for different types of physical activity (static and ballistic).
Principles of training.	Specificity, progressive overload, reversibility, recovery, Frequency Intensity Time Type of Training (FITT) principles.
Application of principles of periodisation.	Macro cycle, Meso cycle, Micro cycle. Preparation, competition, transition. Tapering, peaking.
Training methods to improve physical fitness.	Interval training (anaerobic power). Continuous training (aerobic endurance). Fartlek (aerobic endurance). Circuit training (muscular endurance). Weight training (strength). Proprioceptive Neuromuscular Faciliation (PNF) (flexibility).

3.2.1.3 Injury prevention and the rehabilitation of injury

Content	Additional information
Types of injury.	Acute (fractures, dislocations, strains, sprains). Chronic (achilles tendonitis, stress fracture, 'tennis elbow').
Understanding different methods used in injury prevention, rehabilitation and recovery.	Injury prevention methods: Screening. Protective equipment. Warm up, flexibility training (active, passive, static and ballistic), taping and bracing. Injury rehabilitation methods (proprioceptive training, strength training, hyperbaric chambers, cryotheraphy, hydrotherapy). Recovery from exercise (compression garments, massage/foam rollers, cold therapy, ice bath, cryotheraphy).
Physiological reasons for methods used in injury rehabilitation.	Hyperbaric chambers, cryotheraphy.
Importance of sleep and nutrition for improved recovery.	

3.2.2 Biomechanical movement

Students should develop knowledge and understanding of motion and forces, and their relevance to performance in physical activity and sport.

Students should have a knowledge and use of biomechanical definitions, equations, formulae and units of measurement and demonstrate the ability to plot, label and interpret biomechanical graphs and diagrams.

3.2.2.1 Biomechanical principles

Content	Additional information
Newton's Three Laws of linear motion applied to sporting movements.	First law (inertia), second law (acceleration), third law (action/reaction). Force.
Definitions, equations and units of example scalars.	Speed, distance.
Centre of mass.	
Factors affecting stability.	Height of centre of mass, area of base of support, position of line of gravity and body mass.

3.2.2.2 Levers

Content	Additional information
Three classes of lever and examples of their use in the body during physical activity and sport.	
Mechanical advantage and mechanical disadvantage of each class of lever.	

3.2.2.3 Linear motion

Content	Additional information
An understanding of the forces acting on a performer during linear motion.	Gravity, frictional force, air resistance, internal-muscular force, weight.
Definitions, equations and units of vectors and scalars.	Mass, weight, speed, velocity, distance, displacement, acceleration and momentum.
The relationship between impulse and increasing and decreasing momentum in sprinting through the interpretation of force/time graphs.	

3.2.2.4 Angular motion

Content	Additional information
Application of Newton's laws to angular motion.	
Definitions and units for angular motion.	Angular displacement, angular velocity, angular acceleration.
Conservation of angular momentum during flight, moment of inertia and its relationship with angular velocity.	

3.2.2.5 Projectile motion

Content	Additional information
Factors affecting horizontal displacement of projectiles.	
Factors affecting flight paths of different projectiles.	Shot put, badminton shuttle.
Vector components of parabolic flight.	

3.2.2.6 Fluid mechanics

Content	Additional information
Dynamic fluid force.	Drag and lift.
Factors that reduce and increase drag and their application to sporting situations.	
The Bernoulli principle applied to sporting situations.	Upward lift force (discus). Downward lift force (speed skiers, cyclists, racing cars).

3.2.3 Sport psychology

In this section students will develop knowledge and understanding of the role of sport psychology in optimising performance in physical activity and sport.

Students should be able to understand and interpret graphical representations associated with sport psychology theories.

3.2.3.1 Psychological factors that can influence an individual in physical activities

3.2.3.1.1 Aspects of personality

Content	Additional information
Understanding of the nature vs nurture debate in the development of personality.	Trait, social learning.
Interactionist perspective.	Hollander, Lewin.
How knowledge of interactionist perspective can improve performance.	

3.2.3.1.2 Attitudes

Content	Additional information
Triadic model.	Components of an attitude. Formation of attitudes. Changing attitudes through cognitive dissonance and persuasive communication.

3.2.3.1.3 Arousal

Content	Additional information
Theories of arousal.	Drive theory, inverted U theory, catastrophe theory and zone of optimal functioning theory.

