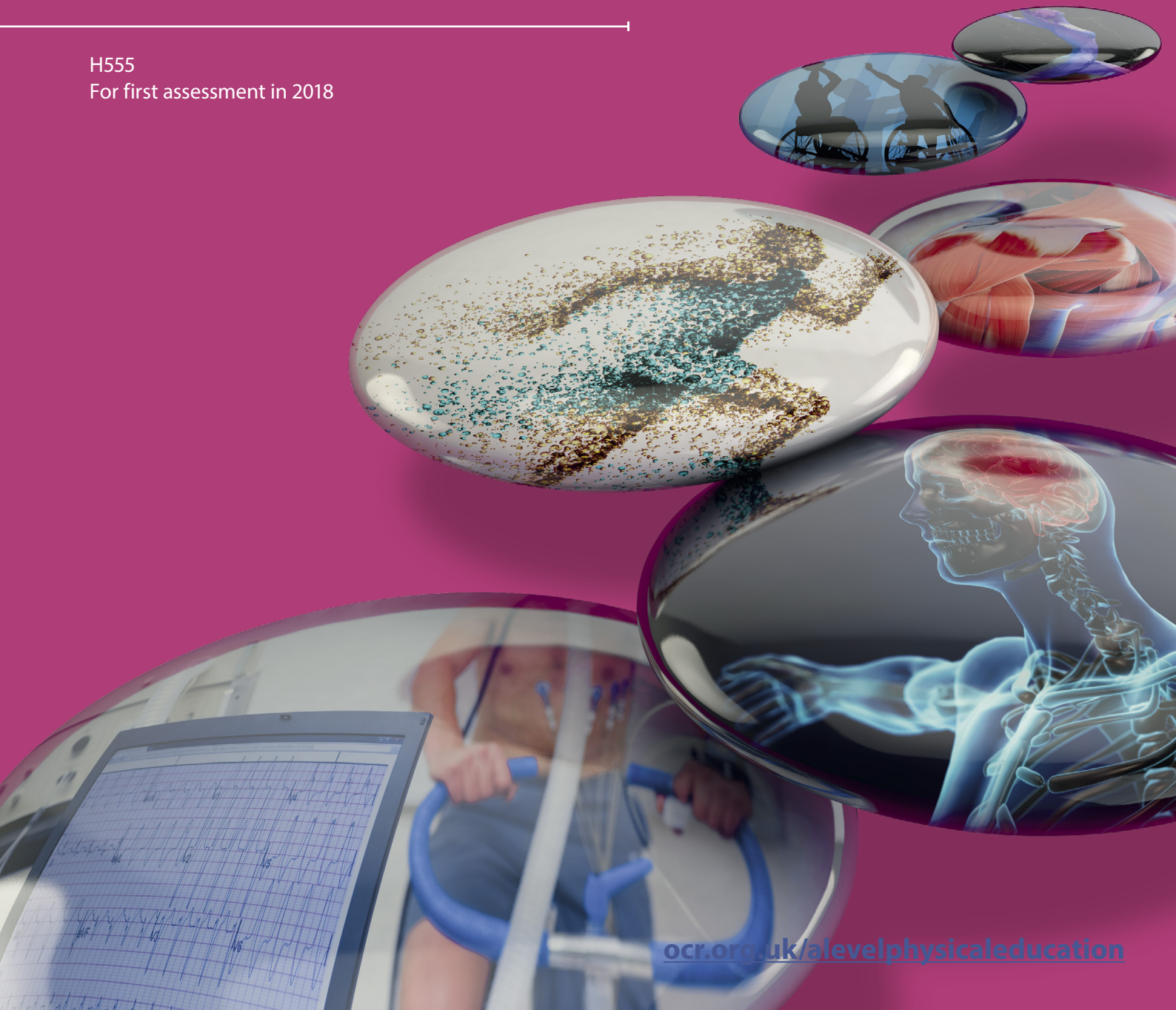


A LEVEL
Specification

PHYSICAL EDUCATION

H555
For first assessment in 2018



Registered office:
1 Hills Road
Cambridge
CB1 2EU

OCR is an exempt charity.

We will inform centres about any changes to the specifications. We will also publish changes on our website. The latest version of our specifications will always be those on our website (ocr.org.uk) and these may differ from printed versions.

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Support and Guidance

Introducing a new specification brings challenges for implementation and teaching, but it also opens up new opportunities. Our aim is to help you at every stage. We are working hard with teachers and other experts to bring you a package of practical support, resources and training.

Subject Specialists

OCR Subject Specialists provide information and support to centres including specification and non-exam assessment advice, updates on resource developments and a range of training opportunities.

Our Subject Specialists work with subject communities through a range of networks to ensure the sharing of ideas and expertise supporting teachers and students alike. They work with developers to help produce our specifications and the resources needed to support these qualifications during their development.

You can contact our Physical Education Subject Specialists for specialist advice, guidance and support:

01223 553998
PE@OCR.org.uk
[@OCR_PhysEd](https://www.instagram.com/OCR_PhysEd)

Teaching and learning resources

Our resources are designed to provide you with a range of teaching activities and suggestions that enable you to select the best activity, approach or context to support your teaching style and your particular students. The resources are a body of

knowledge that will grow throughout the lifetime of the specification, they include:

- Delivery Guides
- Transition Guides
- Topic Exploration Packs
- Lesson Elements.

We also work with a number of leading publishers who publish textbooks and resources for our specifications. For more information on our publishing partners and their resources visit: ocr.org.uk/qualifications/gcse-and-a-level-reform/publishing-partners

Professional development

Our improved Professional Development Programme fulfils a range of needs through course selection, preparation for teaching, delivery and assessment. Whether you want to come to face-to-face events, look at our new digital training or search for training materials, you can find what you're looking for all in one place at the CPD Hub: cpdhub.ocr.org.uk

An introduction to new specifications

We run training events throughout the academic year that are designed to help prepare you for first teaching and support every stage of your delivery of the new qualifications.

To receive the latest information about the training we offer on GCSE and A Level, please register for email updates at: ocr.org.uk/updates

Assessment Preparation and Analysis Service

Along with subject-specific resources and tools, you'll also have access to a selection of generic resources

that focus on skills development, professional guidance for teachers and results data analysis.





1 Why choose an OCR A Level in Physical Education?

1a. Why choose an OCR qualification?

Choose OCR and you've got the reassurance that you're working with one of the UK's leading exam boards. Our new A Level in Physical Education course has been developed in consultation with teachers, employers and higher education to provide learners with a qualification that's relevant to them and meets their needs.

We're part of the Cambridge Assessment Group, Europe's largest assessment agency and a department of the University of Cambridge. Cambridge Assessment plays a leading role in developing and delivering assessments throughout the world, operating in over 150 countries.

We work with a range of education providers, including schools, colleges, workplaces and other institutions in both the public and private sectors. Over 13,000 centres choose our A Levels, GCSEs and vocational qualifications including Cambridge Nationals, Cambridge Technicals and Cambridge Progression.

Our Specifications

We believe in developing specifications that help you bring the subject to life and inspire your learners to achieve more.

We've created teacher-friendly specifications based on extensive research and engagement with the teaching community. They're designed to be straightforward and accessible so that you can tailor the delivery of the course to suit your needs. We aim to encourage learners to become responsible for their

own learning, confident in discussing ideas, innovative and engaged.

We provide a range of support services designed to help you at every stage, from preparation through to the delivery of our specifications. This includes:

- A wide range of high-quality creative resources including:
 - Delivery Guides
 - Transition Guides
 - Topic Exploration Packs
 - Lesson Elements
 - . . . and much more.
- Access to subject specialists to support you through the transition and throughout the lifetime of the specifications.
- CPD/Training for teachers including face-to-face events to introduce the qualifications and prepare you for first teaching.
- Active Results – our free results analysis service to help you review the performance of individual learners or whole schools.
- ExamCreator – our new online past papers service that enables you to build your own test papers from past OCR exam questions.

All A level qualifications offered by OCR are accredited by Ofqual, the Regulator for qualifications offered in England. The accreditation number for OCR's A Level in Physical Education is QN: 601/8322/6.



1b. Why choose an OCR A Level in Physical Education?

1

This practical and engaging course has been developed after feedback from teachers and other key stakeholders, ensuring an inclusive specification that will allow all learners to achieve their potential.

The content has been designed to allow learners to study Physical Education (PE) in an academic setting, enabling them to critically analyse and evaluate their physical performance and apply their experience of practical activity in developing their knowledge and understanding of the subject.

The examined components will provide the knowledge and understanding which underpin the non-exam assessment (NEA). The NEA within this specification allows learners to explore an activity in detail as a performer or coach, chosen from a wide variety of sporting activities. Learners will also analyse and evaluate performance in a chosen activity as part of their NEA.

This course will prepare learners for the further study of PE or sports science courses as well as other related subject areas such as psychology, sociology and biology. Learners will also develop the transferable skills that are in demand by further education, Higher Education and employers in all sectors of industry.

This specification will create confident, independent thinkers and effective decision makers who can operate effectively as individuals or as part of a team – all skills that will enable them to stand out and effectively promote themselves as they progress through life.

With all topic areas of the specification being compulsory, OCR is aware of the need for comprehensive resources covering all areas. Our resourcing provision will support you fully in your teaching of this qualification.

