CAMBRIDGE
International Examinations

Cambridge International AS & A Level

SYLLABUS

Cambridge International AS and A Level Physical Education

9396

For examination in November 2017 and 2018

Cambridge Advanced

Version 1

Changes to syllabus for 2017 and 2018

This syllabus has been updated, but there are no significant changes.

You are advised to read the whole syllabus before planning your teaching programme.

Contents

1. Introduction

1.1 Why choose Cambridge?

Cambridge International Examinations is part of the University of Cambridge. We prepare school students for life, helping them develop an informed curiosity and a lasting passion for learning. Our international qualifications are recognised by the world's best universities and employers, giving students a wide range of options in their education and career. As a not-for-profit organisation, we devote our resources to delivering high-quality educational programmes that can unlock learners' potential.

Our programmes set the global standard for international education. They are created by subject experts, are rooted in academic rigour, and provide a strong platform for progression. Over 10 000 schools in 160 countries work with us to prepare nearly a million learners for their future with an international education from Cambridge.

Cambridge learners

Cambridge programmes and qualifications develop not only subject knowledge but also skills. We encourage Cambridge learners to be:

- **confident** in working with information and ideas – their own and those of others
- **responsible** for themselves, responsive to and respectful of others
- **reflective** as learners, developing their ability to learn
- **innovative** and equipped for new and future challenges
- **engaged** intellectually and socially, ready to make a difference.

Recognition

Cambridge International AS and A Levels are recognised around the world by schools, universities and employers. The qualifications are accepted as proof of academic ability for entry to universities worldwide, although some courses do require specific subjects.

Cambridge AS and A Levels are accepted in all UK universities. University course credit and advanced standing is often available for Cambridge International AS and A Levels in countries such as the USA and Canada.

Learn more at **www.cie.org.uk/recognition**

1.2 Why choose Cambridge International AS and A Level?

Cambridge International AS and A Levels are international in outlook, but retain a local relevance. The syllabuses provide opportunities for contextualised learning and the content has been created to suit a wide variety of schools, avoid cultural bias and develop essential lifelong skills, including creative thinking and problem-solving.

Our aim is to balance knowledge, understanding and skills in our programmes and qualifications to enable students to become effective learners and to provide a solid foundation for their continuing educational journey. Cambridge International AS and A Levels give learners building blocks for an individualised curriculum that develops their knowledge, understanding and skills.

Schools can offer almost any combination of 60 subjects and learners can specialise or study a range of subjects, ensuring a breadth of knowledge. Giving learners the power to choose helps motivate them throughout their studies.

Cambridge International A Levels typically take two years to complete and offer a flexible course of study that gives learners the freedom to select subjects that are right for them.

Cambridge International AS Levels often represent the first half of an A Level course but may also be taken as a freestanding qualification. The content and difficulty of a Cambridge International AS Level examination is equivalent to the first half of a corresponding Cambridge International A Level.

Through our professional development courses and our support materials for Cambridge International AS and A Levels, we provide the tools to enable teachers to prepare learners to the best of their ability and work with us in the pursuit of excellence in education.

Cambridge International AS and A Levels have a proven reputation for preparing learners well for university, employment and life. They help develop the in-depth subject knowledge and understanding which are so important to universities and employers.

Learners studying Cambridge International AS and A Levels have opportunities to:

- acquire an in-depth subject knowledge
- develop independent thinking skills
- apply knowledge and understanding to new as well as familiar situations
- handle and evaluate different types of information sources
- think logically and present ordered and coherent arguments
- make judgements, recommendations and decisions
- present reasoned explanations, understand implications and communicate them clearly and logically
- work and communicate in English.

Guided learning hours

Cambridge International A Level syllabuses are designed on the assumption that learners have about 360 guided learning hours per subject over the duration of the course. Cambridge International AS Level syllabuses are designed on the assumption that learners have about 180 guided learning hours per subject over the duration of the course. This is for guidance only and the number of hours required to gain the qualification may vary according to local curricular practice and the learners' prior experience of the subject.

1.3 Why choose Cambridge International AS and A Level Physical Education?

The Cambridge International AS and A Level Physical Education syllabus is both practical and theoretical. As well as fostering enjoyment in physical activity, it will encourage students to develop an understanding of the interaction between theory and practice by focusing on the performer and performance.

Students learn about anatomy and physiology, movement skills and contemporary studies at Cambridge International AS Level. This provides a firm foundation for the further advanced study of exercise, physiology, psychology of sport performance and the study of the Olympic Games from a global perspective.

The syllabus provides an excellent grounding for students intending to pursue careers in teaching and coaching, sports development, the leisure industry, recreational management and professional sport.

Prior learning

We recommend that candidates who are beginning this course should have previously completed a Cambridge O Level or Cambridge IGCSE course in Physical Education or the equivalent.

Progression

Cambridge International A Level Physical Education provides a suitable foundation for the study of Physical Education, Sport Sciences or related courses in higher education. Equally it is suitable for candidates intending to pursue careers or further study in teaching, coaching, sport development, the leisure industry, recreational management and professional sport, or as part of a course of general education.

Cambridge International AS Level Physical Education constitutes the first half of the Cambridge International A Level course in Physical Education and therefore provides a suitable foundation for the study of Physical Education at Cambridge International A Level and thence for related courses in higher education. Depending on local university entrance requirements, it may permit or assist progression directly to university courses in Physical Education or some other subjects. It is also suitable for candidates intending to pursue careers or further study in Physical Education, leisure industry, recreational management, or as part of a course of general education.

1.4 Cambridge AICE (Advanced International Certificate of Education) Diploma

Cambridge AICE Diploma is the group award of the Cambridge International AS and A Level. It gives schools the opportunity to benefit from offering a broad and balanced curriculum by recognising the achievements of candidates who pass examinations in different curriculum groups.

Learn more about the Cambridge AICE Diploma at **www.cie.org.uk/aice**

1.5 How can I find out more?

If you are already a Cambridge school

You can make entries for this qualification through your usual channels. If you have any questions, please contact us at **info@cie.org.uk**

If you are not yet a Cambridge school

Learn about the benefits of becoming a Cambridge school at **www.cie.org.uk/startcambridge**. Email us at **info@cie.org.uk** to find out how your organisation can register to become a Cambridge school.

2. Teacher support

2.1 Support materials

We send Cambridge syllabuses, past question papers and examiner reports to cover the last examination series to all Cambridge schools.

You can also go to our public website at **www.cie.org.uk/alevel** to download current and future syllabuses together with specimen papers or past question papers and examiner reports from one series.