Content	Additional information
Practical applications of theories of arousal and their impact on performance.	
Characteristics of peak flow experience.	

3.2.3.1.4 Anxiety

Content	Additional information
Types of anxiety.	Somatic, cognitive, competitive trait and competitive state.
Advantages and disadvantages of using observations, questionnaires and physiological measures to measure anxiety.	

3.2.3.1.5 Aggression

Content	Additional information
Difference between aggression and assertive behaviour.	
Theories of aggression.	Instinct theory, frustration-aggression hypothesis, social learning theory and aggressive cue theory.
Strategies to control aggression.	

3.2.3.1.6 Motivation

Content	Additional information
Motivation.	Intrinsic, extrinsic, tangible and intangible.

3.2.3.1.7 Achievement motivation theory

Content	Additional information
Atkinson's Model of achievement motivation.	
Characteristics of personality components of achievement motivation.	Need to achieve (Nach) and Need to avoid failure (Naf).
Impact of situational component of achievement motivation.	Incentive value and probability of success.

Content	Additional information
Achievement goal theory.	Impact of outcome orientated goals and task orientated goals.
Strategies to develop approach behaviours leading to improvements in performance.	

3.2.3.1.8 Social facilitation

Content	Additional information
Social facilitation and inhibition.	Zajonc's model.
Evaluation apprehension.	
Strategies to eliminate the adverse effects of social facilitation and social inhibition.	

3.2.3.1.9 Group dynamics

Students should understand how group dynamics can influence the performance of an individual and/or team.

Content	Additional information
Group formation.	Tuckman's model.
Cohesion.	Task and social.
Steiner's model of potential and actual productivity, faulty group processes.	Including cooperation and coordination.
Ringelmann effect and social loafing.	
Strategies to improve cohesion, group productivity and overcome social loafing to enhance team performance.	

3.2.3.1.10 Importance of goal setting

Content	Additional information
Benefits of types of goal setting.	Outcome goals, task orientated. Performance related goals, process goals.
Principles of effective goal setting.	SMARTER (specific, measurable, achievable, realistic, time bound, evaluate, re-do).

3.2.3.1.11 Attribution theory

Content	Additional information
Attribution process.	
Weiner's Model and its application to sporting situations.	
Link between attribution, task persistence and motivation.	
Self-serving bias.	
Attribution retraining.	
Learned helplessness.	General and specific.
Strategies to avoid learned helplessness leading to improvements in performance.	

3.2.3.1.12 Self-efficacy and confidence

Content	Additional information
Characteristics of self-efficacy, self-confidence and self-esteem.	
Bandura's Model of self-efficacy.	Performance accomplishments, vicarious experiences, verbal persuasion and emotional arousal.
Vealey's Model of self-confidence.	Relationship between trait sport confidence, competitive orientation, the sport situation and state sport confidence.
Effects of home field advantage.	
Strategies to develop high levels of self-efficacy leading to improvements in performance.	

3.2.3.1.13 Leadership

Content	Additional information
Characteristics of effective leaders.	
Styles of leadership.	Autocratic, democratic, laissez-faire.
Evaluation of leadership styles for different sporting situations.	

Content	Additional information
Prescribed and emergent leaders.	
Theories of leadership in different sporting situations.	Fiedler's contingency theory and Chelladurai's multi-dimensional model.

3.2.3.1.14 Stress management

Content	Additional information
Explanation of the terms 'stress' and 'stressor'.	
Effects of cognitive and somatic techniques on the performer.	
Explanation of cognitive techniques.	Psychological skills training (PST). Mental rehearsal. Visualisation. Imagery. Attentional control and cue utilisation. Thought stopping. Positive self-talk.
Explanation of somatic techniques.	Biofeedback, centering, breathing control, progressive muscle relaxation.

3.2.4 Sport and society and the role of technology in physical activity and sport

Students should develop knowledge and understanding of the interaction between, and the evolution of, sport and society and the technological developments in physical activity and sport.

3.2.4.1 Concepts of physical activity and sport

Content	Additional information
The characteristics and functions of key concepts and how they create the base of the sporting development continuum.	Physical recreation. Sport. Physical education. School sport.
The similarities and the differences between these key concepts.	

