Oxford Cambridge and RSA Examinations

RECOGNISING ACHIEVEMENT

OCR AS GCE in Physical Education (3875)

OCR Advanced GCE in Physical Education (7875)

Approved Specifications – Revised Edition

First Advanced Subsidiary GCE certification was 2001 QAN (3875) 100/0623/0
First Advanced GCE certification was 2002 QAN (7875) 100/0454/3

Foreword to Revised Edition

This Revised Edition has been produced to consolidate earlier revisions to these specifications and any changes contained within have previously been detailed in notices to centres. **There is no change to the structure or teaching content of the specification and most differences are cosmetic**. Sidelining will be used to indicate any significant changes.

The main changes are:

Re-sits of Units – The restrictions on re-sitting units have been removed, enabling candidates to re-take units more than once (for details see page 18).

Foreword (continued)

This booklet contains OCR's Advanced Subsidiary GCE (AS) and Advanced GCE (A level) Physical Education specifications for teaching from September 2004.

The AS GCE is assessed at a standard appropriate for candidates who have completed the first year of study of a two year Advanced GCE course, i.e. between GCSE and Advanced GCE. It forms the first half of the Advanced GCE course in terms of teaching time and content. When combined with the second half of the Advanced GCE course, known as 'A2', the AS forms 50% of the assessment of the total Advanced GCE. However, the AS can be taken as a 'stand-alone' qualification. A2 is weighted at 50% of the total assessment of the Advanced GCE.

In these specifications the term **module** is used to describe specific teaching and learning requirements. The term **unit** describes a unit of assessment.

Each teaching and learning module is assessed by its associated unit of assessment.

These specifications meet the requirements of the Common Criteria (Qualifications and Curriculum Authority, 1999), the GCE AS and Advanced Level Qualification-Specific Criteria (QCA, 1999) and the relevant Subject Criteria (QCA, 1999).

Each of the practical activities offered to candidates in these specifications should be carried out in accordance with the recommendations in '*Safe Practice in Physical Education*' (BAALPE, 2004).

The activities can place candidates in physically demanding situations. Centres should ensure that candidates are medically capable of coping with these situations. Where doubt exists, medical advice should be sought. Centres should also satisfy themselves that candidates are not suffering from any medical condition which would be affected by strenuous exercise.

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Specification Summary

Outline

These OCR AS GCE and Advanced GCE Physical Education specifications take a multi-disciplinary approach, encouraging the development of different methods of enquiry drawn from a wide range of disciplines, with the focal point being the performer and the performance. The specifications are based on the interaction between the theory and practice of Physical Education.

Specification Content

AS

Candidates study the following: Application of Anatomical and Physiological Knowledge to Improve Performance; Acquiring and Performing Movement skills; and Contemporary Studies in Physical Education.

A2

Candidates study Exercise and Sport Physiology: the response of the body to performance and training; and two options. The options are:

Historical Studies in Physical Education (Option A1);

Comparative Studies in Physical Education (Option A2);

Biomechanical Analysis of Human Movement (Option B1);

Psychology of Sport Performance (Option B2).

At least one option must be either Historical Studies in Physical Education or Comparative Studies in Physical Education.

Scheme of Assessment

The AS GCE forms 50% of the assessment weighting of the full Advanced GCE. AS GCE is assessed at a standard between GCSE and Advanced GCE and can be taken as a stand-alone qualification or as the first part of the full Advanced GCE course.

Assessment is by means of **3 Units of Assessment** for AS GCE and **6 Units of Assessment** for Advanced GCE.

AS GCE	Candidates take Units 2562, 2563 and 2564.
Advanced GCE	Candidates take Units 2562, 2563, 2564, 2565, 2566 and 2567.

Units of Assessment

Unit	Level	Unit Title	Duration	Weighting	
				AS	Advanced GCE
2562	AS	The Application of Physiological and Psychological Knowledge to Improve Performance	1 hour 30 mins	40%	20%
2563	AS	Contemporary Studies in Physical Education	1 hour 15 mins	30%	15%
2564	AS	Performance and its Improvement through Critical Analysis	-	30%	15%
2565	A2	Physical Education: Historical, Comparative, Biomechanical and Sport Psychology options	1 hour 15 mins	-	15%
2566	A2	Exercise and Sport Physiology and the integration of knowledge of principles and concepts across different areas of Physical Education	1 hour 30 mins	-	20%
2567	A2	The improvement of effective performance and critical evaluation of the practical activities with synoptic assessment	-	-	15%

All units are assessed by written examination except the coursework Units 2564 and 2567.

Question Paper Requirements

AS

Unit 2562 (1 hour and 30 minutes)

There are four compulsory structured questions. Candidates answer two questions in Section A on Application of Anatomical and Physiological Knowledge to Improve Performance, and two questions in Section B on Acquiring and Performing Movement Skills. Each question is divided into a number of parts.

Unit 2563 (1 hour and 15 minutes)

This question paper has two questions. Candidates answer both questions. Each question is divided into a number of parts.

A2

Unit 2565 (1 hour and 15 minutes)

The question paper has two sections. Section A contains one question on Historical Studies in Physical Education and one question on Comparative Studies in Physical Education. Section B contains one question on the Biomechanical Analysis of Human Movement and one question on Psychology of Sport Performance. Candidates must answer two questions, including at least one question from Section A. Each question is divided into a number of parts.

Unit 2566 (1 hour and 30 minutes)

The question paper has two sections. Section A consists of a compulsory question on Exercise and Sport Physiology: The response of the body to performance and training. Section B contains two synoptic questions, one question with a scientific focus and the other question with a socio-cultural focus. One synoptic question must be answered.

Coursework Requirements

AS

Unit 2564: Performance and its Improvement through Critical Analysis

Candidates are assessed in two chosen activities, from two different activity profiles. The assessment is divided and weighted as follows:

- The selection and application of acquired and developed skills (20% of the AS).
- Personal Performance Portfolio (10 % of the AS).

A2

Unit 2567: The Improvement of Effective Performance and critical evaluation of the practical activities with synoptic application

Candidates are assessed in two chosen activities, from two different activity profiles. The assessment is divided and weighted as follows:

- The selection, application and performance of skills in an open environment (20% of A2).
- Evaluation and appreciation of performance through observation and synopsis of knowledge (10% of A2).