For teachers at registered Cambridge schools a range of additional support materials for specific syllabuses is available from Teacher Support, our secure online support for Cambridge teachers. Go to **http://teachers.cie.org.uk** (username and password required).

2.2 Endorsed resources

We work with publishers providing a range of resources for our syllabuses including print and digital materials. Resources endorsed by Cambridge go through a detailed quality assurance process to ensure they provide a high level of support for teachers and learners.

We have resource lists which can be filtered to show all resources, or just those which are endorsed by Cambridge. The resource lists include further suggestions for resources to support teaching.

2.3 Training

We offer a range of support activities for teachers to ensure they have the relevant knowledge and skills to deliver our qualifications. See **www.cie.org.uk/events** for further information.

3. Assessment at a glance

Advanced Subsidiary (AS) Level: Candidates take papers 1 and 2

Advanced (A) Level: Candidates take papers 1, 2, 3 and 4

Component	Type of assessment	Weighting (%)		
		AS	A2	A Level
1	AS Written paper (2½ hours) Three compulsory questions	70	–	35
2	AS Coursework Centre-based assessment	30	–	15
3	A2 Written paper (2½ hours) Three compulsory questions	–	70	35
4	A2 Coursework Centre-based assessment	–	30	15

Candidates would normally take the AS components at the end of year 1 and the A2 components at the end of year 2 of a two-year course.

Availability

This syllabus is examined in the November examination series.

This syllabus is not available to private candidates.

Detailed timetables are available from **www.cie.org.uk/examsofficers**

Centres in the UK that receive government funding are advised to consult the Cambridge website **www.cie.org.uk** for the latest information before beginning to teach this syllabus.

Combining this with other syllabuses

Candidates can combine this syllabus in an examination series with any other Cambridge syllabus, except:

- syllabuses with the same title at the same level

4. Syllabus aims and assessment objectives

4.1 Syllabus aims

The aims of a course based on this syllabus, whether leading to a Cambridge International AS or A Level qualification, are:

- to provide a knowledge and understanding of the conceptual basis, structure and function of a selection of physical education activities
- to develop understanding and problem-solving skills (interpretation and evaluation)
- to develop planning and practical skills for effective performance
- to foster an ability to relate practice to theory, and theory to practice
- to develop an understanding of the physiological, socio-cultural and psychological factors which influence physical education
- to provide an experience which is valuable, both as a means of personal development and as a foundation for employment or more advanced study.

In addition, the Advanced Level syllabus aims to encourage candidates:

- to develop the capacity to think critically about the relationships between the different factors influencing performance
- to develop a capacity to explain global trends in physical education and sport.

4.2 Assessment objectives

Candidates are expected to demonstrate the following in the context of the content described:

AO1: knowledge with understanding

AO2: the ability to apply practical skills, knowledge and understanding to physical activity

AO3: the ability to analyse and critically evaluate practical performance

4.3 Scheme of assessment

Centres and candidates may choose to:

- take the AS components (Papers 1 and 2) at one exam series and the A2 components (Papers 3 and 4) at a later series, leading to the full Cambridge International A Level qualification
- take the AS components (Papers 1 and 2) only, leading to the Advanced Subsidiary qualification.

The Cambridge International AS Level forms 50% of the assessment weighting of the full Advanced Level.

Component	Weighting (%)		
	AS	A2	A
Paper 1 (2½ hours) AS written paper, consisting of three sections: Section A: Applied anatomy and physiology Section B: Acquiring, developing and performing movement skills Section C: Contemporary studies in physical education and sport One compulsory question worth 30 marks on each of the three sections. (90 marks)	70	–	35
Paper 2 AS Coursework Candidates will follow a minimum of two activities from the activity profiles offered. Assessment will take place in conditioned competitive situations/ prescribed situations. (2 × 30 marks) Candidates will also produce a written action plan. Candidates should design, explain and follow an action plan for improvement in one of their chosen activities. (30 marks) Coursework will be internally assessed and externally moderated by Cambridge.	30	–	15
Paper 3 (2½ hours) A2 written paper, consisting of three sections: Section A: Exercise and sport physiology Section B: Psychology of sport performance Section C: Olympic Games: a global perspective One compulsory question worth 30 marks on each of the three sections. (90 marks)	–	70	35
Paper 4 A2 Coursework Candidates will follow a minimum of two activities from the activity profiles offered. Assessment will take place in an open environment (effective performance). (2 × 30 marks) Candidates will be required to evaluate and appreciate a live performance in one of their chosen activities. (30 marks) Coursework will be internally assessed and externally moderated by Cambridge.	–	30	15

Specification Grid

The approximate weightings allocated to each of the assessment objectives at Cambridge International A Level in the assessment model are summarised in the table below.

Assessment objective	AS Weighting (%)	A2 Weighting (%)
AO1: knowledge with understanding	20	20
AO2: apply practical skills, knowledge and understanding to physical activity	25	25
AO3: analyse and evaluate practical performance	5	5

Weighting of Assessment Objectives

The relationship between the assessment objectives and the scheme of assessment at Cambridge International A Level is set out in the table below.

Assessment objective	Component 1	Component 2		Component 3	Component 4	
		practical performance	action plan		practical performance	evaluation and analysis
AO1: knowledge with understanding	20			20		
AO2: apply practical skills, knowledge and understanding to physical activity	15	10		15	10	
AO3: analyse and evaluate practical performance			5			5

5. Syllabus content

Component 1

Section A: Applied anatomy and physiology

1. The skeletal system

- general overview of the skeletal system to include the functions of the skeleton, the axial and appendicular skeleton

This is meant as an introductory section to the course and will not be directly examined.

2. Joint type

- definitions and examples of fibrous, cartilaginous and synovial joints
- the typical structure and features of a synovial joint
- the type of joint and the bones which articulate at the following joints: shoulder, elbow, radio-ulnar, wrist, hip, knee, ankle, spine (pivot, cartilaginous and gliding)

3. Movement type

- types of movement which can occur at the above named joints to include: flexion, extension, plantar flexion, dorsi flexion, abduction, adduction, pronation, supination, elevation, depression, rotation, and circumduction

4. Muscles

- location and action of individual muscles (knowledge of origins and insertions is desirable but will not be examined)
- the following joints and muscles need to be covered:
  - shoulder: deltoid, latissimus dorsi, pectoralis major, rotator cuff muscles (suprasinatus, subscapularis, infraspinatus, teres minor)
  - elbow: biceps brachii, triceps brachii
  - radio-ulnar: supinator, pronator teres
  - wrist: wrist extensors, wrist flexors
  - spine: rectus abdominus, external obliques/internal obliques, erector spinae, transversus abdominus, multifidus
  - hip: iliopsoas, sartorius, gluteus maximus, gluteus medius, gluteus minimus, gracilis, adductor longus, adductor magnus, adductor brevis
  - knee: biceps femoris, semimembranosus, semitendinosus, rectus femoris, vastus lateralis, vastus medialis, vastus intermedius
  - ankle: tibialis anterior, gastrocnemius, soleus
- a knowledge that some muscles cause movement at more than one joint