Aims and learning outcomes

OCR's A Level in Physical Education will equip learners with both a depth and breadth of knowledge, understanding and skills relating to scientific, socio-cultural and practical aspects of physical education. This requires them to:

- develop theoretical knowledge and understanding of the factors that underpin physical activity and sport and use this knowledge to improve performance
- understand how physiological and psychological states affect performance
- understand the key socio-cultural factors that influence people's involvement in physical activity and sport
- understand the role of technology in physical activity and sport
- refine their ability to perform effectively in physical activity and sport by developing skills and techniques and selecting and using tactics, strategies and/or compositional ideas
- develop their ability to analyse and evaluate to improve performance
- understand the contribution which physical activity makes to health and fitness
- improve as effective and independent learners and as critical and reflective thinkers with curious and enquiring minds.

1c. What are the key features of this specification?

The key features of OCR's A Level in Physical Education for you and your learners are:

- a straightforward structure with clear focussed content
- improved support, resources and teacher guidance
- a wide variety of practical activities to choose from in the NEA component
- learners are introduced to a wide range of topics enabling them to fully experience the subject
- learners will see 'where they fit in' with physical activity and sport and how to improve their performance
- a synoptic element of learning meaning learners will gain a deeper understanding of how different elements of the specification are interrelated
- a quantitative skills element, enabling learners to develop their knowledge and understanding of subject specific skills
- content which is fully co-teachable with OCRs AS level Physical Education qualification.

1d. How do I find out more information?

If you are already using OCR specifications you can contact us at: www.ocr.org.uk

If you are not already a registered OCR centre then you can find out more information on the benefits of becoming one at: www.ocr.org.uk

If you are not yet an approved centre and would like to become one go to: www.ocr.org.uk

Want to find out more?

Ask our Subject Specialist:

Email: PE@ocr.org.uk

Teacher support: 01223 553998

Twitter: [@OCR_PhysEd](https://twitter.com/OCR_PhysEd)

2 The specification overview

2a. OCR's A Level in Physical Education (H555)

Learners take all components (01, 02, 03 and 04) to be awarded the OCR A Level in Physical Education.

Content Overview	Assessment Overview	
<ul style="list-style-type: none"> Applied anatomy and physiology Exercise physiology Biomechanics 	<p>Physiological factors affecting performance (01)*</p> <p>90 marks</p> <p>2 hour written paper</p>	<p>30% of total A level</p>
<ul style="list-style-type: none"> Skill acquisition Sports psychology 	<p>Psychological factors affecting performance (02)*</p> <p>60 marks</p> <p>1 hour written paper</p>	<p>20% Of total A level</p>
<ul style="list-style-type: none"> Sport and society Contemporary issues in physical activity and sport 	<p>Socio-cultural issues in physical activity and sport (03)*</p> <p>60 marks</p> <p>1 hour written paper</p>	<p>20% of total A level</p>
<ul style="list-style-type: none"> Performance or Coaching Evaluation and Analysis of Performance for Improvement (EAPI) 	<p>Performance in physical education (04)*</p> <p>60 marks**</p> <p>Non-exam assessment (NEA)</p>	<p>30% of total A level</p>

* Indicates inclusion of synoptic assessment.

** Examination is weighted up to 90 marks to equal the total marks combined for the two tasks.

Learners who are retaking the qualification may carry forward their result for the non-exam assessment component. See section 4a for details.

2b. Content of A Level in Physical Education (H555)

The content of OCR's A Level in Physical Education is divided into four components. Each component is further sub divided into topic areas and the detailed content associated with those topics.

Component 01: Physiological factors affecting performance

- 1.1 Applied anatomy and physiology
- 1.2 Exercise physiology
- 1.3 Biomechanics.

Component 02: Psychological factors affecting performance

- 2.1 Skill acquisition
- 2.2 Sports psychology.

Component 03: Socio-cultural issues in physical activity and sport

- 3.1 Sport and Society
- 3.2 Contemporary issues in physical activity and sport.

Component 04: Performance in physical education (NEA)

- 4.1 Performance or coaching of an activity taken from the approved lists*.

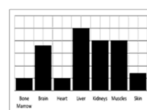
*The approved lists can be found in section 2e of the 'OCR AS and GCE guide to NEA in Physical Education'.

4.2 The Evaluation and Analysis of Performance for Improvement (EAPI).

The content of this specification allows for practical examples from physical activities and sports to show how theory can be applied and to reinforce understanding. Areas of the specification where this may be assessed are marked with the following symbol:



This specification contains a 5% quantitative skills requirement. The use of quantitative skills is spread across the components and areas of the specification where this may be assessed are marked with the following symbol:



There is a synoptic element to the assessment of A level Physical Education and this will be assessed in each component. This specification is designed to be co-teachable with OCR's AS Level in Physical Education.

This specification is fully co-teachable with the AS qualification. All additional GCE content contained in this specification is marked with an *. This * can be found to the left of each topic header that applies to the additional GCE content.

2c. Content of Physiological factors affecting performance (01)

2

Component 01, Physiological factors affecting performance, focuses on developing the learner's knowledge of the science behind physical activity. This includes the structure and function of key systems in the human body, the forces that act upon us and the adaptations we make to our bodies through diet and training regimes.

Through the study of this component, learners will gain a deeper understanding of key systems in the body and how they react to changes in diet and exercise. They will also study the effects of force and motion on the body and how these effects can be used in physical activities to our advantage.

In many areas of this specification, it is expected that practical examples from physical activities and sports will be used to show how theoretical concepts can be applied and to reinforce understanding. Areas of the specification where this may be examined are marked with the following symbol:



This topic focuses on key systems of the human body involved in movement and physical activity.

Learners will develop their knowledge and understanding of the changes within these body systems prior to exercise, during exercise of differing intensities and during recovery.

Learners are required to develop knowledge and understanding of quantitative skills, which in this component include:

1.1.a. Skeletal and muscular systems

Learners will develop their knowledge and understanding of the roles of the skeletal and muscular systems in the performance of movement skills in physical activities and sport.

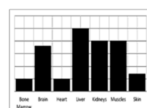
Applied anatomy and exercise physiology:

- interpretation of data and graphs relating to:
 - changes within musculo-skeletal, cardio-respiratory and neuro-muscular systems during different types of physical activity and sport
 - use of energy systems during different types of physical activity and sport and the recovery process
- quantitative methods for planning, monitoring and evaluating physical training and performance.

Biomechanics:

- knowledge and use of definitions, equations, formulae and units of measurement
- ability to plot, label and interpret graphs and diagrams.

Areas of the specification which allow for this to be included within teaching and where it may be examined are marked with the following symbol:





Learners will know and understand the different energy systems and factors that affect the interplay of the energy systems during physical activity.

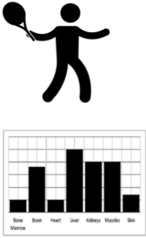


Application of this theoretical knowledge will enable learners to understand how changes in physiological states can influence performance in physical activities and sport.

Knowledge and understanding of the skeletal system is required and should include the structure and functions of bones, joints and connective tissues.

Knowledge and understanding of planes of movement, the roles of muscles and types of contraction will be developed. Learners will also be

able to analyse movement in physical activities and sport applying the underlying knowledge of muscular contraction.

Topic Area	Content
<p>Joints, movements and muscles</p> 	<ul style="list-style-type: none"> • shoulder: <ul style="list-style-type: none"> ○ flexion, extension, abduction, adduction, horizontal flexion/extension, medial and lateral rotation, circumduction ○ deltoid, latissimus dorsi, pectoralis major, trapezius, teres minor • elbow: <ul style="list-style-type: none"> ○ flexion, extension ○ biceps brachii, triceps brachii • wrist: <ul style="list-style-type: none"> ○ flexion, extension ○ wrist flexors, wrist extensors • hip: <ul style="list-style-type: none"> ○ flexion, extension, abduction, adduction, medial and lateral rotation ○ iliopsoas, gluteus maximus, medius and minimus, adductor longus, brevis and magnus • knee: <ul style="list-style-type: none"> ○ flexion, extension ○ hamstring group: biceps femoris, semi-membranosus, semi-tendinosus ○ quadriceps group: rectus femoris, vastus lateralis, vastus intermedius and vastus medialis • ankle: <ul style="list-style-type: none"> ○ dorsi flexion, plantar flexion ○ tibialis anterior, soleus, gastrocnemius • planes of movement: <ul style="list-style-type: none"> ○ frontal ○ transverse ○ sagittal.
<p>Functional roles of muscles and types of contraction</p> 	<ul style="list-style-type: none"> • roles of muscles: <ul style="list-style-type: none"> ○ agonist ○ antagonist ○ fixator • types of contraction: <ul style="list-style-type: none"> ○ isotonic ○ concentric ○ eccentric ○ isometric.