3.2.4.2 Development of elite performers in sport

Content	Additional information
The personal, social and cultural factors required to support progression from talent identification to elite performance.	
The generic roles, purpose and the relationship between organisations in providing support and progression from talent identification through to elite performance.	National Governing Bodies. National Institutes of Sport. UK Sport.
The key features of National Governing Bodies' Whole Sport Plans.	
The support services provided by National Institutes of Sports for talent development.	
The key features of UK Sport's World Class Performance Programme, Gold Event Series and Talent Identification and Development.	Or equivalent current named programmes.

3.2.4.3 Ethics in sport

Content	Additional information
Amateurism, the Olympic Oath, sportsmanship, gamesmanship, win ethic.	
Positive and negative forms of deviance in relation to the performer.	

3.2.4.4 Violence in sport

Content	Additional information
The causes and implications of violence in sport in relation to the performer, spectator and sport.	
Strategies for preventing violence within sport to the performer and spectator.	

3.2.4.5 Drugs in sport

Content	Additional information
The social and psychological reasons behind elite performers using illegal drugs and doping methods to aid performance.	

Content	Additional information
The physiological effects of drugs on the performer and their performance.	Erythropoietin (EPO). Anabolic steroids. Beta blockers.
The positive and negative implications to the sport and performer of drug taking.	
Strategies for elimination of performance enhancing drugs in sport.	
Arguments for and against drug taking and testing.	Testing procedures will not be examined.

3.2.4.6 Sport and the law

Content	Additional information
The uses of sports legislation.	Performers (contracts, injury, loss of earnings). Officials (negligence). Coaches (duty of care). Spectators (safety, hooliganism).

3.2.4.7 Impact of commercialisation on physical activity and sport and the relationship between sport and the media

Content	Additional information
The positive and negative impact of commercialisation, sponsorship and the media.	Performer. Coach. Official. Audience. Sport.

3.2.4.8 The role of technology in physical activity and sport

Students should understand the types of and use of data analysis to optimise performance.

In this section, students should be able to select and justify their selection of technology for analysis of physical activity and sport to optimise performance by:

Content	Additional information
Understanding of technology for sports analytics.	Use of technology in data collection (quantitative and qualitative, objective and subjective, validity and reliability of data). Video and analysis programmes. Testing and recording equipment (metabolic cart for indirect calorimetry). Use of GPS and motion tracking software and hardware. Maintaining data integrity.
Functions of sports analytics.	Monitor fitness for performance. Skill and technique development. Injury prevention (vibration, electrostimulation). Game analysis. Talent ID/scouting.
The development of equipment and facilities in physical activity and sport, and their impact on participation and performance.	Impact of material technology on equipment – adapted (disability, age). Facilities – Olympic legacy, (surfaces, multi-use).
The role of technology in sport and its positive and negative impacts.	Sport. Performer. Coach. Audience.

Summary of changes

This guide outlines the changes to AS Physical Education from our current specification (2580) to our new specification (7581). It presents a simple comparison of the main areas in which the specification has changed, including subject content and assessment.

Key points:

- Assessment is linear. Linear means that students will sit all their exams and submit all their non-exam assessment (NEA) at the end of the course.
- Students will need to gain quantitative skills relevant to the subject content to meet Ofqual requirements (it represents at least 5% of the overall AS assessment).
- Subject content is split across one paper, with topic areas explained below. Each topic area has equal weighting in the papers as with the previous specification.

Our new specification has been developed in line with the regulatory requirements provided by the Department for Education (DfE) and Ofqual.

Topics

Assessed	No longer assessed
• Applied anatomy and physiology • Skill acquisition • Sport and society • Biomechanical movement • Sport psychology • Sport and society and the role of technology in physical activity sport.	• PHED1 Applied Exercise Physiology: Health, exercise and fitness. • PHED1 Opportunities for Participation: Section 2 - The current provision for active leisure. • PHED1 Opportunities for Participation: Section 3 - The role of schools and national governing bodies in creating opportunities for increasing participation (except Whole Sport plans).

Factors affecting participation in physical activity and sport

Applied anatomy and physiology

Previously this was covered in PHED 1 (AS) Applied Exercise Physiology and PHED3 (A2) Applied physiology to optimise performance sections.

Cardiovascular system

This content was previously found in the PHED1 (AS) Applied Exercise Physiology: Cardiac function and Transport of blood gases.