5. Functions of muscles

- function of muscles as agonists, antagonists, fixators and synergists

6. Types of muscle contraction

- concentric, eccentric, isometric, isokinetic

7. Muscle fibre types

- structure and function of slow oxidative, fast oxidative glycolytic, and fast glycolytic muscle fibre types

8. Movement analysis of sporting actions associated with each joint

- practical analysis of typical sporting actions associated with each joint, to include identification of joint, joint type, movement occurring, working muscles, functions of the muscles, type of contraction

9. Structure and function of the heart

- internal and external structure of the heart, to include the heart chambers and valves, all blood vessels attached to the heart, the heart wall, and pericardium
- conduction system of the heart, cardiac cycle
- definitions and relationship between cardiac output, stroke volume, heart rate; differences in values at rest and during exercise
- regulation of heart rate to include neural, hormonal, and intrinsic factors
- measurement of heart rate response to varying intensities of workload
- heart rate response during recovery, with a graphical representation of data

10. Function of the vascular system

- pulmonary and systemic circulatory systems
- factors linked with venous return
- distribution of cardiac output at rest and during exercise, to include the vascular shunt mechanism, the role of the precapillary sphincters and the role of the vasomotor centre
- blood flow, blood velocity, blood pressure and the effects of exercise on blood pressure
- oxygen and carbon dioxide transport

11. Structure and function of the respiratory system

- structure of the nasal passages, trachea, bronchii, bronchioles, and alveoli
- lobes of the lung and pleural membrane
- mechanics of breathing at rest and during exercise
- respiratory muscles, to include: diaphragm, external intercostals, sternocleidomastoid, pectoralis minor, internal intercostals, and abdominal muscles
- control of ventilation (neural and chemical)
- definitions, values and measurement of respiratory volumes at rest and during exercise
- effect of exercise on respiratory volumes and pulmonary ventilation
- gaseous exchange, partial pressures and tissue respiration
- the effect of altitude on the respiratory system

Component 1

Section B: Acquiring, developing and performing movement skills

1. Characteristics of a skilful performance

- learned
- efficient
- goal directed
- follows technical model
- fluent
- aesthetically pleasing

2. Definition and characteristics of motor and perceptual skills

(a) Classification of skills

- placement of skills on continua to include (with examples)
  - gross and fine
  - open and closed
  - discrete, serial and continuous
  - external and internally paced
  - simple or complex
  - high and low organisation

(b) Definition and characteristics of abilities

- characteristics: innate, underlying and enduring traits
- gross motor and psychomotor abilities, with examples

3. Motor skill development

- knowledge of the progression from motor abilities to fundamental motor skills, to sport specific skills
- awareness of the influences of early experiences and environmental exposure

4. Theories related to the learning of motor skills

- description of the stimulus-response (S/R) bond and application of related theories
- associationist theories: operant conditioning – shaping behaviour, the use of reinforcement, link to trial and error, linking of the S/R bond
- cognitive theory: work of the Gestaltists – wholeness and insight learning
- observational learning: the work of Bandura – the four elements (attention, retention, motor reproduction, motivation)

5. Reinforcement

- definition and examples of positive reinforcement, negative reinforcement and punishment, as methods of strengthening or weakening the S/R bond
- ways of strengthening the S/R bond through repetition, satisfaction/annoyance, and through physical and mental preparedness

6. Theories related to motor and executive programmes

- definition as a generalised series of movements: creation of programmes in the long term memory; awareness of the major programmes/sub-routines of a range of motor skills
- open loop control: retrieval of programmes by making one decision, used in quick movements where there is no time for feedback, with examples
- closed loop control: detection and correction of movements during the performance through the use of feedback, with examples
- schema theory: a way of modifying the motor programme by the use of schema or rules of information
  - Schmidt's sources of information as recall and recognition schema
  - four rules of schema (knowledge of initial conditions, knowledge of response specifications, sensory consequences, movement outcomes)
  - examples of the application of the schema theory in teaching and coaching

7. Theory of information processing in the performance of motor skills

(a) Basic models of information processing

- display, sensory information, sense organs, perception, decision making, effector mechanism response and feedback
- use of practical examples to show evidence of understanding

(b) Memory

- basic model of the memory process: selective attention, short term sensory store, short term memory, long term memory
- use of practical examples to show evidence of understanding of the use of memory in the performance of practical skills

(c) Reaction time

- definitions of reaction time, movement time and response time
- importance of a short reaction time
- factors affecting reaction time, including psychological refractory period, in a range of sporting activities

(d) Feedback

- importance and functions of feedback
- types of feedback to include: intrinsic and extrinsic, terminal and concurrent, positive and negative, knowledge of performance, knowledge of results
- use of practical examples to show how feedback can be used effectively to improve performance

(e) Phases of learning movement skills

- cognitive, associative, autonomous phases of learning
- characteristics of each phase and their practical implications

(f) Transfer of learning

- definition of transfer of learning
- types, including (with practical examples):
  - positive transfer, its practical application and ways of optimising its effect
  - negative transfer, its practical application and ways of limiting its effect
  - proactive and retroactive
  - bilateral transfer

(g) Motivation

- definition of motivation to include extrinsic and intrinsic motivation
- practical examples to show the advantages and disadvantages of both methods
- effect of extrinsic rewards on intrinsic motivation

(h) Theories related to arousal levels

- drive theory
- inverted U theory
- drive reduction theory

Component 1

Section C: Contemporary studies in physical education and sport

1. The conceptual basis of physical education and sport

(a) Defining the field of study

- physical performance as it falls within such activity categories as play, physical recreation, sport and physical education
- recognition of the broader concepts of leisure and recreation, and the sub categories of outdoor recreation and outdoor education; identification and explanation of shared characteristics

(b) Leisure and recreation

- identifying leisure activities and associated characteristics
- leisure as an activity and experience:
  - in a cultural setting
  - as an economic product
  - as a form of social control
  - as a basis for self realisation
- recreation as a positive aspect of leisure: active leisure, associations with privilege and purposefulness

(c) Physical and outdoor recreation

- definition and characteristics of physical recreation in a leisure and cultural framework
- definition and characteristics of outdoor recreation:
  - appreciation of the natural environment
  - adventure and risk to the individual
  - respect for the countryside