Overlap with Other Qualifications

These specifications relate well to other Advanced GCEs in the social sciences and natural sciences and to some VCE units, particularly in the vocational fields of Leisure and Recreation, Health and Social Care, Business Studies and Science. There is limited overlap of subject content with the VCE Leisure and Recreation.

1 Introduction

These OCR specifications lead to qualifications at AS GCE and Advanced GCE in Physical Education. Candidates take three units for AS GCE and a further three units for A2. AS and A2 combined constitute the full Advanced GCE specification. There is coursework in both AS and A2.

Candidates would normally be expected to have successfully completed a GCSE in Physical Education at a satisfactory level but this would not exclude candidates who have not studied this subject at GCSE. However, the specifications have been designed to provide progression by building on the knowledge, understanding and skills set out in the National Curriculum Key Stage 4.

The specifications take a multi-disciplinary approach, encouraging the development of different methods of enquiry drawn from a wide range of disciplines, with the focal point being the performer and the performance. The specifications are based on the interaction between the theory and practice of Physical Education.

These specifications relate well to other Advanced GCEs in the social sciences and natural sciences and to some GNVQ units, particularly in the vocational fields of Leisure and Recreation, Health and Social Care, Business Studies and Science. There is limited overlap of subject content with the GNVQ Leisure and Recreation and VCEs in Leisure and Recreation. An Advanced Level qualification in the subject is rapidly becoming an essential pre-requisite for specialist study in Physical Education and Sport Studies in higher education, and it is also a suitable qualification for other areas of study. The specifications provide an excellent foundation for candidates intending to pursue careers in teaching and coaching, sports development, the leisure industry, recreational management, the health and fitness industry and professional sport.

Rationale

Physical Education is an umbrella term used to describe the study of a range of specified physical activities. It is a field of study which hinges on physical performance and exists as a family concept, consisting of play, physical recreation, sport and institutional physical education (Calhoun, Morgan and Meier et al).

There are a number of different classifications of these specified physical activities (Alderson, Almond, et al). In the context of AS GCE and Advanced GCE , and in line with maintaining links with Key Stage 4 and GCSE, these specifications use the six activity categories identified in the National Curriculum document for Physical Education (1998), with the addition of a combat category.

Candidates are engaged in a learning process which involves three dimensions, as identified by P J Arnold (Physical Education Review Vol 3 No.1 1980). The first and dominant dimension is the knowledge and understanding which exists in the field of study itself, as a physical experience. What may start out as a series of skills, when applied to specified physical activities, can become a valued personal experience. This approach is rooted in the classical concept of ‘mind, body and spirit’ and expressed in the modern concept of holistic learning (Kretchmar, Hyland Drew et al).

The second dimension arises out of this, where learning about the physical is concerned with multi-disciplinary knowledge from such fields as physiology, psychology and socio-cultural studies. This knowledge is divided into what is deemed necessary study at this level and consists of functional anatomy, the acquisition of skill, contemporary studies and exercise physiology and, desirable study arising from four options, historical studies, comparative studies, biomechanics and sport psychology, where candidates select two of these for more specialised study.

The third dimension, though less significant in the context of these specifications, is learning through physical activity, where the physical experience is used instrumentally. This use of physical education as a vehicle for the promotion of desired patterns of behaviour is reflected commercially in the status given to sport in the media and to the political significance of sport in schools reflected in the document 'Raising the Game'. However, physical education in schools, as a medium for the transmission of valued experiences and attitudes, can have a most significant impact on the future development of our society.

These three dimensions are not mutually exclusive, but overlap and inter-relate with each other, producing three major outcomes. Firstly, the recognition that physical education as a field of study is a worthwhile academic experience, involving 'intelligent' personal performance at a practical level, which identifies a physically educated person.

Secondly, that this experience develops individual and social values, together with an awareness of the contribution of physical education to the broader education of young people in modern society.

Thirdly, that these learning experiences arise out of an established body of knowledge and understanding, which can be applied at informative, interpretative and reflective levels with the intention of developing self-directed, socially minded individuals.

It is appreciated that children in the primary sector are almost entirely engaged in experiencing physical activity for its own sake; that older children increasingly develop an awareness of the social significance of physical education; and that this is extended to include disciplinary analysis as they approach higher education in an on-going chain of development.

There are a number of key features in these specifications which justify special mention. The central feature is the placement of the physical experience as the core element and the use of various disciplines to enhance the understanding of it. This relationship is achieved through a synthesis of theory and practice in theoretical and practical lessons and a proactive teaching style which establishes worthwhile learning experiences by the candidates.

As part of this recognition of the pre-eminent place of the physical experience, a second special feature is the assessment of practical studies as an essential part of the examination process, where candidate performance, the ability to demonstrate and the ability to observe critically and evaluate performance, are formally assessed as part of the coursework.

Thirdly, there is a focus on progression at a number of different stages. The intention is to rationalise and extend knowledge brought from Key Stage 4 and GCSE to an Advanced level. Candidates cover a diverse foundation programme at AS with opportunities for a staged assessment, allowing them to make a decision to defer progression to A2. For those who wish, AS is followed by more demanding and qualitative requirements in A2, where study of

Modules 2566 and 2567 leads towards synoptic assessment involving the integration of knowledge across different areas of the subject.

It is expected that this progression will not only provide a coherent and worthwhile course for candidates who do not wish to engage in further study, but also prepare them for higher education. In this way it is hoped to establish career foundations, and to encourage candidates to engage in and promote a physically active lifestyle.

This notion of what it is to be a physically educated person is expressed in the general aims and the assessment objectives, and realised through a recognition of a range of worthwhile learning experiences. The learning process reflects these objectives and develops in complexity and sophistication over the duration of the course and with progression from AS to A2. The development of candidate abilities is accompanied by the development of principles and concepts drawn from the specification content areas, together with efforts to link learning experiences between modules.

The final evaluation is the formal examination of theory modules and the assessment of practical activity at AS GCE and Advanced GCE, where Unit 2566, focusing thematically on the integration of knowledge principles and concepts across different areas of the subject, meets some of the synoptic assessment requirements of the Advanced GCE specification.

The interrelationships of learning in, about and through physical activity have a number of important implications for the teaching of physical education. These include a fundamental requirement for teachers to provide a variety of learning experiences, which allow candidates not only to understand relationships between physical activity and the complexity of factors underlying performance, but also to experience these relationships themselves. The implications for teaching physical education are that:

- as many learning experiences as possible relate to the real-life experiences of candidates;
- these learning experiences develop candidates as self-directed, inter-dependent and independent learners, where private study and a commitment to improve physical performance are essential parts of this process;
- there is a strong link maintained between physical activities and theoretical content;
- learning experiences reflect the general objectives of acquiring, applying, evaluating and appreciating each physical activity as it is related to the theoretical content.