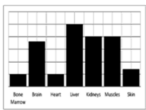
Topic Area	Content
Analysis of movement 	<ul style="list-style-type: none"> analyse movement with reference to: <ul style="list-style-type: none"> joint type movement produced agonist and antagonist muscles involved type of muscle contraction taking place.
Skeletal muscle contraction 	<ul style="list-style-type: none"> structure and role of motor units in skeletal muscle contraction nervous stimulation of the motor unit: <ul style="list-style-type: none"> motor neuron action potential neurotransmitter 'all or none' law.
Muscle contraction during exercise of differing intensities and during recovery 	<ul style="list-style-type: none"> muscle fibre types: <ul style="list-style-type: none"> slow oxidative fast oxidative glycolytic fast glycolytic recruitment of different fibre types during exercise of differing intensities and during recovery.


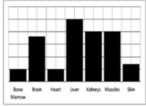
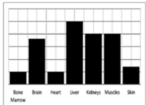

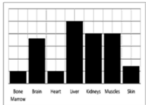
1.1.b. Cardiovascular and respiratory systems

Learners will know key terms and develop their knowledge and understanding of the cardiovascular and respiratory systems at rest, during exercise and during recovery.

Knowledge and understanding of the recovery system and how the body returns to its pre-exercise state will also be developed.

Learners understanding of the cardiovascular, respiratory and neuromuscular systems will also be applied to altitude training and exercise in the heat to show how these types of training can affect the body systems.

Topic Area	Content
Cardiovascular system at rest 	<ul style="list-style-type: none"> the relationship between, and resting values for: <ul style="list-style-type: none"> heart rate stroke volume cardiac output methods of calculating the above cardiac cycle: <ul style="list-style-type: none"> diastole systole conduction system of the heart linked to the cardiac cycle.

Topic Area	Content
<p>Cardiovascular system during exercise of differing intensities and during recovery</p>  	<ul style="list-style-type: none"> • effects of different exercise intensities and recovery on: <ul style="list-style-type: none"> ○ heart rate ○ stroke volume ○ cardiac output ○ methods of calculating the above • redistribution of cardiac output during exercise of differing intensities and during recovery: <ul style="list-style-type: none"> ○ 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: <ul style="list-style-type: none"> ○ neural factors ○ hormonal factors ○ intrinsic factors.
<p>Respiratory system at rest</p> 	<ul style="list-style-type: none"> • relationship between resting values for: <ul style="list-style-type: none"> ○ breathing frequency ○ tidal volume ○ minute ventilation ○ methods of calculating the above • mechanics of breathing at rest and the muscles involved: <ul style="list-style-type: none"> ○ diaphragm ○ external intercostals ○ at the alveoli ○ at the muscles.
<p>Respiratory system during exercise of differing intensities and during recovery</p>  	<ul style="list-style-type: none"> • effects of differing intensities of exercise and recovery on: <ul style="list-style-type: none"> ○ breathing frequency ○ tidal volume ○ minute ventilation • mechanics of breathing during exercise of differing intensities and during recovery, including additional muscles involved: <ul style="list-style-type: none"> ○ inspiration – sternocleidomastoid, pectoralis minor ○ expiration – internal intercostals, rectus abdominis. • regulation of breathing during exercise of different intensities and during recovery <ul style="list-style-type: none"> ○ neural control ○ chemical control • effect of differing intensities of exercise and recovery on gas exchange at the alveoli and at the muscles <ul style="list-style-type: none"> ○ changes in pressure gradient ○ changes in dissociation of oxyhaemoglobin.

1.1.c. Energy for exercise

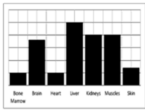

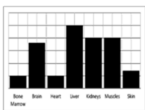

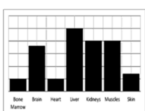
Learners will develop their knowledge and understanding of Adenosine Triphosphate (ATP) as energy currency, along with the principle of the coupled reactions and resynthesis of ATP. The detail of the different energy systems will be known and learners will understand the energy continuum and factors that affect the interplay of the energy systems.


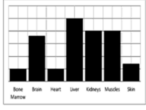
The recovery process will be known, along with an understanding of interpretation of figures relating to the contribution of the three energy systems to exercise of different intensities and durations.

Learners will be able to interpret figures relating to the contribution of the three energy systems to exercise of different intensities and durations.

Learners will develop their knowledge and understanding of the effect of exercise intensity on excess post exercise oxygen consumption (EPOC) and implications of the recovery process for planning exercise or training sessions related to physical activities and sports.

2


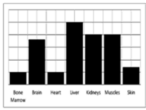

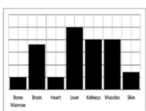
Topic Area	Content
<p>*Adenosine Triphosphate (ATP) and energy transfer</p> 	<ul style="list-style-type: none"> ATP as 'energy currency' principle of energetically coupled reactions: <ul style="list-style-type: none"> breakdown of ATP to ADP (Adenosine Diphosphate) + P (phosphate) resynthesis of ATP from ADP + P.
<p>*Energy systems and ATP resynthesis</p>  	<ul style="list-style-type: none"> energy systems: <ul style="list-style-type: none"> ATP-PC (Phosphocreatine) system glycolytic system aerobic system for each system: <ul style="list-style-type: none"> 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.
<p>*ATP resynthesis during exercise of differing intensities and durations</p>  	<ul style="list-style-type: none"> the energy continuum predominant energy system used during exercise: <ul style="list-style-type: none"> 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 <ul style="list-style-type: none"> intensity of exercise duration of exercise recovery periods fitness levels.

Topic Area	Content
<p>*The recovery process</p>  	<ul style="list-style-type: none"> • how the body returns to its pre-exercise state: <ul style="list-style-type: none"> ○ Excess Post exercise Oxygen Consumption (EPOC) • fast components of EPOC, the processes that occur and the duration: <ul style="list-style-type: none"> ○ replenishment of blood and muscle oxygen stores ○ re-synthesis of ATP and PC • slow components of EPOC, the processes that occur and the duration: <ul style="list-style-type: none"> ○ elevated circulation ○ elevated ventilation ○ 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.

1.1.d. Environmental effects on body systems

Learners will develop their knowledge and understanding of the effect of altitude on the cardiovascular and respiratory systems and the performance of exercise at different intensities at altitude. Knowledge of acclimatisation will also be developed.

Learners will develop their knowledge and understanding of exercise in the heat and recognise the effect of heat on the cardiovascular and respiratory systems. The understanding of the performance of exercise of different intensities in the heat will also be developed in this topic.

Topic Area	Content
<p>*Exercise at altitude</p>  	<ul style="list-style-type: none"> • effect of altitude on the cardiovascular and respiratory systems: <ul style="list-style-type: none"> ○ 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).
<p>*Exercise in the heat</p>  	<ul style="list-style-type: none"> • effect of heat on the cardiovascular and respiratory systems: <ul style="list-style-type: none"> ○ temperature regulation ○ cardiovascular drift.

1.2 Exercise physiology

This topic will focus on how key factors can affect the body's ability to perform during physical activity and sport.

Learners will develop their knowledge and understanding of diet, nutrition and ergogenic aids and their effects on physical activity and performance.

Learners will know about physical preparation and different training methods in relation to improving and maintaining physical activity and performance. Knowledge and understanding will also be developed

of the impact of training on preventing lifestyle-related diseases.



Learners will develop their knowledge and understanding of how physiological adaptations resulting from training and lifestyle affect the efficiency of these body systems.


Learners will be able to understand how to prevent injury in physical activities and sport and the rehabilitation of injury including the treatment of common sporting injuries.

1.2.a. Diet and nutrition and their effect on physical activity and performance

Learners will develop their knowledge and understanding of the components and functions of a balanced diet, as well as being able to relate diet, hydration and dietary supplements to performance in physical activities and sports.

Knowledge and understanding will also be developed of ergogenic aids and how they are used to improve sports performance.

Topic Area	Content
Diet and nutrition 	<ul style="list-style-type: none"> • function and importance of the components of a healthy, balanced diet: <ul style="list-style-type: none"> ○ carbohydrates ○ proteins ○ fats ○ minerals ○ vitamins ○ fibre ○ water • energy intake and expenditure and energy balance in physical activity and performance.
Ergogenic aids 	<ul style="list-style-type: none"> • use of ergogenic aids; potential benefits and risks: <ul style="list-style-type: none"> ○ pharmacological aids: <ul style="list-style-type: none"> – anabolic steroids – erythropoietin (EPO) – human growth hormone (HGH) ○ physiological aids: <ul style="list-style-type: none"> – blood doping, – intermittent hypoxic training (IHT) – cooling aids

Topic Area	Content
Ergogenic aids cont. 	<ul style="list-style-type: none"> ○ nutritional aids: <ul style="list-style-type: none"> – amount of food – composition of meals – timing of meals – hydration – glycogen/carbohydrate loading – creatine – caffeine – bicarbonate – nitrate.

1.2.b. Preparation and training methods in relation to improving and maintaining physical activity and performance


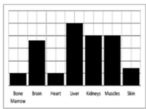
Learners will develop their knowledge and understanding of aerobic training, methods of evaluating aerobic capacity and factors affecting $VO_2\text{max}$, as well as applying the importance of this training to physical activities and sports.