What's new	What's gone	What's changed
Students will be expected to interpret data and graphs relating to the cardiovascular system during different types of physical activity and sport. The receptors involved in regulation of responses during physical activity have been stated in the specification.	Pulmonary and systematic circulation related to the various blood vessels. Cardiac hypertrophy leading to bradycardia/athlete's heart.	Blood pressures/velocities are now assessed in relation to its relationship with venous return.

Respiratory system

This content was previously found in the PHED1 (AS) Applied Exercise Physiology: Pulmonary function.

What's new	What's gone	What's changed
Students will be expected to interpret data and graphs relating to the respiratory system during different types of physical activity and sport. This could include a spirometer trace even though this isn't stated in the specification.	Mechanics of breathing.	Students will now only need to know the lung volumes stated in the specification.

Neuromuscular system

This is a new topic for the AS qualification as it was previously covered at A2 Level. This content was previously found in the PHED3 (A2) Applied physiology to optimise performance: Muscles and Specialised training.

What's new	What's gone	What's changed
Students will be expected to interpret data and graphs relating to the neuromuscular system during different types of physical activity and sport. Wave summation. Tetanic contraction.	Structure and function of muscles/fibres. Sliding filament hypothesis.	PNF stretching is taught in relation to the role of the proprioceptors to develop an understanding of neuromuscular control. This promotes the understanding of the interrelationship between the different areas of study as PNF stretching as a method is also covered under the subtopic of preparation and training methods.

The musculo-skeletal system and analysis of movement in physical activities

This content was previously found in the PHED1 (AS) Applied Exercise Physiology: Analysis of movement in specified sporting actions.

What's new	What's gone	What's changed
Students will be expected to interpret data and graphs relating to the musculo-skeletal system during different types of physical activity and sport.	N/A	Students will be required to analyse any suitable sporting action. The questions will no longer be restricted to the sporting actions specified in the previous specification. The joint actions in each plane and axis have been specified to clarify.

Skill acquisition

This content was previously found in the PHED1 (AS) Skill Acquisition.

Skill, skill continuums and transfer of skills

This content was previously found in the PHED1 (AS) Skill Acquisition: Skill and ability and Learning and performance.

What's new	What's gone	What's changed
High – low and simple – complex as skill continua.	Definition of skill. Difference between motor and perceptual abilities. Difference between skill and ability. Types of skill (cognitive, perceptual, psychomotor).	The different types of transfer of learning have been reduced to those stated in the specification with proactive and retroactive no longer assessed.

Impact of skill classification on structure of practice for learning

This content was previously found in the PHED1 (AS) Skill Acquisition in practical situations (Section B).

What's new	What's gone	What's changed
N/A	Part and whole-part as methods of practice.	The methods of presenting practice and types of practice and that were previously assessed in Section B of the PHED1 paper will no longer be assessed separately.

Principles and theories of learning and performance

This content was previously found in the PHED1 (AS) Skill Acquisition: Learning and performance.

What's new	What's gone	What's changed
Constructivism - Social development theory (Vygotsky).	N/A	Motor learning - Schmidt's schema theory now appears in the specification under memory models.

Theorists are named to make it clearer for teachers and students.		

Use of guidance and feedback

This content was previously found in the PHED1 (AS) Skill Acquisition in practical situations (Section B).

What's new	What's gone	What's changed
N/A	Terminal and concurrent types of feedback.	The methods of guidance and feedback that were previously assessed in Section B of the PHED1 paper will no longer be assessed separately.

Sport and society

This content was previously found in the PHED1 (AS) Opportunities for Participation and PHED3 (A2) Evaluating contemporary influences.

Emergence of globalisation of sport in the 21st century

This is a new topic for the AS qualification as it was previously covered at A2. This content was previously found in the PHED3 (A2) Evaluating contemporary influences: Section 2 - evaluates whether the Olympic ideal still has a place in modern-day sport and Section 4 - the factors that have influenced the commercialisation of modern-day sport.

What's new	What's gone	What's changed
The social factors are studied specifically in relation to the development of football, tennis and athletics across the key time frames stated. • Pre-industrial (pre-1780) - Characteristics and impact on sporting recreation. • Pre-industrial (pre-1780) -	The contract to compete and its relevance to modern-day elite sport.	The key historical periods have been split up into: • Pre-industrial • Industrial and post-industrial • Post World War II to make it clearer for students to see the characteristics of each period and the impact it had on the sports of football, tennis and athletics.