(d) Towards a concept of play

- definition and characteristics of play:
  - freedom and time
  - space and spontaneity
  - enjoyment
  - intrinsic value
  - non serious and non productive assumptions
- child at play: increasing mastery over reality
- adult at play: escape from reality, stress release

(e) Towards a concept of sport

- definitions and characteristics of sport
- values such as sportsmanship and fair play; win and participation ethics
- sport in society: the functional/desirable to dysfunctional/undesirable components
- concepts of sport for all and excellence in sport
- equal opportunity, provision and esteem
- elitism

(f) Physical education and outdoor education

- definitions and characteristics of physical education in schools
- values:
  - health and skill learning
  - preparation for active leisure and as a career
  - self realisation
  - socialisation
- definitions and characteristics of outdoor education as part of physical education
- safety in natural situations: subjective and objective danger; real and perceived risk

(g) Relationships between play, physical recreation, sport and physical education

- differences in emphasis of characteristics in different activities

2. Achieving excellence in sport (relating to a country of your choice)

- policies, government initiatives
- status of elite sport, professional approach
- political views
- importance of Olympic success
- provision for excellence, facilities, coaches, science support
- funding for excellence
- administration, structure and organisation of sport

3. Mass participation in sport (relating to a country of your choice)

- benefits of regular participation in sport
- widening the base of the performance pyramid
- initiatives to encourage mass participation
- provision of facilities, for mass participation by private, public, or voluntary bodies
- funding for mass participation
- provision at grass roots level by National Governing Bodies and other agencies
- attitudes to participation

4. Factors affecting participation in sport

- socio-economic status
- parents, siblings, peer group
- age
- gender
- ability/disability
- race
- religion
- government/status of country

5. Sporting issues

- sport and commercialism
- links between sport and politics
- sponsorship/advantages and disadvantages to the performer and sponsor
- role of the media
- ethics in sport/fair play, sportsmanship and gamesmanship
- violence by players and spectators; solutions to the problem
- drugs in sport

Component 3

Section A: Exercise and sport physiology

1. Energy concepts

- definitions of energy, work and power, and the units they are expressed in
- forms of energy to include chemical, kinetic and potential

2. ATP

- the role of ATP
- the breakdown and re-synthesis of ATP
- the principle of coupled reactions; exothermic and endothermic reactions

3. ATP resynthesis

- knowledge of the three energy systems:
  - ATP/PC (alactic)
  - the lactic acid system
  - the aerobic system
- Detail required to include the type of reaction (aerobic or anaerobic), the chemical or food fuel used, the specific site of the reaction, the controlling enzyme, energy yield, specific stages within a system, and the by-products produced

4. Energy continuum

- the predominant energy system used related to:
  - the type of exercise (duration and intensity)
  - the interchanging between thresholds during an activity (for example, the onset of blood lactate accumulation/OBLA)
- the effect of the level of fitness, availability of oxygen and food fuels, and enzyme control on the energy system used

5. The recovery process

- returning the body to its pre-exercise state
- the oxygen debt / excess post exercise oxygen consumption (EPOC)
- the alactacid and lactacid debt components, including the processes that occur and the duration of each component
- replenishment of myoglobin stores and fuel stores, and the removal of carbon dioxide
- implications of recovery process to be considered when planning training sessions, for example training intensities, work/relief ratios

6. Principles of training

- specificity, progression, overload (FIT), reversibility, moderation, and variance
- the physiological implications of a warm up and cool down (for example, reduce the delayed onset of muscular soreness – DOMS)
- periodisation of training to include the macro, meso and micro cycle
- awareness of the implications of the principles when applied to the candidate's own training

7. Components of fitness

(a) Aerobic capacity

- definition of aerobic capacity
- awareness of how an athlete's VO_2 max. is affected by individual physiological make up, training, age and sex
- methods of evaluating aerobic capacity (for example, multi-stage fitness test, PWC170 test)
- assessment of the candidate's own VO_2 max., matching their result against the aerobic demand of their chosen activity
- types of training used to develop aerobic capacity (continuous running, repetition running, fartlek and interval training)
- use of target heart rates as an intensity guide
- energy system and food/chemical fuels used during aerobic work
- physiological adaptations that take place after aerobic training

(b) Strength

- definition of types of strength to include:
  - strength endurance
  - maximum strength
  - explosive/elastic strength
  - static and dynamic strength
- factors affecting strength, for example fibre type and cross-sectional area of the muscle
- methods of evaluating strength, for example grip strength dynamometer
- types of training used to develop strength
- the repetition, sets and resistance guidelines used to improve each type of strength
- use of multi-gym, weights, plyometrics and circuit/interval training (work intensity, work duration, relief interval, number of work/relief intervals)
- energy system and food/chemical fuels used during each type of strength training
- physiological adaptations that take place after training, including neural and physiological changes to skeletal muscle

(c) Flexibility

- definition of flexibility to include static and dynamic flexibility
- factors affecting flexibility, for example, type of joint, length of surrounding connective tissue
- methods of evaluating flexibility, for example sit and reach test, or goniometer
- types of training used to develop flexibility, including
  - static (active and passive)
  - ballistic
  - proprioceptive neuromuscular facilitation (PNF)
  - dynamic stretching
- physiological adaptations that take place after training, to include physiological changes to skeletal muscle and connective tissue

(d) Body composition
- definition, method of evaluation
- global rise in BMI leading to health problems
- percentage of muscle mass and bone density found in highly trained athletes
- methods of improvement

(e) Balance
- definition
- methods of evaluation
- static and dynamic dimensions of balance
- methods of improvement

(f) Co-ordination
- definition
- methods of evaluation
- methods of improvement

(g) Agility
- definition
- methods of evaluation
- methods of improvement

(h) Reaction time
- definition
- methods of evaluation
- relationship to muscle fibre types
- methods of improvement

(i) Speed
- definition
- methods of evaluation
- methods of improvement

8. Erogenic aids
- an awareness of current methods of performance enhancement
- the effects of each aid
- which athletes would benefit from each aid
- nutritional aids:
  - carbohydrate loading
  - pre/post competition meals
  - food/fluid intake during exercise
- use of creatine supplements
- blood doping and recombinant erythropoietin (Rh EPO)
- effects of caffeine
- effects of alcohol
- anabolic steroids (e.g. Nandralone)
- human growth hormone (HGH)

Component 3

Section B: Psychology of sport performance

1. Individual aspects of sport performance

(a) Personality

- theories of personality including:
  - trait perspectives (including the characteristics of extroversion/introversion, neuroticism/stability, Type A/Type B)
  - social learning perspectives
  - interactionist approaches
- justification of the limitations of personality profiling in sport