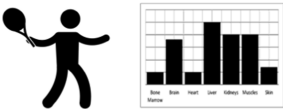
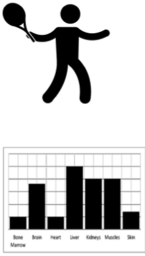
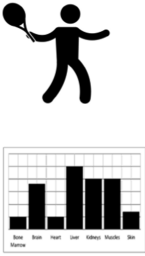
Strength and flexibility training will also be covered, including knowledge and understanding of the types of strength and flexibility training, factors that affect strength and flexibility and methods of evaluating strength and flexibility. Learners will also be able to understand how training can be used to

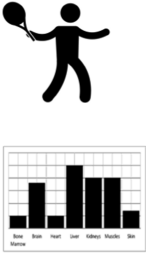


develop strength and flexibility through different training activities and how the body adapts to such training.

Learners will also develop their knowledge and understanding of the periodisation of training and how to plan personal health and fitness programmes.

Learners will also develop their knowledge and understanding of the impact of training on lifestyle-related diseases that affect the cardiovascular and respiratory systems.

Topic Area	Content
Aerobic training  	<ul style="list-style-type: none"> • aerobic capacity and maximal oxygen uptake ($VO_2\text{max}$) • how $VO_2\text{max}$ is affected by: <ul style="list-style-type: none"> ○ individual physiological make-up ○ training ○ age ○ gender • methods of evaluating aerobic capacity: <ul style="list-style-type: none"> ○ laboratory test of $VO_2\text{max}$ 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: <ul style="list-style-type: none"> ○ continuous training ○ high intensity interval training (HIIT) • the use of target heart rates as an intensity guide





Topic Area	Content
<p>Aerobic training cont.</p> 	<ul style="list-style-type: none"> • physiological adaptations from aerobic training: <ul style="list-style-type: none"> ○ cardiovascular ○ respiratory ○ muscular ○ metabolic • activities and sports in which aerobic capacity is a key fitness component.
<p>Strength training</p> 	<ul style="list-style-type: none"> • types of strength: <ul style="list-style-type: none"> ○ strength endurance ○ maximum strength ○ explosive/elastic strength ○ static and dynamic strength • factors that affect strength: <ul style="list-style-type: none"> ○ fibre type ○ cross sectional area of the muscle • methods of evaluating each type of strength: <ul style="list-style-type: none"> ○ grip strength dynamometer ○ 1 Repetition Maximum(1RM) ○ press up or sit-up test ○ vertical jump test • training to develop strength: <ul style="list-style-type: none"> ○ repetitions ○ sets ○ resistance guidelines used to improve each type of strength ○ use of multi-gym ○ weights ○ plyometrics ○ circuit/interval training: <ul style="list-style-type: none"> – work intensity – work duration – relief interval – number of work/relief intervals • physiological adaptations from strength training: <ul style="list-style-type: none"> ○ muscle and connective tissues ○ neural ○ metabolic • activities and sports in which strength is a key fitness component.
<p>Flexibility training</p> 	<ul style="list-style-type: none"> • types of flexibility: <ul style="list-style-type: none"> ○ static flexibility (active and passive) ○ dynamic flexibility • factors that affect flexibility: <ul style="list-style-type: none"> ○ type of joint ○ length of surrounding connective tissue ○ age ○ gender

Topic Area	Content
Flexibility training cont. 	<ul style="list-style-type: none"> • methods of evaluating flexibility: <ul style="list-style-type: none"> ○ sit and reach test ○ goniometer • training used to develop flexibility: <ul style="list-style-type: none"> ○ passive stretching ○ proprioceptive neuromuscular facilitation (PNF) ○ static stretching ○ dynamic stretching ○ ballistic stretching ○ isometric stretching • physiological adaptations from flexibility training: <ul style="list-style-type: none"> ○ muscle and connective tissues • activities and sports in which flexibility is a key fitness component.
Periodisation of training 	<ul style="list-style-type: none"> • periodisation cycles: <ul style="list-style-type: none"> ○ macrocycle ○ mesocycle ○ microcycle • phases of training: <ul style="list-style-type: none"> ○ preparatory ○ competitive ○ transition • tapering to optimise performance • how to plan personal health and fitness programmes for aerobic, strength and flexibility training.
Impact of training on lifestyle diseases 	<ul style="list-style-type: none"> • the effect of training on lifestyle diseases: <ul style="list-style-type: none"> ○ cardiovascular system : <ul style="list-style-type: none"> – coronary heart disease (CHD) – stroke – atherosclerosis – heart attack ○ respiratory system <ul style="list-style-type: none"> – asthma – chronic obstructive pulmonary disease (COPD).

1.2.c. Injury prevention and the rehabilitation of injury

Learners will develop their knowledge and understanding of acute and chronic injuries related to physical activities and sports. The prevention of injury will also be known by understanding the risk factors and the relative value of warm up and cool down routines used in physical activities and sports.

Learners will develop their knowledge and understanding of how we might respond to injuries and medical conditions in a sporting context. Rehabilitation of injury will be understood by knowing about common sports injuries and common treatments.

Topic Area	Content
*Acute and chronic injuries 	<ul style="list-style-type: none"> • acute injuries resulting from a sudden stress to the body: <ul style="list-style-type: none"> ○ hard tissue injuries ○ soft tissue injuries ○ concussion • chronic injuries resulting from continuous stress to the body: <ul style="list-style-type: none"> ○ soft tissue injuries ○ hard tissue injuries.
*Injury prevention 	<ul style="list-style-type: none"> • intrinsic risk factors: <ul style="list-style-type: none"> ○ individual variables ○ training effects • extrinsic risk factors: <ul style="list-style-type: none"> ○ poor technique/training ○ incorrect equipment/clothing ○ inappropriate intensity, duration or frequency of activity • debate surrounding effective warm up and cool down.
*Responding to injuries and medical conditions in a sporting context 	<ul style="list-style-type: none"> • assessing sporting injuries using 'SALTAPS' <ul style="list-style-type: none"> ○ See ○ Ask ○ Look ○ Touch ○ Active ○ Passive ○ Strength • acute management of soft tissue injuries using 'PRICE' <ul style="list-style-type: none"> ○ Protection ○ Rest ○ Ice ○ Compression ○ Elevation • recognising concussion: IRB's 'Recognise and Remove' 6 R's <ul style="list-style-type: none"> ○ Recognise ○ Remove ○ Refer ○ Rest ○ Recover ○ Return.
*Rehabilitation of injury 	<ul style="list-style-type: none"> • treatment of common sporting injuries: <ul style="list-style-type: none"> ○ injuries: <ul style="list-style-type: none"> – fractures – simple, stress – joint injuries – dislocation, sprain, torn cartilage – exercise-induced muscle damage ○ treatments: <ul style="list-style-type: none"> – stretching – massage – heat, cold and contrast therapies – anti-inflammatory drugs – physiotherapy – surgery.

1.3 Biomechanics

This topic will focus on the biomechanics of movement. It involves the study of force and its effect on human movement in physical activities and sports.

The ultimate goal of biomechanics is to improve performance and the prevention and treatment injury by optimising technique, training and equipment in physical activity and sport.

The study of biomechanical movement will allow learners to develop their knowledge and understanding of the more technical aspects of performance and participation in physical activity and sport and evaluate their own and others' effectiveness and efficiency.

This topic will develop learners' knowledge and understanding of biomechanical principles, including defining and applying Newton's Laws. The concept of force will be understood along with being able to draw and understand free body diagrams.

Learners will develop their knowledge and understanding of levers and the mechanical advantage of the second class lever, as well as the use of technology to analyse movement and improve performance.

The definitions and creation of linear motion and angular motion will be known and learners will be able to make calculations for quantities of linear and angular motion.

Learners will develop their knowledge and understanding of fluid mechanics, including factors that impact the magnitude of air resistance (on land) or drag (in water) on a body or object.

Learners will also develop their knowledge and understanding of projectile motion, including the application of Bernoulli's principle.

2

1.3.a. Biomechanical principles, levers and the use of technology

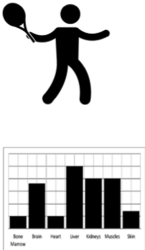
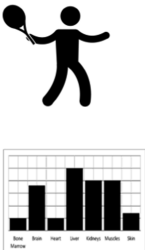
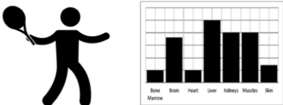
Learners will be able to develop their knowledge and understanding of the underlying biomechanical principles related to Newton's Laws and force, including the factors affecting air resistance and how this knowledge is applied to sports performance.

The components of a lever system will be known for 1st, 2nd and 3rd class levers.

Learners will also develop their knowledge and understanding of the use of technology to analyse movement and improve performance.

Learners will be able to calculate force, momentum, acceleration and weight.