Characteristics of popular and rational recreation linked to the two-tier class system. • Industrial and post-industrial (1780–1900) – The impact of the three-tier class system (emphasis on middle class and working class). • Industrial and post-industrial (1780–1900) – The consideration of the changing role of women in sport. • Post World War II (1950–present) - Golden triangle – the interrelationship between commercialisation (including sponsorship), media (radio, TV, satellite, internet and social media) and sports and governing bodies. • Post World War II (1950–present) - Factors affecting the emergence of elite female performers in football (players and officials), tennis and athletics in late 20th – early 21st century.		

Sociological theory applied to equal opportunities

This content was previously found in the PHED1 (AS) Opportunities for Participation: Section 4 the potential barriers to participation and possible solutions for various target groups.

What's new	What's gone	What's changed
Students will be required to interpret and analyse data and graphs relating to participation in physical activity and sport. Understanding of the definitions of the following key terms in relation to the study of sport and their impact on equal opportunities in sport and society: Society, Socialisation, Social processes, Social issues and Social structures/stratification. Understanding of social action theory in relation to social issues in physical activity and sport. The inter-relationship between Sport England, local and national partners to increase participation at grass roots level and under-represented groups in sport.	Inclusiveness as a key term. The need to give examples of equal opportunity, discrimination, stereotyping, inclusiveness and prejudice in sport. Socio-economic class as an under represented group.	N/A

Exercise physiology

This content was previously found in the PHED1 (AS) Applied Exercise Physiology and PHED3 (A2) Applied physiology to optimise performance.

Diet and nutrition and their effect on physical activity and performance

This content was previously found in the PHED1 (AS) Applied Exercise Physiology: Nutrition and was previously covered at A2 Level in PHED3 (A2) Applied physiology to optimise performance: Preparation and training and Specialised training.

What's new	What's gone	What's changed
The study of fat, vitamins and minerals and their exercise related function is now more prescribed by the details in the specification, eg fats (saturated fat, trans fat and cholesterol).	Protein supplements and herbal remedies as dietary supplements. The need for a balanced diet and the energy balance of food. The performer's use of nutritional information based on their activity, difference in diet composition between endurance athletes and power athletes. Definitions of obesity and the limitations in trying to define it. Percentage body fat/body composition and Body Mass Index (BMI) as measures of nutritional suitability. Electrolyte balance. Achieving optimal weight for activities.	Glycogen loading was previously taught as a specialised training method at A2 however it is now taught as a dietary manipulation technique at AS.

Preparation and training methods in relation to maintaining physical activity and performance

This content was previously found in the PHED1 (AS) Applied Exercise Physiology in practical situations (Section B) and was previously covered at A2 in PHED3 (A2) Applied physiology to optimise performance: Specialised training.

What's new	What's gone	What's changed
Quantitative, qualitative, objective and subjective as key data terms. Recovery as a principle of training. Fartlek training to improve aerobic power. Key terms associated with periodisation as detailed in the specification that was previously taught at A2.	Over-training and tedium as principles of training. Mobility training. Thermoregulation in different environments. Fitness testing – reasons for testing, principles of maximal and sub-maximal tests, limitations of testing, specific test protocols. Calculating working intensities for optimal gains through heart rate and Borg scale, weights - one rep max.	Validity and reliability that were previously assessed in Section B of the PHED1 paper will no longer be assessed separately. Physiological effects and benefits of a warm-up and cool down that were previously assessed in Section B of the PHED1 paper will no longer be assessed separately. The training methods included have been linked to a stated component of fitness to limit the breadth of knowledge of each method. Interval has replaced intermittent training. PNF stretching under this subtopic refers to the method adopted to increase flexibility. The physiology that explains the working of PNF stretching is covered under the neuro-muscular subtopic of the applied anatomy and physiology. This is to promote the understanding of the interrelationship between the different areas of study.

Biomechanical movement

This content was previously found in the PHED1 (AS) Applied Exercise Physiology and PHED3 (A2) Applied physiology to optimise performance.

Biomechanical principles

This is a new topic for the AS qualification as it was previously covered at A2. This content was previously found in the PHED3 (A2) Applied physiology to optimise performance: Mechanics of movement.