(b) Attitudes

- the nature of attitudes, inconsistencies and prejudice in sporting situations
- understanding of their origins and influences (including the effects of socialisation)
- identification of the components of attitudes (cognitive, affective, behavioural)
- identification of the links between attitudes and behaviour in sporting situations
- awareness of methods of changing attitudes from negative to positive, including knowledge of:
  - cognitive dissonance
  - persuasive communication

(c) Motivation

- Atkinson and McClelland's theory of achievement motivation (the need to achieve and the need to avoid failure)
- awareness of sport-specific achievement motivation (i.e. competitiveness)

2. Group dynamics of sport performance

(a) Groups and teams

- definition of a group/team (mutual awareness, interaction, common goal)
- knowledge of Steiner's model of group performance
- awareness of problems associated with productivity of a group/team, including:
  - motivational factors (social loafing)
  - co-ordination/co-operation factors (Ringlemann effect)
- knowledge of factors affecting the formation and development of a cohesive group/team

(b) Leadership

- understanding the importance of effective leadership
- characteristics of leaders, including:
  - autocratic/task-oriented
  - democratic/social oriented
  - laissez-faire
- emergent and prescribed leaders
- theories of leadership, including:
  - trait theories
  - social learning theories
  - interactionist theories
- Fiedler's contingency model
- Chelladurai's multi-dimensional model of leadership

3. Mental preparation for sport performance

(a) Commitment

- goal setting
- understand the importance and relevance to sport (related to anxiety management)
- factors affecting the setting of goals ("SMARTER" principle)
- the candidate should set sporting goal(s) and justify the use of short/intermediate/long term goals and process/performance/product goals to improve performance

(b) Self-confidence

- sports confidence (Vealey)
- the concepts of trait sports confidence, competitiveness orientation, state sports confidence
- self-efficacy (Bandura) and the influence of:
  - performance accomplishments
  - vicarious experiences
  - verbal persuasion
  - emotional arousal

(c) Concentration

- attentional control
- cue utilisation (Easterbrook) and its links with arousal
- attentional styles, e.g. broad/narrow, internal/external (Nideffer)

(d) Emotional control

- definition of activation and arousal
- awareness of their relationship to personality, ability level, and complexity of the task
- peak flow experience and the zone of optimum functioning theory (Hanin)
- definition of anxiety
- the nature and influences of anxiety, including:
  - the trait/state distinction (Spielberger)
  - multi-dimensional theory (cognitive anxiety and somatic anxiety)
  - sports competition anxiety
- anxiety management to improve performance including:
  - cognitive techniques (mental rehearsal/imagery, positive self talk, thought stopping, rational/positive thinking)
  - somatic techniques (progressive muscular relaxation, biofeedback relaxation)

4. Competition effects on sport performance

(a) Social facilitation and audience effects

- knowledge of the positive (facilitation) and negative (inhibition) effects of others (including an audience and co-actors) on performance
- awareness of the links with levels of arousal, and the heightening of the dominant response (Zagonc)
- the causes and effects of evaluation apprehension (Cottrell)
- awareness of the distraction effect
- awareness of the Homefield Advantage Phenomenon
- the use of strategies to combat the effects of social inhibition, particularly the use of selective attention and mental rehearsal

(b) Aggression

- the difficulties associated with the definition of aggression as opposed to assertion
- definition of channelled aggression
- causes of aggressive behaviour
- theories of aggression (in sporting situations) including:
  - instinct theories
  - frustration-aggression hypothesis
  - aggressive-cue hypothesis (Berkowitz)
  - social learning theories
- methods of eliminating aggressive tendencies of performers

5. Consequences of sport performance

(a) Attribution theory

- reasons for success and failure
- Weiner's model
- the use of attributional retraining
- strategies for the promotion of mastery orientation and the avoidance of learned helplessness

Component 3

Section C: Olympic Games: a global perspective
1. As a social force • the concept of an international athletic festival to act as a social force • athletes from all over the world meeting and competing irrespective of colour, race, creed, and political belief • the promotion of international understanding, and an appreciation of cultural diversity • concept of a supreme mental and physical challenge • fair play ideals • ideals of peace, harmony, and co-operation to transcend political barriers
2. Ancient Olympic Games • as a blueprint for the modern era • sporting events as a common feature of life in ancient Greece • use of Olympia as a site • held every four years from 776BC for 1000 years, abolished in 393AD • format of ancient games, for example, five day period, religious ceremony, types of athletics events, (the stade, the establishment of the pentathlon) • 'wreath or death' mentality • the place of women in these games
3. Role of the IOC • mission and role of the IOC in leadership of the Olympic Movement • organisation, membership and administration of the IOC • bidding to host the games, for example: controversy caused on methods of selection, criticism of selected host countries (Beijing 2008, human rights in People's Republic of China)
4. Politics • the concept of open, international competition being corrupted in full view of the global community • the distortion of Olympic competition into political power • the deterioration of the Olympic Games being used as a competition between nations to enhance national prestige and political ideologies • Olympic Games as a preferred platform for political confrontation • athletes as pawns for their governments • athletes as targets for terrorists • cost of security precautions to deter terrorists • political power determining who can compete • nationalism as a symbol of the Olympic Games, not peace and co-operation • examples, such as Hitler's 1936 Olympiad in Berlin – the master race ethic • the contribution of Jesse Owens • examples, such as political statements made by athletes in Mexico 1968

- examples such as apartheid and terrorism in Munich 1972
- examples such as power politics as seen in the form of boycotts; Montreal 1976, Moscow 1980, Los Angeles 1984
- accelerated rebuilding of Beijing, movement of people from urban areas into cities; globalisation causing industrialisation of their economy; use of foreign exchange reserves for funding
- positive legacy of the games – impact on regeneration in host countries

5. Comparison of methods of nurturing talent in the pursuit of global excellence

- a comparison of the pursuit of excellence, therefore gold medals, in countries such as the United States of America and the People's Republic of China
- a comparison of:
  - elitist and personal achievement ethics
  - win at all costs ethic
  - status and funding of high-level sport
  - policies and methods used to achieve gold medals
  - professionalism and behaviour

6. Economics and commercialism

- costs of hosting the games
- provision of facilities, transport systems, housing
- use of cheap labour
- costs of hosting an even more expensive event than the previous one
- demands of IOC
- the spiral of extravagance
- sources of funding, e.g. sponsorship, donations from private corporations, government subsidies, sale of television rights
- costs to local people, e.g. Beijing relocation of 300 000 people
- cost of competing to the athlete, for example:
  - training, living expenses, travel
  - loss of income
- sponsorship, grants, bursaries
- benefits to competing athletes, for example:
  - high income
  - public appearances
  - media spotlight
- financial benefits of hosting the games:
  - revenue from operating facilities as training sites
  - profitability to television networks
- attraction of mass audiences