These specifications meet the agreed general aims for AS GCE and Advanced GCE Physical Education reflecting a focus on ‘intelligent’ physical performance; a diversity and quality of academic study and a progressive experience of valuable analytical and evaluative skills commensurate with Advanced GCE study. The specifications cover the assessment objectives set out in the Physical Education Subject Criteria (QCA, 1999).

1.1 Certification Title

These qualifications are shown on a certificate as:

- OCR Advanced Subsidiary GCE in Physical Education.
- OCR Advanced GCE in Physical Education.

1.2 Language

These specifications and associated assessment materials are available in English only.

1.3 Exclusions

Candidates who enter for this Physical Education AS GCE specification may **not** also enter for any other AS GCE specification with the certification title Physical Education in the same examination session.

Candidates who enter for this Physical Education Advanced GCE may **not** also enter for any other Advanced GCE specification with the certification title Physical Education in the same examination session.

Every specification is assigned to a national classification code indicating the subject area to which it belongs.

Centres should be aware that candidates who enter for more than one GCE qualification with the same classification code will have only one grade (the highest) counted for the purpose of the School and College Performance Tables.

The classification code for these specifications is 7210.

1.4 Overlap with Other Qualifications

These specifications relate well to other Advanced GCEs in the social sciences and natural sciences and to some VCE units, particularly in the vocational fields of Leisure and Recreation, Health and Social Care, Business Studies and Science. There is limited overlap of subject content with the VCE Leisure and Recreation.

1.5 Code of Practice Requirements

These specifications will comply in all respects with the 2004 revised Code of Practice.

2 Specification Aims

The aims of these AS GCE and Advanced GCE specifications are to encourage candidates to:

- develop an understanding of the factors influencing performance and the ability to apply these to a range of physical activities;
- develop knowledge and skills of selected physical activities;
- develop the skills necessary to analyse, evaluate and improve performance;
- develop an appreciation of social, moral and cultural issues which affect participation and performance in physical activity.

In addition, the Advanced GCE specification aims to encourage candidates to:

- develop the capacity to think critically about the relationships between the different factors influencing performance;
- develop a capacity to explain current provision for participation in physical activity in the context of social issues and global trends.

2.1 Spiritual, Moral, Ethical, Social and Cultural Issues

The awareness of the significance of these fundamental issues is a core element of the whole of these specifications; identified in the aims and manifested in candidate's learning experiences in the theory and practical modules. These issues are particularly reinforced in:

- Contemporary Studies in Physical Education (Module 2563), which includes women in sport, and deviance in sport;
- Historical Studies in Physical Education (Module 2565 Option A1);
- Comparative Studies in Physical Education (Module 2565 Option A2) where global and specific values in France, Australia and USA are compared with the UK.

The significance of the synoptic learning in Module 2566 lies in the opportunity for candidates to identify these issues through a number of different study areas.

As part of institutionalised physical education, spiritual, moral and ethical values and attitudes are discussed as necessary, as are desirable features of physical performance, particularly in the context of young people. For example, Module 2566 encourages candidates to discuss the ethical issues surrounding performance enhancement.

2.2 Environmental Education, European Dimension and Health and Safety Issues

Environmental, economic and health issues are part of the section on cultural determinants in the socio-cultural modules and is discussed widely at a candidate's learning experience level.

Environmental issues arise in the countryside where the natural environment is faced with problems of equating recreation with conservation (Module 2563), cultural analysis and the outdoor education issue. Issues also arise in the problems inherited from the past (Historical Studies in Physical Education, Module 2565 Option A1); urbanisation and rational sport and global perspectives (Comparative Studies in Physical Education Module 2565 Option A2).

The European dimension with its political economic and sporting features is a microcosm of global problems, but one which should be appreciated by all candidates. This dimension is covered in general terms in Contemporary Studies in Physical Education (Module 2563) with development of cultures and cultural determinants, in Historical Studies in Physical Education (Module 2565 Option A1) where cultural factors from the past are analysed, and in Comparative Studies (Module 2565 Option A2) where the European dimension is analysed and the French and British political systems in particular are examined.

Health is a central notion in terms of the health related basis of physical performance. As such it is considered in terms of knowledge content and candidate's learning experience in the scientific areas (Module 2566) and socio-cultural modules (Module 2563: the concept of Sport for All; in Module 2565 Option A1: living standards during the early years of the twentieth Century; and comparative analysis of the health factor in French, Australian and American physical education). The health related analysis of physical performance is an excellent theme for synoptic analysis.

2.3 Avoidance of Bias

OCR has taken great care in the preparation of these specifications and assessment materials to avoid bias of any kind.

3 Assessment Objectives

Knowledge, understanding and skills are closely linked. These specifications require candidates to demonstrate the following assessment objectives in the context of the content and skills prescribed. Assessment objectives AO1 and AO2 apply to both AS GCE and Advanced GCE. AO3 applies only to the A2 part of the Advanced GCE course.

AO1 Knowledge and Understanding

Candidates should be able to:

- evaluate aspects of practical performance and selected activities showing an understanding of the application of physical factors which underpin performance;
- describe and explain the ways in which skills are learned and applied in practice conditions to improve performance;
- interpret the effects of social, moral and cultural influences on participation and performance in physical activity;
- organise and present information, ideas, descriptions and arguments in a clear, logical and appropriate form, taking into account the use of specialist vocabulary, grammar, punctuation and spelling.

AO2 Skills

Candidates should be able to:

- analyse and evaluate performance in selected practical activities;
- apply appropriate techniques and principles designed to develop an improvement in performance.

AO3 Knowledge and Understanding

Candidates should be able to:

- analyse and explain the relationships between the physical and skill determinants of performance with contemporary influences on physical education and sport.
- critically evaluate and justify current provision for participation in physical activity in the context of social and cultural issues in the UK, Europe and other comparative cultures. Analyse these trends through a consideration of global events that provide opportunity for international competition and reflect a country's policies, priorities and prejudices.

