The specification overview

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

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| Learners take all components (01, 02, 03 and 04) to be awarded the OCR A Level in Physical Education. **Content Overview** | | **Assessment Overview** | |
|  Applied anatomy and  physiology   Exercise physiology   Biomechanics | **Physiological factors affecting performance** (01)\*  90 marks  2 hour written paper | | **30%**  of total  A level |
|  Skill acquisition   Sports psychology | **Psychological factors affecting performance** (02)\*  60 marks  1 hour written paper | | **20%**  Of total  A level |
|  Sport and society   Contemporary issues in  physical activity and sport | **Socio-cultural issues in physical activity and sport**  (03)\*  60 marks  1 hour written paper | | **20%**  of total  A level |
|  Performance or Coaching   Evaluation and Analysis of  Performance for Improvement  (EAPI) | **Performance in physical education**  (04)\*  60 marks  non-exam assessment (NEA) | | **30%**  of total  A level |

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 (page 34) 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. **8 © OCR 2016 A Level in Physical Education**

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

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:

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

**Applied anatomy and exercise physiology:**

 interpretation of data and graphs relating to:

o changes within musculo-skeletal, cardio-respiratory and neuro-muscular systems during different types of physical activity and sport

o 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:

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 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.

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.

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. **© OCR 2016 9 A Level in Physical Education**

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| **Topic Area** | **Content** |
| Joints, movements and muscles |  shoulder:  – flexion, extension, abduction, adduction, horizontal flexion/extension, medial and lateral rotation, circumduction  – deltoid, latissimus dorsi, pectoralis major, trapezius, teres minor.   elbow:  – flexion, extension  – biceps brachii, triceps brachii.   wrist:  – flexion, extension  – wrist flexors, wrist extensors.   hip:  – flexion, extension, abduction, adduction, medial and lateral rotation  – iliopsoas, gluteus maximus, medius and minimus, adductor longus, brevis and magnus.   knee:  – flexion, extension  – hamstring group: biceps femoris, semi-membranosus , semi-tendinosus;  – quadriceps group: rectus femoris, vastus lateralis, vastus intermedius and vastus medialis.   ankle:  – dorsi flexion, plantar flexion  – tibialis anterior, soleus, gastrocnemius.   planes of movement:  – frontal  – transverse  – sagittal. |
| Functional roles of muscles and types of contraction |  roles of muscles:  – agonist  – antagonist  – fixator.   types of contraction:  – isotonic  – concentric  – eccentric  – isometric. |
| Analysis of movement |  analyse movement with reference to:  – joint type  – movement produced  – agonist and antagonist muscles involved  – type of muscle contraction taking place. |
| Skeletal muscle contraction |  structure and role of motor units in skeletal muscle contraction   nervous stimulation of the motor unit:  – motor neuron  – action potential |