What's new	What's gone	What's changed
Students will be expected to use definitions, equations and formulae and units of measurement for different scalars specified. Students will need to have the ability to plot, label and interpret biomechanical graphs and diagrams relating to biomechanical principles outlined in the specification. Centre of mass. Factors affecting stability.	Vectors.	N/A

Levers

This content was previously found in the PHED1 (AS) Applied Exercise Physiology: Levers.

What's new	What's gone	What's changed
N/A	N/A	Although students have previously been required to sketch and label a lever diagram, students will need to have the ability to label lever diagrams that are technically sound.

Sport psychology

This content was previously found in the PHED1 (AS) Skill Acquisition and PHED3 (A2) Psychological aspects that optimise performance.

Aspects of personality

This is a new topic for the AS qualification as it was previously covered at A2. This content was previously found in the PHED3 (A2) Psychological aspects that optimise performance: Aspects of personality.

What's new	What's gone	What's changed
N/A	Definition of personality. Use of personality testing. Profile of mood states (POMS).	More detail has been given in relation to the interactionalist perspectives so students are guided to know both Lewin and Hollander's theories.

Attitudes

This is a new topic for the AS qualification as it was previously covered at A2. This content was previously found in the PHED3 (A2) Psychological aspects that optimise performance: Attitudes.

What's new	What's gone	What's changed
N/A	Definition of an attitude.	N/A

Arousal

This is a new topic for the AS qualification as it was previously covered at A2. This content was previously found in the PHED3 (A2) Psychological aspects that optimise performance: Arousal. There are no changes within this subtopic.

Anxiety

This is a new topic for the AS qualification as it was previously covered at A2. This content was previously found in the PHED3 (A2) Psychological aspects that optimise performance: Controlling anxiety.

What's new	What's gone	What's changed
N/A	N/A	Goal setting is now in the specification as a separate subtopic.

Aggression

This is a new topic for the AS qualification as it was previously covered at A2. This content was previously found in the PHED3 (A2) Psychological aspects that optimise performance: Aggression.

What's new	What's gone	What's changed
N/A	Channeled and instrumental aggression. Strategies to control aggression.	N/A

Motivation

This content was previously found in the PHED1 (AS) Skill Acquisition: Learning and performance. There are no changes within this subtopic.

Social facilitation

This is a new topic for the AS qualification as it was previously covered at A2. This content was previously found in the PHED3 (A2) Psychological aspects that optimise performance: Confidence.

What's new	What's gone	What's changed
Zajonc's model has been stated in the specification to guide students.	Baron's distraction conflict theory, home field advantage.	Social facilitation was previously taught under the subtopic of confidence and is now a separate subtopic.

Group dynamics

This is a new topic for the AS qualification as it was previously covered at A2. This content was previously found in the PHED3 (A2) Psychological aspects that optimise performance: Group success.

What's new	What's gone	What's changed
Tuckman's model has been stated in the specification to guide students.	N/A	N/A

Importance of goal setting

This content was previously found in the PHED1 (AS) Skill Acquisition: Learning and performance and was previously covered at A2 in PHED3 (A2) Psychological aspects that optimise performance: Controlling anxiety.

What's new	What's gone	What's changed
The inclusion of SMARTER in the specification to guide teachers and students.	N/A	N/A

The role of technology in physical activity and sport

This is new content for the AS qualification.

What's new	What's gone	What's changed
Students will need to be able to understand different types and use of data analysis to optimise performance. Understanding of technology for sports analytics. Functions of sports analytics. The development of equipment and facilities in physical activity and	N/A	N/A

sport, and their impact on participation and performance. The role of technology in sport and its positive and negative impacts was previously assessed in PHED3 Evaluating contemporary issues.		

Assessment

New assessment consists of an exam (70%) and NEA (30%).

Exam

What's new	What's the same	What's gone/changed
• All assessment is at the end of either a one year or two year AS course. • A wider range of question styles. • Assessment of quantitative skills, at least 5% of the total assessment. • 1 hour 30 minutes written exam. • 84 marks in total. • Three compulsory sections containing: multiple choice, short answer and extended writing.	As with the previous specification, there will still be three sections to each of the papers, all identical in size. The topic areas for each one are as detailed above.	• AS assessment is stand alone, it no longer contributes to the A-level grade. • There will be the removal of choice as with the current PHED3 paper and all questions are compulsory. • The content previously assessed in Section B of the PHED1 paper (Applied Exercise Physiology and Skill Acquisition in practical situations) will not be assessed separately and is included within the specification alongside all other content.