The assessment objectives are weighted as follows:

	AS GCE	A2	Advanced GCE
AO1	70%	40%	55%
AO2	30%	20%	25%
AO3	0%	40%	20%

3.1 Specification Grid

The relationship between the assessment objectives and the units of assessment is shown in specification grid below.

Unit	Level	Percentage of Advanced GCE			Total
		AO1	AO2	AO3	
2562	AS	20	-	-	20
2563	AS	15	-	-	15
2564	AS	-	15	-	15
2565	A2	15	-	-	15
2566	A2	5	-	15	20
2567	A2	-	10	5	15
Total		55	25	20	100

3.2 Quality of Written Communication

Quality of written communication is included in Assessment Objective AO1. There are questions that include assessment of the quality of written communication in Units 2563, 2565 and 2566.

The examination papers for these units give opportunities for candidates to select and use an appropriate form of extended writing in response to the questions set. Candidates when responding to these questions are expected to analyse, select and apply relevant knowledge on complex subjects, interpret evidence, and present an argument or develop a line of reasoning using subject specific terminology.

4 Scheme of Assessment

Candidates take three units of assessment, including a coursework unit, for AS GCE, followed by a further three units of assessment, including a coursework unit, at A2 if they are seeking an Advanced GCE award.

Units of Assessment

Unit	Level	Unit Title	Duration	Weighting	
				AS	Advanced GCE
2562	AS	The Application of Physiological and Psychological Knowledge to Improve Performance	1 hour 30 mins	40%	20%
2563	AS	Contemporary Studies in Physical Education	1 hour 15 mins	30%	15%
2564	AS	Performance and its Improvement through Critical Analysis	-	30%	15%
2565	A2	Physical Education: Historical, Comparative, Biomechanical and Sport Psychology options	1 hour 15 mins	-	15%
2566	A2	Exercise and Sport Physiology and the integration of knowledge of principles and concepts across different areas of Physical Education	1 hour 30 mins	-	20%
2567	A2	Improvement of effective performance and critical evaluation of practical activities with synoptic assessment	-	-	15%

All units are assessed by written examination except the coursework units 2564 and 2567.

Rules of Combination

Candidates must take the following combination of units.

AS GCE Units 2562, 2563 and 2564.

Advanced GCE Units 2562, 2563, 2564, 2565, 2566 and 2567.

Unit Availability

There are two unit sessions each year, in January and June.

The availability of units is shown below.

Unit	Level	Unit Title	Jan 2005	June 2005
2562	AS	The Application of Physiological and Psychological Knowledge to Improve Performance	⌴	⌴
2563	AS	Contemporary Studies in Physical Education	⌴	⌴
2564	AS	Performance and its Improvement through Critical Analysis	-	⌴
2565	A2	Physical Education: Historical, Comparative, Biomechanical and Sport Psychology options	⌴	⌴
2566	A2	Exercise and Sport Physiology and the integration of knowledge of principles and concepts across different areas of Physical Education	⌴	⌴
2567	A2	Improvement of effective performance and critical evaluation of the practical activities with synoptic assessment	-	⌴

The availability in subsequent years will be the same as that shown for 2005.

Sequence of Units

The normal sequence in which the units could be taken is Units 2562, 2563 and 2564 in the first year of a course of study, leading to an AS GCE award then Units 2565, 2566 and 2567 in the second year, together leading to the Advanced GCE award. However, the units may be taken in other sequences.

Alternatively, candidates may take all units at the end of their AS GCE or Advanced GCE course in a 'linear' fashion, if desired.

Synoptic Assessment

Synoptic assessment tests the candidates' understanding of the connections between the different elements of the subject from both AS and A2 units. It accounts for 20% of the total Advanced GCE marks. Unit 2566 Section B contains two synoptic questions, of which candidates answer one question. Unit 2567 also contributes to the synoptic assessment requirements.

For Advanced GCE, Units 2566 and 2567 should normally be taken at the end of a candidate's course of study, but this is no longer a requirement.

Certification

Candidates may enter for:

- AS GCE certification;
- AS GCE certification, bank the result, and complete the A2 assessment at a later date;
- Advanced GCE certification.

Candidates must enter all six AS and A2 units to qualify for the full Advanced GCE award.

Individual unit results, prior to certification of the qualification, have a shelf-life limited only by that of the specification.

Re-sits of Units

The restrictions on re-sitting units have been removed, enabling candidates to re-take units more than once. Upon making an entry for certification, the best attempt will be counted towards the final award. This change applies to all candidates, including those who have already been entered for any units or full qualifications.

Re-sits of AS GCE and Advanced GCE

Candidates may still enter for the full qualification an unlimited number of times.

4.1 Question Papers

4.1.1 AS

Unit 2562: The Application of Physiological and Psychological Knowledge to Improve Performance (1 hour 30 minutes) [60 marks]

There are two sections:

- Section A: Application of Anatomical and Physiological Knowledge to Improve Performance.
- Section B: Acquiring and Performing Movement Skills.

There are two questions in each section and all questions carry equal marks. Candidates must answer all four questions.

Each question is structured into a series of short sub-questions.

Candidates may be required to interpret and to sketch graphs and diagrams. The use of technical language is expected.

Unit 2563: Contemporary Studies in Physical Education (1 hour 15 minutes) [45 marks]

There are two questions, and candidates must answer **both**.

Candidates may be required to respond to and interpret visual material, including photographs and diagrams.

Unit 2563 includes assessment of Quality of Written Communication.

4.1.2 A2

Unit 2565: Physical Education: Historical, Comparative, Biomechanical and Sport Psychology options (1 hour 15 minutes) [45 marks]

There are four questions, one on each of the following topics:

Section A : Socio-cultural topics

- Option A1: Historical Studies in Physical Education
- Option A2: Comparative Studies in Physical Education

Section B : Scientific topics

- Option B1: Biomechanical Analysis of Human Movement
- Option B2: Psychology of Sport Performance

The questions require candidates to make links between theory and practice, and to evaluate and make comparisons of relevant information. Each question is divided into a series of stepped sub-questions.

Candidates must answer two questions, including at least one question from Section A. All questions carry equal weighting.

In answering questions on Options A1, A2 and B2, candidates may be required to respond to and interpret visual material, including photographs and diagrams.

In answering questions on Option B1, candidates may be required to interpret and to sketch graphs and diagrams. The use of technical language is expected.

Unit 2565 includes assessment of Quality of Written Communication.