2

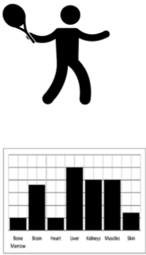
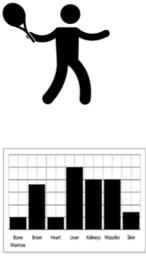
Topic Area	Content
<p>Biomechanical principles</p> 	<ul style="list-style-type: none"> • Define and apply Newton's laws of motion: <ul style="list-style-type: none"> ○ Newton's first law: inertia ○ Newton's second law: acceleration ○ Newton's third law: reaction • Force: <ul style="list-style-type: none"> ○ net force ○ balanced and unbalanced force ○ weight ○ reaction ○ friction ○ air resistance ○ factors affecting friction and air resistance and their manipulation in sporting performance ○ free body diagrams showing vertical and horizontal forces acting on a body at an instant in time and the resulting motion ○ calculations of force, momentum, acceleration and weight ○ definition of centre of mass ○ factors affecting the position of the centre of mass ○ the relationship between centre of mass and stability.
<p>Levers</p> 	<ul style="list-style-type: none"> • components of a lever system: <ul style="list-style-type: none"> ○ load ○ effort ○ fulcrum ○ effort arm ○ load arm • 1st class lever • 2nd class lever • 3rd class lever • mechanical advantage of a 2nd class lever.
<p>Analysing movement through the use of technology</p> 	<ul style="list-style-type: none"> • definitions and uses of: <ul style="list-style-type: none"> ○ limb kinematics ○ force plates ○ wind tunnels • how each type of technology may be used to optimise performance in sport.

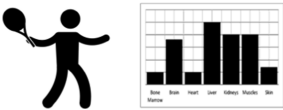
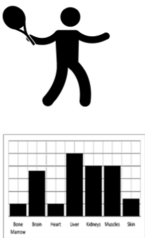
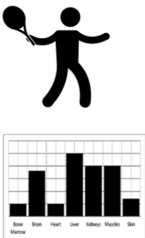
1.3.b. Linear motion, angular motion, fluid mechanics and projectile motion

Learners will develop their knowledge and understanding of linear motion by being able to define linear motion and be able to apply it as well as being able to calculate quantities of linear motion.

They will also be able to define angular motion and know about the creation of angular motion through the application of an eccentric force about one (or more) of the three axes of rotation. Again, learners will also be able to calculate angular motion and interpret graphs of angular velocity, moment of inertia and angular momentum.

Learners will develop their knowledge and understanding of fluid mechanics and the factors that impact the magnitude of air resistance (on land) or drag (in water) on a body or object. Projectile motion will also be understood with factors affecting the horizontal distance travelled by a projectile, as well as patterns of flight paths as a consequence of the relative size of air resistance and weight. Bernoulli's principle will be understood along with the application of projectile motion on the design of equipment and the use of spin in sport.

Topic Area	Content
<p>*Linear motion</p> 	<ul style="list-style-type: none"> • definition of linear motion. • creation of linear motion by the application of a direct force through the centre of mass • definitions, calculations and units of measurement for each of the following quantities of linear motion: <ul style="list-style-type: none"> ○ distance ○ displacement ○ speed ○ velocity ○ acceleration/deceleration • plot and interpret graphs of linear motion: <ul style="list-style-type: none"> ○ distance/time graphs ○ speed/time graphs ○ velocity/time graphs.
<p>*Angular motion</p> 	<ul style="list-style-type: none"> • definition of angular motion • creation of angular motion through the application of an eccentric force about one (or more) of the three axes of rotation: <ul style="list-style-type: none"> ○ longitudinal ○ frontal ○ transverse • definitions, calculations and units of measurement for each quantity of angular motion: <ul style="list-style-type: none"> ○ moment of inertia ○ angular velocity ○ angular momentum • factors affecting the size of the moment of inertia of a rotating body: <ul style="list-style-type: none"> ○ mass of the body (or body part) ○ distribution of the mass from the axis of rotation • the relationship between moment of inertia and angular velocity

Topic Area	Content
<p>*Angular motion cont.</p> 	<ul style="list-style-type: none"> the conservation of angular momentum during flight in relation to the angular analogue of Newton's first law of motion interpret graphs of angular velocity, moment of inertia and angular momentum.
<p>*Fluid mechanics</p> 	<ul style="list-style-type: none"> factors that impact the magnitude of air resistance (on land) or drag (in water) on a body or object: <ul style="list-style-type: none"> velocity mass frontal cross-sectional area streamlining and shape surface characteristics.
<p>*Projectile motion</p> 	<ul style="list-style-type: none"> factors affecting the horizontal distance travelled by a projectile: <ul style="list-style-type: none"> height of release speed of release angle of release free body diagrams showing the forces acting on a projectile once in flight: <ul style="list-style-type: none"> weight air resistance resolution of forces acting on a projectile in flight using the parallelogram of forces patterns of flight paths as a consequence of the relative size of air resistance and weight <ul style="list-style-type: none"> parabolic (symmetrical) flight path <ul style="list-style-type: none"> shot put non-parabolic (asymmetric) flight path <ul style="list-style-type: none"> badminton shuttle The addition of lift to a projectile through the application of Bernoulli's principle: <ul style="list-style-type: none"> angle of attack to create an upwards lift force on a projectile: <ul style="list-style-type: none"> discus javelin ski jumper design of equipment to create a downwards lift force: <ul style="list-style-type: none"> F1 racing cars track cycling use of spin in sport to create a Magnus force, causing deviations to expected flight paths: <ul style="list-style-type: none"> imparting spin to a projectile through the application of an eccentric force types of spin: <ul style="list-style-type: none"> top spin, side spin and back spin in tennis and table tennis side spin in football hook and slice in golf.

2c. Content of Psychological factors affecting performance (02)

This component focuses on the psychological factors affecting physical activities and sports. This includes models and theories that affect learning and performance in physical activities, how different methods of training and feedback work and why their effectiveness differs from person to person. It also includes psychological factors affecting group dynamics and the effects of leadership and stress on performers.

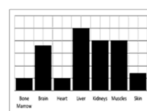
Through the study of this component, learners will gain a deeper understanding of the underlying psychological factors that influence our performance in physical activity and sport. They will learn how to apply the theories to practical examples, giving guidance and feedback in constructive ways that are suited to that individual's personality; therefore assisting in developing practical performance in physical activities and sports.

In many areas of the specification, it is expected that practical examples from physical activities and sports will be used to show how theory can be applied and to reinforce understanding. Areas of the specification where this may be examined are marked with the following symbol:



Quantitative skills

Areas of the specification which allow for this to be included within teaching and where it may be examined are marked with the following symbol:



2.1 Skill Acquisition

This topic will develop learners' knowledge and understanding of the role of skill acquisition in performance of physical activities and sports. It aims to develop knowledge and understanding of the principles required in order to optimise the learning of new, and the development of existing, skills.







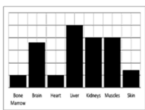
Learners will develop an understanding of the importance of being able to classify skills in order to select the most suitable approach to the learning of motor skills.


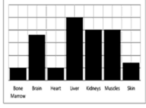

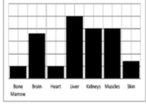
This topic looks at the underlying factors required for effective and efficient performance. Learners will also gain a detailed understanding of the impact of

the environment and conditions in which new skills are learned on the success of acquiring these motor skills.

Knowledge and understanding will also be developed in the different approaches and theories to teaching new skills as well as the guidance and feedback used to support this. Focus will also be placed on enhancing existing skills and the opportunities to transfer between the two.

Through application of knowledge gained from this topic, learners will be able to develop their skills in other sporting roles such as coach or leader, as well as directly relating it to their own performance.

Topic Area	Content
Classification of skills 	<ul style="list-style-type: none"> justification of placement of skills on continua: <ul style="list-style-type: none"> difficulty (simple/complex) environmental influence (open/closed) pacing (self-paced/externally paced) muscular involvement (gross/fine) continuity (discrete/serial/continuous) organisation (low/high).
Types and methods of practice 	<ul style="list-style-type: none"> characteristics and uses of each: <ul style="list-style-type: none"> part practice whole practice whole/part-whole practice progressive/part practice massed practice distributed practice fixed practice varied practice.
Transfer of skills 	<ul style="list-style-type: none"> types of transfer: <ul style="list-style-type: none"> positive negative proactive 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.
Principles and theories of learning movement skills 	<ul style="list-style-type: none"> theories of learning: <ul style="list-style-type: none"> operant conditioning cognitive theory of learning Bandura's theory of social/observational learning.
Stages of learning 	<ul style="list-style-type: none"> characteristics of the stages of learning: <ul style="list-style-type: none"> cognitive associative autonomous.
Guidance  	<ul style="list-style-type: none"> types and uses of guidance: <ul style="list-style-type: none"> verbal guidance visual guidance manual guidance mechanical guidance advantages and disadvantages of using each type of guidance.


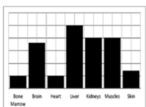
Topic Area	Content
Feedback  	<ul style="list-style-type: none"> types and uses of feedback: <ul style="list-style-type: none"> intrinsic extrinsic positive negative knowledge of performance knowledge of results advantages and disadvantages of using each type of feedback.
*Memory models  	<ul style="list-style-type: none"> Atkinson and Shiffrin's multi-store memory model <ul style="list-style-type: none"> use of selective attention Craik and Lockhart's levels of processing model relate both models to learning and performing physical activity skills.

2.2 Sports psychology



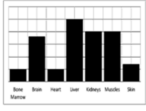

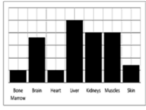

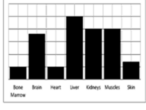

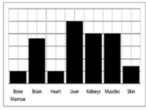
In this topic, learners will develop their knowledge and understanding of the psychological factors that can affect performers in physical activity and sport.