NEA

What's new	What's the same	What's gone/changed
• Students are assessed as either a player/performer or coach in the full sided version of one activity of their choice, from the given list. • 15% of the assessment is for the practical and	N/A	• There is a reduced activity list, which is the same for all boards. • Students are only assessed in one activity.

15% of the assessment if for the analysis and evaluation of performance. • Inclusion of specialist activities for students with disabilities. • The practical assessment will be marked out of three areas of assessment, each worth 15 marks. • The analysis and evaluation of assessment will be marked out of 45: analysis (20 marks) and evaluation (25 marks). • Levels of response grids will be used for all assessment.		

How to co-teach our AS and A-level Physical Education specifications

AS Year 12 and A-level Year 12 (first year)

All students can be taught together.

The whole class studies:

- Applied anatomy and physiology
- Skill acquisition
- Sport and Society
- The impact of sport on society and of society on sport
- Exercise physiology
- Biomechanical movement
- Sports psychology
- Sport and society and the role of technology in physical activity and sport

At the end of Year 12 students decide to:

- continue straight to A-level with no exam; or
- sit AS exams and finish with an AS qualification; or
- sit AS exams then decide whether to continue to A-level or not.

Sit AS exams

AS assessment

Component 1 – Paper 1: Factors affecting participation in physical activity and sport

- Topics covered in the first year
- Written exam paper (2 hours)
- 70% of AS

Component 2 – Non-exam assessment: Practical performance in physical activity and sport

- Students assessed as a performer or coach in the full sided version of one activity
- Written/verbal analysis and evaluation of performance
- 30% of AS

Stand alone AS qualification

No

Continue straight to second year of the A-level?

Yes

No AS exams

No

Continue to second year of the A-level?

Yes

A-level Year 13 (second year)

Students study:

- Applied anatomy and physiology – Energy systems
- Skill acquisition – Memory models
- Exercise physiology – injury prevention and the rehabilitation of injury
- Biomechanical movement – linear motion, angular motion, projectile motion, fluid mechanics
- Sports psychology – Achievement motivation theory, attribution theory, self-efficacy and confidence, leadership, stress management
- Sport and society and the role of technology in physical activity and sport – concepts of physical activity and sport, development of elite performers in sport, ethics in sport, violence in sport, drugs in sport, sport and the law, impact of commercialisation on physical activity and sport and the relationship between sport and the media

A-level assessment

Component 1 – Paper 1: Factors affecting participation in physical activity and sport

- Applied anatomy and physiology
- Skill acquisition
- Sport and society
- Written exam paper (2 hours)
- 35% of A-level

Component 2 – Paper 2: Factors affecting optimal performance in physical activity and sport

- Exercise physiology and biomechanics
- Sports psychology
- Sport and society and technology in sport
- Written exam paper (2 hours)
- 35% of A-level

Component 3 – Non-exam assessment: Practical performance in physical activity and sport

- Students assessed as a performer or coach in the full sided version of one activity
- Written/verbal analysis and evaluation of performance
- 30% of A-level

A-level qualification

Sit A-level exams

Command words

Command words are the words and phrases used in exams and other assessment tasks that tell students how they should answer the question.

The following command words are taken from Ofqual's official list of command words and their meanings that are relevant to this subject. In addition, where necessary, we have included our own command words and their meanings to complement Ofqual's list.

Analyse

Separate information into components and identify their characteristics.

Apply

Put into effect in a recognised way.

Assess

Make an informed judgement.

Calculate

Work out the value of something.

Comment

Present an informed opinion.

Compare

Identify similarities and or differences.

Complete

Finish a task by adding to given information.

Consider

Review and respond to given information.

Contrast

Identify differences.

Define

Specify meaning.

Describe

Set out characteristics.

Discuss

Present key points about different ideas or strengths and weaknesses of an idea.

Evaluate

Judge from available evidence.

Explain

Set out purposes or reasons.

Give

Produce an answer from recall.

Identify

Name or otherwise characterize.

Interpret

Translate information into recognisable form.

Justify

Support a case with evidence.

Label

Provide appropriate names on a diagram.

Name

Identify using a recognised technical term.

Outline

Set out main characteristics.

Plot

Mark on a graph.

State

Express clearly and briefly.

Sketch

Draw approximately.

Suggest

Present a possible case/solution.