Unit 2566: Exercise Physiology and the integration of knowledge of principles and concepts across different areas of Physical Education (1 hour 30 minutes) [60 marks]

Candidates answer the compulsory question in Section A and one of the questions in Section B.

Section A: Exercise and Sport Physiology: The response of the body to performance and training

There is one compulsory question.

This question draws from the whole body of knowledge covered in Module 2566, as set out in the Specification Content (see Section 5.5). The question requires candidates to make links between theory and practice, and to evaluate and make comparisons of relevant information. The question is divided into a series of stepped sub-questions.

Section B: Integration of knowledge of principles and concepts across different areas of PE

Section B assesses a candidate's ability to bring together knowledge of principles and concepts across a range of study areas, particularly as it concerns knowledge in physical performance and multi-disciplinary study about performance.

Candidates answer one question from a choice of two questions. The element of choice provides candidates with the opportunity to explore the extent of their knowledge, understanding and personal experience gained from the core elements and from their chosen optional studies. The questions are thematic and applied. They allow a degree of personal interpretation, but demand a structured response involving analysis and reappraisal.

The assessment focuses on the quality of the integration and the depth of knowledge shown in specific areas of the subject, particularly the synthesis of physical performance and applied theoretical knowledge. The candidate's answer is marked according to a level of response marking scheme.

Section B includes assessment of Quality of Written Communication.

Section B addresses part of the synoptic assessment requirements of the Advanced GCE specification.

4.2 Coursework

4.2.1 AS

Unit 2564: Performance and its Improvement through Critical Analysis.

Candidates are assessed in two chosen activities, from two different activity profiles. The assessment is divided and weighted as follows:

- The selection and application of acquired and developed skills. 20% of the AS
- Personal Performance Portfolio 10% of the AS

For further information see Appendix B.

4.2.2 A2

Unit 2567: The Improvement of Effective Performance and critical evaluation of the practical activities with synoptic application

Candidates are assessed in two chosen activities, from two different activity profiles. The assessment is divided and weighted as follows:

- The selection, application and performance of skills in an open environment (Effective Performance). 20% of the A2
- Evaluation and appreciation of performance through observation and synopsis of knowledge (oral test). 10% of the A2

For further information see Appendix B.

4.2.3 Assessment and Moderation

Centres are required to have video evidence of a sample of their candidates across the range of marks for each activity assessed. This video evidence should relate to:

- For AS: the selection and application of acquired and developed skills part of Unit 2564;
- For A2: all of Unit 2567
    - (i) The selection, application and performance of skills in an open environment
    - (ii) Evaluation and appreciation of performance through observation and synopsis of knowledge

The video evidence should clearly identify candidates and enable them to be linked to the assessment documentation.

Moderation is by means of cluster groups based on geographical distribution. The purpose of the process is to ensure that assessments are standardised across all Centres and that every candidate is treated fairly. Moderation is part of the examination process and attendance is compulsory. A sample of Personal Performance Portfolios will be also be moderated.

A sample of a Centre's candidates will be identified by the Moderator and asked to attend the cluster moderation meeting. Candidates must be accompanied to the moderation by the teacher responsible for internal standardisation, usually the Head of PE Department. This staff member will be fully responsible for the candidates during the moderation and will ensure their health and safety at all times. Candidates may be moderated in both the activities they have been assessed in, but may also be asked to take part in other activities to ensure viable numbers for the standardisation exercise. Cluster moderations will usually last for a day, but Centres can request that, where the programme of activities permits, candidates attend for only part of the day. Candidates should be aware that moderation is part of the examination process. Candidates **must** attend moderation if requested and they should prepare themselves appropriately for the process. If acceptable special circumstances arise which prevent the candidate from attending the moderation session, written evidence confirming the circumstances must be made available to the moderator.

4.2.4 Minimum Coursework Requirements

If a candidate completes no work for a coursework unit, then the candidate should be indicated as being absent from that unit on the coursework mark sheets submitted to OCR. If a candidate completes any work at all for a coursework unit then the work should be assessed according to the criteria and marking instructions and the appropriate mark awarded, which may be 0 (zero).

4.2.5 Authentication

As with all coursework, the teachers must verify that the work carried out for assessment is the candidate's own work. Sufficient work must be carried out under direct supervision to allow the teacher to authenticate the coursework marks with confidence.

4.3 Special Arrangements

For candidates who are unable to complete the full assessment or whose performance may be adversely affected through no fault of their own, teachers should consult the *Inter-Board Regulations and Guidance Booklet for Special Arrangements and Special Consideration*. In such cases advice should be sought from OCR as early as possible during the course. Applications for special consideration in coursework units should be accompanied by Coursework Assessment Forms giving the breakdown of marks.

4.3.1 Special Consideration for Incomplete Coursework

There is a minimum requirement to be fulfilled before special consideration can be given.

- If a candidate completes one activity and the Personal Performance Portfolio (2564)/Evaluation and Appreciation (2567), and then is unable to undertake the second practical because of severe injury, marks should be submitted for the two completed parts of the unit attached to a special consideration form. OCR will consider enhancing the practical marks based on the one activity completed. Medical evidence should be attached to the special consideration form with the breakdown of marks.
- If there is no practical assessment at all, marks cannot be credited for the practical activities. Where there is a Personal Performance Portfolio (2564)/Evaluation and Appreciation (2567), marks can be submitted for this section of the unit. No enhancement for practicals can be based on the written part of the unit.
- If a candidate is injured after the AS assessment and cannot progress to A2 practicals, no further credit can be given for the A2 practical element.

4.4 Differentiation

In the question papers, differentiation is achieved by setting questions which are designed to assess candidates at their appropriate levels of ability and which are intended to allow all candidates to demonstrate what they know, understand and can do.

In coursework, differentiation is by task and by outcome. Candidates undertake activities which enable them to display positive achievement.

4.5 Awarding of Grades

The AS GCE has a weighting of 50% when used in an Advanced GCE award.

An Advanced GCE award is based on the certification of the weighted AS (50%) and A2 (50%) marks.

Both AS GCE and Advanced GCE qualifications are awarded on the scale A-E, or U (unclassified).

4.6 Grade Descriptions

The following grade descriptions indicate the level of attainment characteristic of the given grade at Advanced GCE. They give a general indication of the required learning outcomes at each specified grade. The descriptions should be interpreted in relation to the content outlined in the specification; they are not designed to define that content. The grade awarded will depend, in practice, upon the extent to which the candidate has met the assessment objectives overall. Shortcomings in some aspects of the examination may be balanced by better performances in others.