Learners knowledge and understanding will be developed on the individual differences affecting


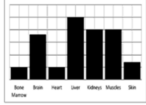
performers in physical activity and sport; group and team dynamics in sport; the importance of goal setting in sports performance; the role of attribution in motivating performers; confidence and self-efficacy in sport; leadership in sport and stress management in physical activities and sports to optimise performance.

Topic Area	Content
Individual differences  	<ul style="list-style-type: none"> personality <ul style="list-style-type: none"> definition of personality theories of personality: <ul style="list-style-type: none"> trait – extroversion/introversion, stable/unstable, type a/type b social learning interactionist attitudes <ul style="list-style-type: none"> definition of attitude factors affecting attitude formation components of attitude: <ul style="list-style-type: none"> cognitive affective behavioural

Topic Area	Content
<p>Individual differences cont.</p>  	<ul style="list-style-type: none"> ○ methods of attitude change: <ul style="list-style-type: none"> – persuasive communication – cognitive dissonance • motivation <ul style="list-style-type: none"> ○ definitions of: <ul style="list-style-type: none"> – intrinsic motivation – extrinsic motivation ○ uses and effects of: <ul style="list-style-type: none"> – intrinsic motivation – extrinsic motivation • arousal <ul style="list-style-type: none"> ○ definition of arousal ○ effects of arousal: <ul style="list-style-type: none"> – drive theory – inverted U theory – catastrophe theory • anxiety <ul style="list-style-type: none"> ○ definition of anxiety ○ types of anxiety: <ul style="list-style-type: none"> – state and trait ○ response to anxiety: <ul style="list-style-type: none"> – somatic and cognitive – zone of optimal functioning. • aggression <ul style="list-style-type: none"> ○ definition of aggression ○ theories of aggression: <ul style="list-style-type: none"> – instinct – social learning – frustration-aggression hypothesis – aggressive cue hypothesis • social facilitation <ul style="list-style-type: none"> ○ definition of social facilitation and social inhibition ○ the effect of an audience on: <ul style="list-style-type: none"> – introverts/extroverts – beginners/experts – simple/complex skills – gross/fine skills ○ evaluative apprehension ○ strategies to minimise social inhibition.
<p>Group and team dynamics in sport</p> 	<ul style="list-style-type: none"> • definition of a group • the formation of groups and sports teams using stages of group development <ul style="list-style-type: none"> ○ forming ○ storming ○ norming ○ performing

Topic Area	Content
Group and team dynamics in sport cont. 	<ul style="list-style-type: none"> Steiner's model of group effectiveness Ringelmann effect and social loafing.
Goal setting in sports performance  	<ul style="list-style-type: none"> importance and effectiveness of goal setting <ul style="list-style-type: none"> for attentional focus persistence on tasks raising confidence and self-efficacy control of arousal and anxiety to monitor performance the SMART principle (Specific, Measurable, Achievable, Recorded, Time phased).
*Attribution  	<ul style="list-style-type: none"> Weiner's model of attribution <ul style="list-style-type: none"> stability dimension (unstable and stable) locus of control dimension (internal and external) controllability dimension learned helplessness as a barrier to sports performance mastery orientation to optimise sports performance
*Confidence and self-efficacy in sports performance.  	<ul style="list-style-type: none"> definitions of sports confidence and self-efficacy the impact of sports confidence on: <ul style="list-style-type: none"> performance participation self-esteem Vealey's model of sports confidence: <ul style="list-style-type: none"> trait sports confidence competitive orientation state sports confidence subjective perceptions of outcome Bandura's theory of self efficacy: <ul style="list-style-type: none"> performance accomplishments vicarious experiences verbal persuasion emotional arousal.
*Leadership in sport  	<ul style="list-style-type: none"> characteristics of effective leaders emergent or prescribed leaders leadership styles <ul style="list-style-type: none"> autocratic democratic laissez-faire theories of leadership <ul style="list-style-type: none"> trait perspective social learning interactionist Chelladurai's multi-dimensional model of sports leadership.



Topic Area	Content
<p data-bbox="178 397 459 467">*Stress management to optimise performance</p>  	<ul style="list-style-type: none"><li data-bbox="571 397 999 427">• definition and causes of stress<li data-bbox="571 434 1210 464">• use of cognitive stress management techniques:<ul style="list-style-type: none"><li data-bbox="640 471 999 501">○ positive thinking/self-talk<li data-bbox="640 508 1011 539">○ negative thought stopping<li data-bbox="640 546 893 576">○ rational thinking<li data-bbox="640 583 898 613">○ mental rehearsal<li data-bbox="640 620 794 650">○ imagery<li data-bbox="640 657 835 687">○ goal setting<li data-bbox="640 694 844 725">○ mindfulness<li data-bbox="571 732 1194 762">• use of somatic stress management techniques:<ul style="list-style-type: none"><li data-bbox="640 769 1075 799">○ progressive muscular relaxation<li data-bbox="640 806 844 836">○ biofeedback<li data-bbox="640 843 921 873">○ centring technique<li data-bbox="640 880 910 911">○ breathing control.

2

2c. Content of Socio-cultural issues in physical activity and sport (03)

This component focuses on the sociological and contemporary issues that influence and affect physical activity and sport for both the audience and the performer and how sport affects society.

It includes the emergence and evolution of modern sport and how social and cultural factors shaped the characteristics of sports and pastimes in pre-industrial and post-industrial Britain.

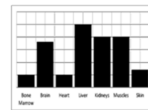
The impact of the modern Olympic Games will be understood as well as the impact on society of hosting global sporting events. The ever-evolving modern technology and its influence on sport performers and spectators will be understood and practical examples will be used by learners to show the effect of modern technology.

In many areas of the specification, it is expected that practical examples from physical activities and sports will be used to show how theory can be applied and to reinforce understanding. Areas of the specification where this may be examined are marked with the following symbol:



Quantitative skills

Areas of the specification which allow for this to be included within teaching and where it may be examined are marked with the following symbol:




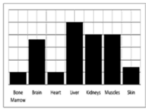
3.1 Sport and society


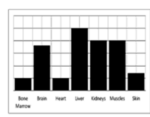

In this topic, learners will develop their knowledge and understanding of how physical activity and sport have developed through time and the factors that shape contemporary sport.

For the ‘Emergence and evolution of modern sport’ topic area, it will be beneficial to include the use of

case studies in particular sports (for example football, tennis, athletics or cricket) which can be charted through the different time periods covered.

Learners will also understand the nature of global sporting events and how they reflect and are impacted upon by social issues.

Topic Area	Content
<p>Emergence and evolution of modern sport</p>  	<ul style="list-style-type: none"> • how social and cultural factors shaped the characteristics of, and participation in, sports and pastimes in pre-industrial Britain: <ul style="list-style-type: none"> ○ social class ○ gender ○ law and order ○ education/literacy ○ availability of time ○ availability of money ○ type and availability of transport • how social and cultural factors shaped the characteristics of, and participation in, sport in post 1850 industrial Britain: <ul style="list-style-type: none"> ○ social class <ul style="list-style-type: none"> – amateurism and professionalism

Topic Area	Content
<p data-bbox="173 383 520 453">Emergence and evolution of modern sport cont.</p>  	<ul style="list-style-type: none"> ○ gender/changing status of women ○ law and order ○ education/literacy ○ availability of time/changing work conditions ○ availability of money ○ transport notably the railways ○ influence of public schools: <ul style="list-style-type: none"> – on the promotion and organisation of sports and games – on the promotion of ethics through sports and games – the ‘cult’ of athleticism – meaning, nature and impact – on the spread and export of games and the games ethic • how social factors shaped the characteristics of, and participation in, sport in 20th century Britain: <ul style="list-style-type: none"> ○ class <ul style="list-style-type: none"> – amateurism and professionalism ○ gender/changing role and status of women ○ law and order ○ education ○ availability of time ○ availability of money ○ transport • how contemporary factors are shaping the characteristics of, and participation in, sport in the 21st century: <ul style="list-style-type: none"> ○ class <ul style="list-style-type: none"> – amateurism and professionalism ○ gender/changing role and status of women ○ law and order ○ education ○ availability of time ○ availability of money ○ transport ○ globalisation of sport <ul style="list-style-type: none"> – media coverage – freedom of movement for performers – greater exposure of people to sport.
<p data-bbox="173 1708 446 1742">Global sporting events</p> 	<ul style="list-style-type: none"> • the modern Olympic Games <ul style="list-style-type: none"> ○ background and aims (1896) ○ political exploitation of the Olympic Games <ul style="list-style-type: none"> – Berlin 1936, Third Reich Ideology – Mexico City 1968 ‘Black Power’ demonstration – Munich 1972 Palestinian terrorism – Moscow 1980 boycott lead by USA – Los Angeles 1984 boycott by Soviet Union

Topic Area	Content
Global sporting events cont. 	<ul style="list-style-type: none"> • hosting global sporting events <ul style="list-style-type: none"> ○ positive and negative impacts on the host country/city of hosting a global sporting event (such as the Olympic Games or FIFA World Cup) <ul style="list-style-type: none"> – sporting – social – economic – political.


3.2 Contemporary issues in physical activity and sport


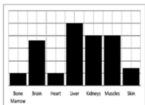
The ethics involved in sport and deviance that affects sport and sporting behaviour will be understood and applied using practical examples.


in the UK will be known and the roles of key organisations to develop excellence will also be understood.