7. Amateurism

- traditional definition of amateurism in the Olympic Games
- definition as a tool for excluding the working class in sports events organised for the upper class
- definition as a noble concept
- transition to professionalism
- 'broken time' payment
- lack of policy from the IOC
- abuse of the amateur ideal
- necessity for full time pursuit to achieve Olympic success

8. Dysfunctional aspects

- Olympic Oath 2000
- win at all costs ethic
- rumours of widespread use of drugs
- risk-taking, and 'paying the price'
- testing as a deterrent
- example: 'Big Drug Bust', Seoul 1988
- examples: Sydney Olympics 2000 and Salt Lake City Winter Olympics 2002

9. Discrimination

- the changing role of women throughout the Olympic Games
- expansion of events which now cater for all races
- introduction and importance of the Paralympics
  - the staging of the first Paralympics
  - why and how this movement gained impetus
  - the relevance of WWII
  - Sir Ludwig Guttman
  - the significance of Seoul

10. Spectacular aspect

- expanding horizon
- pushing the achievements of the body in sport to the limits of endurance
- intensity of competition
- spiritual aspect: bravery of competition

11. The Future

NB These are notes for teachers, to give guidance on areas for discussion leading to some reformative style questioning in the examination.

- Should the Olympic Games be reformed?
- athletes' experiences, rather than outcomes, becoming the major emphasis
- medal counts and national prestige are major concerns for reform
- revision of opening ceremonies and medal ceremonies to reflect achievements of athletes
- place of national uniforms, flags, anthems and medal counts
- dropping of 'wealth sports'
- revision of team sports
- revision of the Olympic Motto (Citius, Altius, Fortius) to emphasise participation and the commitment to fair play
- use of multiple sites rather than one host nation
- the removal of politics from the Olympic Arena
- solutions/recommendations related to performance enhancement

6. Coursework

The assessment criteria for all the practical activities at both AS and A2 can be found in the *AS and A Level Physical Education Coursework Guidelines Booklets* which Centres must have access to.

The *Coursework Guidelines Booklets* also contain information and the assessment criteria to assess:

- **the written Action Plan for the AS Coursework component (part of Component 2)**
- **the Evaluation and Appreciation of Performance for the A2 Coursework component (part of Component 4).**

The assessment, including the production of video evidence of candidates performing in practical activities, is an integral part of the Cambridge International AS/A Level PE course. In addition, candidates can be placed in physically demanding situations when taking part in practical activities.

It is the responsibility of the Centre, through the Head of Physical Education or equivalent, to ensure that:

- candidates are capable of taking part in practical activities. **If there is any doubt then medical advice should be sought.**
- the health and safety of candidates is paramount and is maintained at all times when candidates are engaged in practical activities as part of this course
- the necessary facilities and equipment are available and safe for each activity that candidates take part in
- they oversee the assessment process and that there is effective internal standardisation across the Centre's assessments and all the staff involved in the assessments, including off-site activities
- the DVD video evidence is sufficiently comprehensive and in the correct format (single layered DVD, viewable in Windows Media player or QuickTime) to enable external moderation to take place efficiently.

Centres should always follow best practice in conducting practical activities. One textbook that Centres may find helpful is *Safe Practice in Physical Education and School Sport* (2008), ISBN 978-1905540549, produced by the Association for Physical Education.

Advanced Subsidiary (AS) – Component 2

Candidates are assessed on:

- their performance and its improvement in **two** chosen activities, from two different activity categories listed below (20% of total marks). The assessments will take place in conditioned competitive situations/ prescribed situations. The conditioned competitive situations should generate tasks of appropriate pitch and challenge. The *Coursework Guidelines Booklet* provides some examples, but Centres can devise their own.
- their ability to produce an action plan on **one** of their chosen activities (10% of total marks).

Advanced Level (A2) – Component 4

Candidates are assessed on:

- their effective performance in **two** chosen activities, from two different activity categories listed below (20% of total marks). Assessment will take place in an open environment.
- their ability to evaluate and appreciate a live performance through observation and synopsis of knowledge on **one** of their chosen activities (10% of total marks).

Activity categories

The list below shows the activities available for assessment for AS Coursework (Component 2) and A2 Coursework (Component 4).

Centres should arrange practical activities to suit the particular abilities and interests of candidates, their own facilities, staff expertise and time available.

Activity categories	Sports included
1 Athletic activities	Cross country running (Cc), Track and field athletics (Ath), Track cycling (Tc), Triathlon (Tri)
2 Fitness activities	Weight training AS (Wt), Olympic weight lifting A2 (OWL)
3 Combat activities	Judo (Ju), Karate (non-contact) (Ka)
4 Dance	Various styles (Da)
5 Invasion games	Association Football (AF), Basketball (Bas), Field hockey (Ho), Goalball (Goa), Handball (Ha), In-line hockey (ILH), Lacrosse (La), Netball (Ne), Rugby League (RL), Rugby Union (RU), Water polo (Wp)
6 Net/wall games	Badminton (Bad), Squash (Sq), Table Tennis (TT), Tennis (Te), Volleyball (Vo)
7 Striking/fielding games	Baseball (Bb), Cricket (Cri), Rounders (Ro), Softball (So)
8 Target activities	Archery (Ar), Flat green bowling (Bo), Golf (Go)
9 Gymnastic activities	Gymnastics (AG), Individual ice (figure) skating (FS), Rhythmic gymnastics (RG), Trampolining (Tr)
10 Outdoor and adventurous activities	Canoeing (Ca), Horse riding (dressage/cross-country/show jumping/three-day eventing) (HR), Mountain biking (MB), Mountain/hill walking with campcraft or hostelling (Hw), Orienteering (Or), Rock climbing (Rc), Rowing and sculling (Row), Sailing (Sa), Skiing (Sk), Snowboarding (Sb), Windsurfing (Ws)
11 Swimming	Competitive swimming (Sw), Life saving (LS), Personal survival (PS)

Performance and its improvement (AS)

The candidate should be aware of the correct techniques, methods and rules appropriate to his/her **two** chosen activities. He/she should be able to identify his/her strengths, and areas for improvement and carry out a 10 week action plan for improvement on **one** of his/her chosen activities. This action plan should be recorded and not exceed 20 sides of A4.