Grade A

Candidates:

- use an extensive range of theoretical principles and concepts and apply these to practical performances at a consistently high level;
- demonstrate high order analytical skills clearly matched to underpinning theoretical principles, and use these to refine practical performances;
- demonstrate a deep understanding of all physical factors affecting training, exercise and energy systems and their influence on a wide range of practical performances;
- demonstrate a thorough understanding of the development of skilled performances and how these are achieved through learning, practice and the influence of cognitive factors;
- demonstrate an astute insight into how social, moral and cultural components and wider global issues interact and contribute to the provision of and participation in physical activities;
- demonstrate a sophisticated appreciation and understanding of the connections between all areas of the subject;
- have a good command and understanding of a range of technical language and can apply it accurately and effectively.

Grade C

Candidates:

- use a good range of theoretical principles and concepts and apply these to practical performances;
- demonstrate a good understanding of analysis and evaluation of practical performances using a range of theoretical principles, and through this identify ways of improving performance;
- clearly identify physical factors which affect training, exercise and energy systems and influence practical performance;
- demonstrate a good understanding of how skilled performances are developed through the inter action of learning, practice and cognitive influences;
- demonstrate a good understanding of social, moral and cultural influences and global trends and how these interact to affect the provision for and participation in physical activity;
- display a clear ability to identify and draw together different areas of subject knowledge;
- have a good range and application of technical language related to all subject areas.

Grade E

Candidates:

- use a basic range of theoretical principles and concepts and apply these to practical performances;
- demonstrate a basic understanding of analysis and evaluation of practical performances using theoretical principles, and how performances might be improved;
- identify how physical factors affecting training, exercise and energy influence practical performances;
- understand how skilled performances are developed through learning, practice and the effects of cognitive factors;
- demonstrate a sound understanding of social, moral and cultural issues and global trends and their effects on provision for and participation in physical activity;
- have the appropriate ability to identify and draw together different areas of subject knowledge;
- understand and apply a sound range of technical language.

5 Specification Content

These specifications are set out in the form of teaching modules. Each teaching module is assessed by its associated unit of assessment.

Throughout this section the symbol  is used in the margin to highlight where Key Skills development opportunities are signposted. For more information on Keys Skills coverage please refer to Appendix A.

5.1 Module 2562: The Application of Physiological and Psychological Knowledge to Improve Performance

This Module has two sections:

A - Application of Anatomical and Physiological Knowledge to Improve Performance.

B - Acquiring and Performing Movement Skills.

Module 2562: Section A - Application of Anatomical and Physiological Knowledge to Improve Performance.

C3.1b, C3.2, C3.3

5.1.1.1 Introduction

Section A of Module 2562 helps build a greater understanding of the structure of the human body and how it responds during the performance of a variety of physical activities. Candidates will have had the opportunity to study anatomy and physiology during Key Stage 4 and GCSE. Module 2562 allows candidates to build on and extend their knowledge, as well as experiencing a greater depth of analysis in terms of their own body's individual response to physical activity, and that of others. The focus of study is on how the structure and mechanics of the body, and the function and control of body systems, all interlink with the physiological make-up of an individual to play a significant role in determining both the standard and effectiveness of the performance. The study of applied anatomy and physiology presents an opportunity to candidates, not only to acquire knowledge and understanding, but also to appreciate the interaction of these concepts with psychological and socio-cultural factors in determining not only standard of performance but also effect on improving the standard. Candidates accumulate knowledge that ultimately enables them to reason effectively, and begin to anticipate responses to new performance situations. This application should consist of synthesis of theory and practice as reflected in the aims and objectives of the specification, together with exemplars to illustrate links between physical performance and theoretical study. This provides a platform to build on in A2 when the candidate explores the long term effects of

training and performance on the body. Candidates also have the opportunity to analyse efficient performance in greater detail in Module 2565 Option B1 Biomechanical Analysis of Human Movement.

5.1.1.2 Candidate's Learning Experience

Candidates should gain knowledge and understanding as a result of involvement in, and reflection on practical experiences. The tables in Section 5.1.1.5 provide examples of possible learning experiences.

Candidates should use their experiences gained through their performance of practical activities as a basis on which to improve their anatomical and physiological understanding. They can use this understanding to help in the overall process of improving their own practical performance and that of others.

5.1.1.3 Unit Assessment

Candidates knowledge and understanding of Module 2562 Section A is assessed in Unit 2562, Section A where a candidate answers two compulsory questions (2 x 15 marks). Each question is structured into a series of short sub-questions. Candidates may be required to interpret and to sketch graphs and diagrams. The use of technical language is expected.

5.1.1.4 Module 2562: Section A Content

The Skeletal System

General overview of the skeletal system to include the functions of the skeleton, the axial and appendicular skeleton, types of bone and cartilage. This is meant as an introductory section to the course and is **not** directly examined. Candidates should already have prior knowledge of the skeletal system.

Joints

The following joints, movement and muscles need to be covered:

- wrist: flexion and extension; wrist flexors and extensors;
- radio-ulnar: pronation and supination; pronator teres and supinator muscle;
- elbow: flexion and extension; biceps brachii and triceps brachii;
- shoulder: abduction, adduction, flexion, extension, rotation, horizontal flexion, horizontal extension, circumduction; deltoid, latissimus dorsi, pectoralis major, subscapularis, infraspinatus, teres major and teres minor; trapezius;
- spine (cartilaginous and gliding); Flexion, extension, lateral flexion; Rectus abdominus, external and internal oblique and the erector spinal group (sacrospinalis);
- hip: abduction, adduction, flexion, extension, rotation; illiopsoas, gluteus maximus, medius and minimus, adductor longus, brevis and magnus;

- knee: flexion and extension; biceps femoris, semi-membranosus and semi-tendinosus, rectus femoris, vastus lateralis, vastus intermedius and vastus medialis;
- ankle: dorsi flexion and plantar flexion; tibialis anterior, soleus and gastrocnemius.

Knowledge of each joint should include the following:

- joint type;
- the bones that articulate at the joint;
- the type and range of movement that can occur at the joint (features of the joint and function of the joint should be discussed here);
- the location and action of individual muscles surrounding the joint (a knowledge of origins and insertions is desirable but will not be examined);
- movement analysis of typical sporting actions associated with each joint. Candidates must use their own sporting experiences as a point of reference;
- identification of exercises used to improve the strength of the active muscle or group of muscles surrounding each joint utilised in the production of practical techniques;
- identification of different types of muscular contraction (concentric, eccentric and isometric) used in the performance of practical techniques;
- identification of a movement showing the function of a muscle as either an agonist, antagonist or fixator.