Learners will develop their knowledge and understanding of the positive and negative impacts of commercialisation and the media on physical activity and sport. The routes to sporting excellence

The important and developing influences of modern technology in physical activities and sport will be understood as well as its impact on participation, fair outcomes and entertainment.

Topic Area	Content
*Ethics and deviance in sport 	<ul style="list-style-type: none"> • drugs and doping in sport <ul style="list-style-type: none"> ○ legal supplements versus illegal drugs and doping ○ reasons why elite performers use illegal drugs/doping ○ consequences/implications to: <ul style="list-style-type: none"> – society – sport – performers ○ strategies to stop the use of illegal drugs and doping • violence in sport <ul style="list-style-type: none"> ○ causes in relation to players and spectators ○ implications to: <ul style="list-style-type: none"> – society – sport – performers ○ strategies to prevent violence in relation to players and spectators • gambling in sport <ul style="list-style-type: none"> ○ match fixing/bribery ○ illegal sports betting.

Topic Area	Content
<p data-bbox="178 397 467 460">*Commercialisation and media</p>  	<ul style="list-style-type: none"> • factors leading to the commercialisation of contemporary physical activity and sport: <ul style="list-style-type: none"> ○ growing public interest and spectatorship ○ more media interest ○ professionalism ○ advertising ○ sponsorship • positive and negative impacts of the commercialisation of physical activity and sport on <ul style="list-style-type: none"> ○ society ○ individual sports ○ performers ○ spectators • coverage of sport by the media today and reasons for changes since the 1980s <ul style="list-style-type: none"> ○ television <ul style="list-style-type: none"> – terrestrial – free-to-air – satellite – subscription – pay-per-view ○ radio <ul style="list-style-type: none"> – dedicated sports stations – local and national radio ○ written press <ul style="list-style-type: none"> – newspapers – magazines ○ internet • positive and negative effects of the media on sport <ul style="list-style-type: none"> ○ individual sports ○ performers ○ spectators • relationship between sport and the media <ul style="list-style-type: none"> ○ sport as a commodity ○ links with advertising and sponsorship ('golden triangle').
<p data-bbox="178 1647 419 1710">*Routes to sporting excellence in the UK</p> 	<ul style="list-style-type: none"> • development routes from talent identification through to elite performance • the role of school, clubs, universities in contributing to elite sporting success • the role of UK Sport and National Institutes in developing sporting excellence/high performance sport • strategies to address drop-out/failure rates from elite development programmes/at elite level.

Topic Area	Content
<p>*Modern technology in Sport – its impact on Elite level sport, participation, fair outcomes and entertainment</p> 	<p>Elite performance:</p> <ul style="list-style-type: none"> ○ the extent to which modern technology has affected elite level sport including increased/improved: <ul style="list-style-type: none"> – access – facilities – equipment – monitoring of exercise – safety <p>General participation:</p> <ul style="list-style-type: none"> ○ the extent to which modern technology has increased participation including increased/improved: <ul style="list-style-type: none"> – access – facilities – equipment – monitoring of exercise – safety ○ the extent to which modern technology has limited or reduced participation including: <ul style="list-style-type: none"> – cost – the range of alternatives to physical activity and sport <p>Fair outcomes:</p> <ul style="list-style-type: none"> ○ the extent to which modern technology has increased fair outcomes including: <ul style="list-style-type: none"> – better timing devices – increased accountability of officials – more accurate decision making – improved detection of foul play – improved detection of doping ○ the extent to which modern technology has limited or decreased fair outcomes including: <ul style="list-style-type: none"> – access to modern technology can be limited – performance enhancing drug testing technology cannot keep up with new drug development – pressure on officials due to the exposure and scrutiny of their decisions <p>Entertainment:</p> <ul style="list-style-type: none"> ○ the extent to which modern technology has increased entertainment including: <ul style="list-style-type: none"> – action replays – multiple camera angles – slow motion technology – improved analysis – punditry ○ the extent to which modern technology has reduced or limited entertainment including: <ul style="list-style-type: none"> – interruption and delay – reduced live attendances.

2d. Content of non-exam assessment: Performance in physical education (04)

2

Learners are internally assessed through the NEA in one practical activity (either performing or coaching one chosen activity from the approved lists) and the Evaluation and Analysis of Performance for Improvement (EAPI).

Practical performances

For the practical performances approved activities list see section 2e of the OCR Advanced Subsidiary and Advanced GCE in Physical Education Guide to non-exam assessment.

Learners can be assessed in the role of performer or coach in one activity.

Learners are required to demonstrate effective performance, the use of tactics or techniques and the ability to observe the rules and conventions under applied conditions.

This component is internally marked using the assessment criteria found in section 2b.3

(performance) and section 2c.1 (coaching) of the OCR Advanced Subsidiary and Advanced GCE in Physical Education Guide to non-exam assessment.

The Evaluation and Analysis of Performance for Improvement (EAPI)

In addition to a practical performance, learners will be assessed in the Evaluation and Analysis of Performance for Improvement (EAPI). Learners will observe a live or recorded performance by a peer in either their own assessed performance activity or another activity from the approved list. Through observation, learners will provide an oral response analysing and critically evaluating their peers' performance.

Teachers must refer to and follow the OCR Advanced Subsidiary and Advanced GCE in Physical Education Guide to non-exam assessment for further detail on this area of assessment.

2e. Prior knowledge, learning and progression

- No prior knowledge, skills, understanding or learning of the subject is required.
- The specification builds on, but does not depend on, the knowledge, understanding and skills from GCSE (9–1) in Physical Education.
- Throughout the course of study learners are encouraged to develop an awareness of the role of physical education in society and its application to many situations.
- This qualification is suitable for learners intending to pursue any career for which an understanding of the human body or human behaviour is desirable. This qualification is also suitable for any further study in social sciences, or as part of a course of general education.
- Other avenues of progression for candidates would include careers in: sport and physical activity, PE teaching, Physiotherapy, Personal Trainer and Sports coach.

3 Assessment of A Level in Physical Education

3a. Forms of assessment

OCR's A Level in Physical Education consists of three components that are externally assessed and one component that is internally assessed by the centre and externally moderated by OCR.

Components 01 (Physiological factors affecting performance), 02 (Psychological factors affecting performance) and 03 (Socio-cultural issues in physical activity and sport) will be assessed using a mixture of objective response, short and medium length

answers and extended response items. It may also include the use of multiple choice answer questions. These components assess AO1, AO2 and AO3.

Component 04 (Performance in physical education) will be assessed via NEA which will include a practical performance and the Evaluation and Analysis of Performance for Improvement (EAPI). This component assesses AO4.

3

3b. Assessment objectives (AO)

There are four assessment objectives in OCR's A Level in Physical Education. These are detailed in the table below.

Learners are expected to demonstrate their ability to:

Assessment Objectives	
AO1	Demonstrate knowledge and understanding of the factors that underpin performance and involvement in physical activity and sport.
AO2	Apply knowledge and understanding of the factors that underpin performance and involvement in physical activity and sport.
AO3	Analyse and evaluate the factors that underpin performance and involvement in physical activity and sport.
AO4	<ul style="list-style-type: none">• Demonstrate and apply relevant skills and techniques in physical activity and sport.• Analyse and evaluate performance.

AO weightings in A Level in Physical Education

The relationship between the assessment objectives and the components are shown in the following table:

Component	% of overall A level in Physical Education (H555)			
	AO1	AO2	AO3	AO4
01: Physiological factors affecting performance	12	12	6.66	0
02: Psychological factors affecting performance	6.5	6.5	6.66	0
03: Socio-cultural issues in physical activity and sport	6.5	6.5	6.66	0
04: Performance in physical education	0	0	0	30
Total	25%	25%	20 %	30%

3

3c. Assessment availability

There will be

- **one** examination series available each year in May/June to **all** learners.

All components must be taken in the same examination series at the end of the course.

This specification will be certificated from the June 2018 examination series onwards.

3d. Retaking the qualification

Learners can retake the qualification as many times as they wish. They retake all examined components of the qualification. Learners can choose either to retake

the non-exam component or to carry forward their mark for the non-exam component by using the carry forward entry option (see Section 4a).

3e. Assessment of extended response

The assessment materials for this qualification provide learners with the opportunity to demonstrate their ability to construct and develop a sustained and

coherent line of reasoning and marks for extended responses are integrated into the marking criteria.

3f. Non-exam assessment

Full details for the completion of the NEA for OCR's A Level in Physical Education can be found in the

accompanying 'OCR AS and GCE guide to NEA in Physical Education'.

3g. Synoptic assessment

- Synoptic assessment is the learners understanding of the connections between different elements of the subject. It involves the explicit drawing together of knowledge, skills and understanding within different parts of the A level course.
- The emphasis of synoptic assessment is to encourage the understanding of physical education as a discipline.
- Learners are encouraged to think holistically and develop their skills of thinking as a practitioner of physical education.
- Synoptic assessment is included within all components.
- Within examined components 1, 2 and 3, each assessment will contain an extended response question which requires learners to draw together knowledge from more than one topic within the component and demonstrate their understanding of how the topics interrelate.
- In NEA component 4, the Evaluation and Analysis of Performance task requires learners to draw upon knowledge and understanding from across the course of study in their response.