Effective performance (A2)

Candidates should be able to select, apply and perform skills in his/her **two** chosen activities. This effective performance will be assessed against criteria identified for each activity. The candidate's oral response to the observation of a live performance in **one** of their chosen activities is assessed.

Moderation

For both AS and A2, Coursework is marked by the teacher and internally standardised by the Centre. It is then submitted to Cambridge for external moderation.

The purpose of moderation is to ensure that the standard for the award of marks in Coursework is the same for each Centre, and that each teacher has applied the standard appropriately across the range of candidates within the Centre.

- Final marks for each activity and for the action plan (Cambridge International AS Level) should be entered on separate assessment sheets. The candidate's names should be entered on these sheets in **rank order**.
- Marks and codes for both the assessed practical activities and action plan (AS Level) and for the evaluation and appreciation of performance (A2) should then be entered onto the Coursework Summary Assessment form. Candidates' names should be entered in **candidate number order**.
- Centres will be expected to provide recorded evidence of performance of a sample of five candidates from across the ability range in each of the practical activities offered by the Centre. If there are fewer than five candidates in any activity, then the video evidence of all candidates should be submitted.
- Final marks are submitted at the end of the Cambridge International AS Level course to represent candidates' performance and its improvement in two activities, and their action plan on one of these activities.
- Final marks are submitted at the end of the A2 Level course to represent candidates' effective performance in two activities, and evidence of their evaluation and appreciation of performance in one of their chosen activities.

After internal moderation, the following must be submitted to Cambridge for external moderation:

- Coursework mark sheets
- video/DVD recorded evidence of candidates' performance in practical activities
- evidence of the candidates' action plan (AS Level only)
- video/DVD evidence of the evaluation and appreciation of performance (A2 Level only)

Guidance on the requirements for video evidence of Coursework

It is not permissible to submit the same video evidence for AS Coursework assessment and for A2 Coursework assessment because the assessments are carried out in different contexts. At AS, assessment is within conditioned competitive situations whereas at A2 it is within an open environment.

Video evidence should be submitted on a single layered DVD, viewable on Windows Media player or QuickTime, in the UK.

Each activity should be between 5 and 10 minutes in duration.

The video for indoor activities should be shot in good light.

All candidates should be identified by large numbered bibs or card numbers, pinned on their back and front.

The use of white-on-yellow bibs should be avoided as the numbers are difficult to read on a television screen.

The number worn by the candidate on the video recording should be entered alongside the candidate number on the Practical Activity Assessment Form.

A running commentary, constantly identifying candidates, is very helpful to the Moderator. Captions are also helpful, but not essential.

Accompanying notes are useful, especially those giving the running order of the video. An accurate description of how well candidates are performing should be given, because the marks of unseen candidates will be affected. If a candidate is off form, the reasons should be stated.

The following documentation should be sent with the DVD:

AS

- MS1
- AS Coursework Summary Assessment Form
- Individual activity assessment forms for each activity
- Written action plans for improvement for the sample of candidates

A2

- MS1
- A2 Coursework Summary Assessment Form
- Individual activity assessment forms for each activity
- Video evidence of the evaluation and appreciation of performance for each candidate

The deadlines and methods for submitting internally assessed marks are in the *Cambridge Administrative Guide* available on our website. It would be appreciated if the video evidence and coursework documentation could be submitted in advance of the deadline.

There should be no need to submit more than one 3 hour DVD.

7. Resources list

Magazines/periodicals

Centres are advised to stock a selection of magazines/periodicals related to the sport activities in the practical options.

Coursework Guidelines booklets

There are two Coursework Guidelines booklets, one for each of the AS and A2 components of the syllabus, giving details of assessment of practical activities.

Books

1. General Advanced Level textbooks

The following books contain information for candidates and teachers on most aspects of the course.

Author	Title	Date	Publisher
P Beashel and J Taylor	*Advanced Studies in Physical Education and Sport*	1996	Nelson
D Bonney, J Ireland, C Miller, K Mackreth and S Van Wely	*Advanced PE for OCR A2*	2004	Heinemann
D Carnell, J Ireland, C Jones, K Mackreth and S Van Wely	*Advanced PE for OCR AS*	2002	Heinemann
R J Davis, C R Bull, J V Ruscoe and D A Ruscoe	*Physical Education and the Study of Sport*	1997	Mosby
F Galligan, C Maskery, J Spence, D Howe, T Barry, A Ruston and D Crawford	*Advanced PE for EdExcel (including Olympic Games)*	2000	Heinemann
J W Honeybourne, M Hill and H Moors	*Advanced Physical Education and Sport*	1996	Stanley Thornes
K Wesson, N Wiggins, G Thompson and S Hartigan	*Sport and PE: A Complete Guide To Advanced Level Study*	1998	Hodder and Stoughton

In addition, revision books are available in some of the above titles.

2. Applied anatomy and physiology
The following books contain reference material suitable for teachers.
Books marked with an asterisk (*) are also suitable for candidates.

Author	Title	Date	Publisher
M Cash	*Pocket Atlas of the Moving Body**	1999	Ebury
M Farrally	*An Introduction to the Structure of the Body*	2003	Coachwise UK
C Clegg	*Muscles and Bones in Action**	2005	Feltham Press
F Carpenter and P Ledger	*Physiology and Performance*	1986	National Coaching Foundation
E Marieb	*Human Anatomy and Physiology*	1999	Addison Wesley
R Seeley, T Stephens and P Tate	*Anatomy and Physiology*	2007	McGraw Hill
C Thompson	*Manual of Structural Kinesiology*	1989	Mosby

3. Acquiring, developing and performing movement skills
The following books contain reference material suitable for teachers.
Books marked with an asterisk (*) are also suitable for candidates.

Author	Title	Date	Publisher
J Honeybourne	*Acquiring Skill in Sport**	2006	Routledge
T McMorris	*Acquisition and Performance of Sports Skills*	2004	Wiley
R Magill	*Motor Learning, Concepts and Application*	2004	McGraw Hill
B Sharp	*Acquiring Skill in Sport**	1992	Sports Dynamics
M Williams and N Hodges	*Skill Acquisition in Sport*	2004	Routledge

4. Contemporary studies in physical education and sport
The following books contain reference material suitable for teachers.

Author	Title	Date	Publisher
E Cashmore	*Making Sense of Sport*	1997	Routledge
E Cashmore	*Sports Culture: An A–Z Guide*	1997	Routledge
J J Coakley	*Sport in Society: Issues and Controversies*	1998	Mosby
Thorp	*Sport Matters* ISBN: 9781872365947		Carel Press

5. Exercise and sport physiology
The following books contain reference material suitable for teachers.
The book marked with an asterisk (*) is also suitable for candidates.