Knowledge of muscle structure and function should be restricted to the following:

- the structure and function of the different muscle fibre types (slow oxidative, fast oxidative, glycolytic and fast glycolytic);
- the effect of a warm up on skeletal muscle tissue in relation to speed and force of contraction.

Motion and Movement

This is an introduction to the basic concepts of Biomechanics. Interested candidates will be able to extend their knowledge in Module 2565 (A2).

A practical analysis of the candidate's own choice of activity should refer to the following:

- Newton's Laws of Motion;
- the types of motion produced (linear, angular or general);
- the effect of size of force, direction of the force and the position of application of force on a body;
- centre of mass; the effect of changes in the position of the centre of mass and the area of support when applied to practical techniques.

Candidates have the opportunity to integrate knowledge (already gained at Key Stage 4) of the cardiovascular and respiratory systems, with a more advanced level of study. This leads to a greater understanding of the anatomy and physiology of the body in relation to physical performance. Candidates' knowledge of the structure of the heart and lungs is assumed and will not be examined.

Resting Heart Rate

- The cardiac cycle (diastole and systole), linked to the conduction system of the heart (Sinuatrial node, Atrioventricular node, Bundle of His and Purkinje fibres). Definitions and resting values for stroke volume, heart rate and cardiac output.

Heart Rate Response to Exercise

- How changes in heart rate are regulated to include neural, hormonal and intrinsic factors. To appreciate the changes in heart rate, stroke volume and cardiac output during sub-maximal and maximal activity.

Control of Blood Supply (at rest and during exercise)

- Knowledge of the pulmonary and systemic circulatory networks and the factors linked with venous return. Distribution of cardiac output at rest and during exercise (the vascular shunt mechanism), and the role of the vasomotor centre. Detail should include the involvement of arterioles and pre-capillary sphincters. How carbon dioxide and oxygen are carried within the vascular system. The effects of a warm-up and cool-down period on the vascular system.

Respiration at Rest

- The mechanics of breathing and the respiratory muscle involved, to include diaphragm, external intercostals. Respiratory volumes at rest (definitions and values). Gaseous exchange at the lungs and tissue respiration. An awareness of partial pressure is required but candidates will **not** be expected to provide specific respiratory pressures.

Respiratory Response to Exercise

- Identification of changes in the mechanics of breathing to include additional muscles involved (sternocleidomastoid and pectoralis minor) and the active nature of expiration (internal intercostals and abdominal muscles). Subsequent changes in lung volumes with typical values for sub-maximal and maximal work. How changes are regulated by the respiratory centre (both neural and chemical control). Changes in gaseous exchange at the lungs and tissue respiration (increased diffusion gradient and accelerated dissociation of oxy-haemoglobin). The effect of altitude on the respiratory system.

5.1.1.5 Module 2562: Section A - Examples of Learning Experiences

The following tables highlight a progressive approach to the development of knowledge, understanding and application of the Section A content by the candidate.

Required Knowledge: The type and range of movement that can occur at the joint (feature of the joint and function of the joint should be discussed here).

Theoretical learning experience	Practical learning experience
Investigate the different types of movement possible at each joint. *(acquire)*	During the performance of practical techniques, recognise the types of movement produced. *(acquire)*
Measure and record the range of movement that can be produced at each joint. *(acquire)*	
Explain the differences in range and type of movement that can be produced, with reference to the joint type and prominent features. *(acquire, apply)*	During the performance of practical techniques, analyse the type and range of movement produced by another candidate within the group. *(acquire, apply)*
Compare individual results and give possible reasons for the variation in range of movement (requirements of preferred physical activity, eg level of flexibility, training effects, gender, etc). *(acquire, apply, evaluate)*	During the performance of practical techniques, appraise the type and range of movement produced by other candidates within the group. *(acquire, apply, evaluate)*
Discuss the importance of joint type and range of movement on the efficient production of practical techniques. *(acquire, apply, evaluate, appreciate)*	By using knowledge of the type and range of movement, show how a practical technique may be improved by increasing flexibility, for example inefficient front crawl arm action due to the need to improve shoulder joint flexibility. *(acquire, apply, evaluate, appreciate)*

Required Knowledge: Heart rate response to exercise

Theoretical learning experience	Practical learning experience
define the terms and investigate the relationship between heart rate, stroke volume and cardiac output. *(acquire)*	Measure heart rate (a) one hour before a competitive activity. (b) just prior to competing in an activity. (c) during a competitive activity. *(acquire)*
Measure heart rate in a prone position, standing and during sub-maximal exercise. Produce a graph of the data collected. Plot each result onto acetate to allow comparison. *(acquire, apply)*	Suggest reasons for the changes in heart rate response. *(acquire, apply)*
Explore the reasons why the increase in heart rate occurs from a prone position, to standing and during sub-maximal exercise. *(acquire, apply, evaluate)*	Predict what will happen to a student's heart rate when they perform a handstand. Test and evaluate your prediction.
Explain the difference in the range of heart rate recorded for the same activity by students within the same group. *(acquire, apply, evaluate)*	*(acquire, apply, evaluate)*
Discuss the long-term benefits of sub-maximal exercise on the efficiency of the heart. *(acquire, apply, evaluate, appreciate)*	What are the benefits of a warm-up activity in relation to the function of the heart? *(acquire, apply, evaluate, appreciate)*

Required Knowledge: Centre of mass (the effect of changes in the position of centre of mass and the area of support when applied to physical activity).