3

3h. Calculating qualification results

A learner's overall qualification grade for OCR's A Level in Physical Education will be calculated by adding together their marks for Components 01, 02 and 03. The learner's marks for Performance in physical education (Component 04) will be multiplied by 3/2 and added to this to give their total weighted mark.

This total weighted mark will then be compared to the qualification level grade boundaries for the entry option taken by the learner and for the relevant exam series to determine the learner's overall qualification grade.

4 Admin: what you need to know

The information in this section is designed to give an overview of the processes involved in administering this qualification so that you can speak to your exams officer. All of the following processes require you to submit something to OCR by a specific deadline.

More information about these processes, together with the deadlines, can be found in the *OCR Admin Guide and Entry Codes: 14–19 Qualifications*, which can be downloaded from the OCR website: www.ocr.org.uk.

4a. Pre-assessment

Estimated entries

Estimated entries are your best projection of the number of learners who will be entered for a qualification in a particular series. Estimated entries should be submitted to OCR by the specified deadline. They are free and do not commit your

centre in any way. Estimated entry data is particularly valuable for qualifications such as physical education which contain visiting assessment, as the information enables early planning for the moderation process each year.

Final entries

Final entries provide OCR with detailed data for each learner, showing each assessment to be taken. It is essential that you use the correct entry code, considering the relevant entry rules and ensuring that you choose the entry option for the moderation you intend to use.

Final entries must be submitted to OCR by the published deadlines or late entry fees will apply.

All learners taking an A Level in Physical Education must be entered for one of the following entry options:

Entry option		Components		
Entry code	Title	Code	Title	Assessment type
H555 A	Physical Education	01	Physiological factors affecting performance	External assessment
		02	Psychological factors affecting performance	External assessment
		03	Socio-cultural issues in physical activity and sport	External assessment
		04	Performance in physical education	(NEA) Non-exam assessment (Visiting moderation)
H555 C*	Physical Education (NEA carried forward)	01	Physiological factors affecting performance	External assessment
		02	Psychological factors affecting performance	External assessment
		03	Socio-cultural issues in physical activity and sport	External assessment
		80	Performance in physical education	(NEA) Non-exam assessment (Carried forward)

*Entry option H555 C should only be selected for learners who are retaking the qualification who want to carry forward their mark for the non-exam assessment.

4b. Special consideration

Special consideration is a post-assessment adjustment to marks or grades to reflect temporary injury, illness or other indisposition at the time the assessment was taken.

Detailed information about eligibility for special consideration can be found in the JCQ publication *A guide to the special consideration process*.

4c. External assessment arrangements

Regulations governing examination arrangements are contained in the JCQ *Instructions for conducting examinations*.

4d. Admin of non-exam assessment

Regulations governing arrangements for internal assessments are contained in the JCQ *Instructions for conducting non-examination assessments*.

Authentication of learner's work

Learners and centres must declare that the work is the learner's own.

Teachers must declare that the work submitted for internal assessment is the learner's own work by

submitting a centre authentication form (CCS160) for each internally-assessed component. This should be sent to the moderator at the same time as the marks.

Internal standardisation

Centres must carry out internal standardisation to ensure that marks awarded by different teachers are

accurate and consistent across all learners entered for the component from that centre.

Moderation

The purpose of moderation is to bring the marking of internally assessed components in all participating centres to an agreed standard. This is achieved by checking a sample of each centre's marking of learners' work.

The moderation for the practical element of the Physical Education NEA will be conducted via visiting moderation.

The moderation for the Performance Analysis part of the Physical Education NEA will be conducted via visiting moderation.

Centres will receive the outcome of moderation when the provisional results are issued. This will include:

Moderation Adjustments Report – Listing any scaling that has been applied to internally assessed components.

Moderator Report to Centres – A brief report by the moderator on the internal assessment of learners' work.

Full details of the visiting moderation process can be found in the 'OCR AS and GCE guide to NEA in Physical Education'.

Carrying forward non-exam assessment (NEA)

Learners who are retaking the qualification can choose either to retake the non-exam assessment or to carry forward their mark for that component from the previous exam series.

If a learner decides to carry forward their mark, they must be entered in the retake series using the entry code for the carry forward option H555 C.

Learners must decide at the point of entry whether they are going to carry forward the non-exam assessment, or if they are going to retake it to count

towards their result. It is not possible for a learner to retake the non-exam assessment and then choose whether the retake result or a carried forward result is used for certification.

Learners can only carry forward from one year into the following year. Where the gap between the initial qualification and the retake is more than one year, carry forward is not permitted.

A result for a non-exam assessment component can only be carried forward once.

4

4e. Results and certificates

Grade Scale

A level qualifications are graded on the scale: A*, A, B, C, D, E, where A* is the highest. Learners who fail to reach the minimum standard for E will be Unclassified (U).

Only subjects in which grades A* to E are attained will be recorded on certificates.

Results

Results are released to centres and learners for information and to allow any queries to be resolved before certificates are issued.

Centres will have access to the following results information for each learner:

- the grade for the qualification
- the raw mark for each component
- the total mark for the qualification.

The following supporting information will be available:

- raw mark grade boundaries for each component
- mark grade boundaries for each entry option.

Until certificates are issued, results are deemed to be provisional and may be subject to amendment.

A learner's final results will be recorded on an OCR certificate. The qualification title will be shown on the certificate as 'OCR Level 3 Advanced GCE in Physical Education'.

4f. Post-results services

A number of post-results services are available:

- **Enquiries about results** – If you are not happy with the outcome of a learner’s results, centres may submit an enquiry about results.
- **Missing and incomplete results** – This service should be used if an individual subject result for a learner is missing, or the learner has been omitted entirely from the results supplied.
- **Access to scripts** – Centres can request access to marked scripts.

4g. Malpractice

Any breach of the regulations for the conduct of examinations and non-exam assessment may constitute malpractice (which includes maladministration) and must be reported to OCR as soon as it is detected.

Detailed information on malpractice can be found in the JCQ publication *Suspected Malpractice in Examinations and Assessments: Policies and Procedures*.

5 Appendices

5a. Overlap with other qualifications

There is no significant overlap between the content of this specification and those for other GCE qualifications.

5b. Accessibility

Reasonable adjustments and access arrangements allow learners with special educational needs, disabilities or temporary injuries to access the assessment and show what they know and can do, without changing the demands of the assessment. Applications for these should be made before the examination series. Detailed information about eligibility for access arrangements can be found in

the JCQ *Access Arrangements and Reasonable Adjustments*.

The Advanced Level qualification and subject criteria have been reviewed in order to identify any feature which could disadvantage learners who share a protected Characteristic as defined by the Equality Act 2010. All reasonable steps have been taken to minimise any such disadvantage.

5

5c. Quantitative skills requirement

In order to be able to develop their skills, knowledge and understanding in physical education, learners need to have acquired quantitative skills that are relevant to the subject content, including:

Applied anatomy and exercise physiology

- interpretation of data and graphs relating to:
 - changes within musculo-skeletal, cardio-respiratory and neuro-muscular systems during different types of physical activity and sport
 - use of energy systems during different types of physical activity and sport and the recovery process
- quantitative methods for planning, monitoring and evaluating physical training and performance.

Biomechanics

- knowledge and use of definitions, equations, formulae and units of measurement

- ability to plot, label and interpret graphs and diagrams.

Sport psychology and skill acquisition

- understanding and interpretation of graphical representations associated with sport psychology theories.

Sport and society

- interpretation and analysis of data and graphs relating to participation in physical activity and sport.

Sport technology

- understanding of types of and use of data analysis to optimise performance.

The assessment of these skills will represent 5% of the overall A level marks.

YOUR CHECKLIST

Our aim is to provide you with all the information and support you need to deliver our specifications.

- Bookmark ocr.org.uk/alevelphysicaleducation for all the latest resources, information and news on A Level PE
 - Be among the first to hear about support materials and resources as they become available – register for PE updates at ocr.org.uk/updates
 - Find out about our professional development at cpdhub.ocr.org.uk
 - View our range of skills guides for use across subjects and qualifications at ocr.org.uk/skillsguides
 - Discover our new online past paper service at ocr.org.uk/examcreator
 - Learn more about Active Results at ocr.org.uk/activeresults
 - Join our PE social network community for teachers at social.ocr.org.uk
-

Download high-quality, exciting and innovative A Level Physical Education resources from ocr.org.uk/alevelphysicaleducation

Resources and support for our A Level PE qualification, developed through collaboration between our PE Subject Specialist, teachers and other subject experts, are available from our website. You can also contact our PE Subject Specialist who can give you specialist advice, guidance and support.

Meet the team at ocr.org.uk/physicaleducationteam and contact them at:
01223 553998
pe@ocr.org.uk
[@OCR_PhysEd](https://twitter.com/OCR_PhysEd)

To stay up to date with all the relevant news about our qualifications, register for email updates at ocr.org.uk/updates

Physical Education Community

The social network is a free platform where teachers can engage with each other – and with us – to find and offer guidance, discover and share ideas, best practice and a range of PE support materials. To sign up, go to social.ocr.org.uk



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