Author	Title	Date	Publisher
C Clegg	*Exercise Physiology and Functional Anatomy**	1995	Feltham Press
W McArdle, F Katch and V Katch	*Essentials of Exercise Physiology*	2005	Lippincott Williams and Wilkins
J Wilmore and D Costill	*Physiology of Sport and Exercise*	2004	Human Kinetics

6. Psychology of sport performance
The following books contain reference material suitable for teachers.
Books marked with an asterisk (*) are also suitable for candidates.

Author	Title	Date	Publisher
R Cox	*Sport Psychology: Concepts and Applications*	2002	McGraw Hill
D Gill	*Psychological Dynamics of Sport and Exercise* (2nd edition)	2000	Human Kinetics
M Jarvis	*Sport Psychology: A student's handbook**	2006	Routledge
S Webster	*AS/A2 Psychology Guide**	2002	Jan Roscoe Publications

7. Olympic Games: a global perspective
The following books contain reference material suitable for teachers.
The book marked with an asterisk (*) is also suitable for candidates.

Author	Title	Date	Publisher
J Coakley	*Sports in Society: Issues and Controversies*	1998	McGraw Hill
S Daniels and A Teddler	*A Proper Spectacle: Women Olympians*	2000	ZeNaNa Press
V Girginov and J Parry	*The Olympic Games Explained**	2005	Routledge
R A Mechikoff	*A History and Philosophy of Sport and PE*	2005	McGraw Hill Education
A Senn	*Power, Politics and the Olympic Games*	1999	Human Kinetics

CD-ROMs, DVDs and charts

Mace	*Switch on to Skill in Sport* (CD ROM)	ISBN 9780953545797
Fisher	*The Olympic Games* (CD ROM)	ISBN 9781901424508

Many charts, DVDs and CD ROMs on applied anatomy and physiology are also available.

Resources are also listed on Cambridge's public website at **www.cie.org.uk**. Please visit this site on a regular basis as the Resource lists are updated through the year.

The Cambridge Teacher Support website can be found at **http://teachers.cie.org.uk**. This website is available to teachers at registered Cambridge Centres.

8. Activity categories and codes

Activity category	Activity	Activity codes
Athletic activities	Cross country running	Cc
	Track and field athletics	Ath
	Track cycling	Tc
	Triathlon	Tri
Fitness activities	Weight training (AS)	Wt
	Olympic weight lifting (A2)	OWL
Combat activities	Judo	Ju
	Karate (non-contact)	Ka
Dance	Various styles	Da
Invasion games	Association Football	AF
	Basketball	Bas
	Field hockey	Ho
	Goalball	Goa
	Handball	Ha
	In-line hockey	ILH
	Lacrosse	La
	Netball	Ne
	Rugby League	RL
	Rugby Union	RU
	Water polo	Wp
Net/wall games	Badminton	Bad
	Squash	Sq
	Table tennis	TT
	Tennis	Te
	Volleyball	Vo

Activity category	Activity	Activity codes
Striking/fielding games	Baseball	Bb
	Cricket	Cri
	Rounders	Ro
	Softball	So
Target activities	Archery	Ar
	Flat green bowling	Bo
	Golf	Go
Gymnastic activities	Gymnastics	AG
	Individual ice (figure) skating	FS
	Rhythmic gymnastics	RG
	Trampolining	Tr
Outdoor and adventurous activities	Canoeing	Ca
	Horse riding (dressage/cross-country/ show jumping/three-day eventing)	HR
	Mountain biking	MB
	Mountain/hill walking with campcraft or hostelling	Hw
	Orienteering	Or
	Rock climbing	Rc
	Rowing and sculling	Row
	Sailing	Sa
	Skiing	Sk
	Snowboarding	Sb
	Windsurfing	Ws
Swimming	Competitive swimming	Sw
	Life saving	LS
	Personal survival	PS

9. Assessment forms

All coursework assessment forms can be found in the A/AS Level PE *Coursework Guidelines Booklets* (2013) which can be found on Cambridge's website. Some practical activities have specific assessment forms, e.g. Weight Training (AS), which must be completed for candidates assessed in this activity. Other activities will require the completion of a generic assessment form, e.g. games activities. Details of activities requiring activity specific assessment forms and all the assessment forms can be found in the *Coursework Guidelines Booklets*.

10. Other information

Equality and inclusion

Cambridge International Examinations has taken great care in the preparation of this syllabus and assessment materials to avoid bias of any kind. To comply with the UK Equality Act (2010), Cambridge has designed this qualification with the aim of avoiding direct and indirect discrimination.

The standard assessment arrangements may present unnecessary barriers for candidates with disabilities or learning difficulties. Arrangements can be put in place for these candidates to enable them to access the assessments and receive recognition of their attainment. Access arrangements will not be agreed if they give candidates an unfair advantage over others or if they compromise the standards being assessed.

Candidates who are unable to access the assessment of any component may be eligible to receive an award based on the parts of the assessment they have taken.

Information on access arrangements is found in the *Cambridge Handbook* which can be downloaded from the website **www.cie.org.uk/examsofficers**

Language

This syllabus and the associated assessment materials are available in English only.

Grading and reporting

Cambridge International A Level results are shown by one of the grades A*, A, B, C, D or E, indicating the standard achieved, A* being the highest and E the lowest. 'Ungraded' indicates that the candidate's performance fell short of the standard required for grade E. 'Ungraded' will be reported on the statement of results but not on the certificate. The letters Q (result pending), X (no results) and Y (to be issued) may also appear on the statement of results but not on the certificate.

Cambridge International AS Level results are shown by one of the grades a, b, c, d or e, indicating the standard achieved, 'a' being the highest and 'e' the lowest. 'Ungraded' indicates that the candidate's performance fell short of the standard required for grade 'e'. 'Ungraded' will be reported on the statement of results but not on the certificate. The letters Q (result pending), X (no results) and Y (to be issued) may also appear on the statement of results but not on the certificate.

If a candidate takes a Cambridge International A Level and fails to achieve grade E or higher, a Cambridge International AS Level grade will be awarded if both of the following apply:

- the components taken for the Cambridge International A Level by the candidate in that series included all the components making up a Cambridge International AS Level
- the candidate's performance on these components was sufficient to merit the award of a Cambridge International AS Level grade.

Entry codes

To maintain the security of our examinations, we produce question papers for different areas of the world, known as 'administrative zones'. Where the component entry code has two digits, the first digit is the component number given in the syllabus. The second digit is the location code, specific to an administrative zone. Information about entry codes for your administrative zone can be found in the *Cambridge Guide to Making Entries*.

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