Theoretical learning experience	Practical learning experience
Identify the different effects of changes in centre of mass and base of support in various practical techniques. *(acquire)*	During the performance of physical techniques, recognise how a change in body position can change the position of the centre of mass. *(acquire)*
Using the forward roll as an example, explain the reasons why a body moves from a stable position to an unstable one. *(acquire, apply)*	Explain the importance of unstable positions in gymnastics, looking at the following: (a) dismounts (b) rotations, for example, cartwheels, rolls, h *(acquire, apply)*
Analyse the phases of a practical demonstration with a view to organising them on a stable/unstable continuum. *(acquire, apply, evaluate)*	Formulate up to three principles that can be used to describe a stable body in a sporting situation. *(acquire, apply, evaluate)*
Using your knowledge of the principles affecting stability, outline and the main coaching points which should be followed when an athlete adopts a defensive position in rugby or judo. *(acquire, apply, evaluate, appreciate)*	A novice gymnast finds it hard to gain sufficient rotation to initiate a forward roll. From a biomechanical standpoint, what coaching points could be employed to ensure success? *(acquire, apply, evaluate, appreciate)*

5.1.2 Module 2562: Section B - Acquiring and Performing Movement Skills

C3.1a, C3.2, C3.3

LP3.2

5.1.2.1 Introduction

Section B of Module 2562 helps candidates to develop an understanding of how they can most effectively acquire and improve their movement skills in a variety of physical activities. Candidates should have established some knowledge of psychological factors related to the acquisition and performance of movement skills during Key Stage 4. These specifications enable candidates to further their knowledge and understanding in terms of the developmental learning processes that occur during practice and performance.

Study focuses on the variety of movement skills exhibited in the performance environment; the development and control of these movement skills from early childhood experiences through to competitive performance situations; the contributions of an information processing approach to the performance of movement skills; and how teachers and/or coaches can maximise the effectiveness of practice sessions to improve performance. This area of study affords candidates the opportunity to re-evaluate their strategies for improving practical performance, and to apply new strategies in order to enhance their own performance. This application should consist of a synthesis of theory and practice as reflected in the aims and objectives of the specification, enabling candidates to appreciate the learning of movement patterns, their development into skills which are then available for selection, when appropriate, in performance situations. This provides a sound foundation prior to A2 Module 2565 Option B2: Psychology of Sport Performance, when candidates can investigate a variety of psychological concepts related to the preparation, participation and evaluation of the consequences of performance in physical activity and sport.

5.1.2.2 Candidate's Learning Experience

Candidates gain knowledge and understanding as a result of involvement in, and reflection on, practical experiences. The tables in Section 5.1.2.5 provide examples of possible learning experiences.

Candidates should use their experiences gained through their performance of practical activities as a basis on which to improve their psychological understanding. They can use this understanding to help in the overall process of improving their own performance and that of others.

5.1.2.3 Unit Assessment

Candidates' knowledge and understanding of Module 2562 Section B is assessed in Unit 2562, Section B, where a candidate answers two compulsory questions (2 x 15 marks). Each question is structured into a series of short sub-questions. Candidates may be required to interpret and to sketch graphs and diagrams. The use of technical language is expected.

5.1.2.4 Module 2562: Section B Content

Defining, Developing and Classifying Skills in Physical Education

The Characteristics of Skilful Performance

- Identify key characteristics (learned, efficiency, goal-directed, follows technical model but distinct from technique, fluent, aesthetic).

Definition and Characteristics of Motor Skills, Perceptual Skills and Cognitive Skills

Classification of Movement Skills

- Place and justify examples of movement skills on a variety of continua, to include: muscular involvement (gross – fine); environmental influence (open – closed); continuity (discrete – serial – continuous); pacing (externally paced – self paced); difficulty (simple - complex); organisation (low - high).
- The application of classification in the organisation and determination of practices. Knowledge of methods of manipulating skills to facilitate learning and to improve performance. Knowledge of part and whole practice methods (including progressive part and whole-part or whole). Awareness of links with transfer of learning.

Definition and Characteristics of Abilities

- Identify key characteristics (innate, underlying and enduring traits). Knowledge of gross motor abilities and psychomotor abilities.

Motor Skill Development

- Knowledge of the progression from motor abilities → fundamental motor skills (FMS) → sport-specific skills. Awareness of influences of early experiences and environmental exposure, with an understanding of key stages in motor skill development.

Information Processing during the Performance of Skills in Physical Education

Basic Models of Information Processing

- Understand a variety of models and their key components including: Welford (display, sensory information, sense organs, perceptual mechanism, effector mechanism, response and feedback); Whiting (display, receptor systems, perceptual mechanism, translatory mechanisms, output, feedback).

Memory

- Understand a basic model of the memory process. Awareness of the interaction of memory with the perceptual process (selective attention). Definition of short term sensory store (STSS), short term memory (STM) and long term memory (LTM). Knowledge of strategies to improve the mechanisms of information retention and retrieval.

Reaction Time

- Definitions of reaction time (RT), movement time and response time. Awareness of the importance of a short reaction time. Identify the factors affecting response time in practical activities. Knowledge of the psychological refractory period, choice reaction time (Hick's Law), and the role of anticipation.

Feedback

- Knowledge of the importance of feedback. Identify the functions of feedback. Identify different types of feedback. To include: intrinsic feedback and extrinsic feedback; positive feedback and negative feedback; knowledge of results and knowledge of performance.

Candidates should analyse the information processing requirements of the movement skills experienced in their practical activity experience.

Motor Control of Skills in Physical Education

Motor and Executive Programmes

- Definition as a generalised series of movements and knowledge of the creation of programmes in long term memory. Awareness of the major programmes/subroutines of a number of movement skills.

Motor Control

- Knowledge of open loop control and closed loop control.

Schema Theory

- Understanding as a way of modifying the motor programme by use of schemes or rules of information. Identify sources of information, namely recall schema and recognition schema to include: knowledge of initial conditions; knowledge of response specification; sensory consequences; movement outcomes.

Candidates should analyse how movement skills are controlled and co-ordinated. A number of motor programmes and the relevant sub-routines should be identified from the candidates' practical activity experience. An analysis of the factors affecting the development of schema for movement skills should also be undertaken.

Learning Skills in Physical Education

Motivation and Arousal

- Definition of motivation and knowledge of Drive Reduction Theory (Hull). Knowledge of intrinsic and extrinsic methods of motivation. Basic understanding of arousal. Knowledge and application of Drive Theory (Hull, Spence) and Inverted U Theory (Yerkes and Dodson). Justify the effective use of motivational strategies.

Theories Related to the Learning of Movement Skills

- Description and application of these theories. associationalist/connectionist theories (operant conditioning); cognitive theories related to the work of Gestaltists (wholeness/insight learning); social/observational learning theories, including knowledge of Bandura's model (demonstration, attention, retention, motor reproduction, matching performance), and the factors which affect modelling.

Reinforcement

- Definition of positive reinforcement, negative reinforcement and punishment. Knowledge of methods of strengthening the stimulus-response (S-R) bond through repetition, satisfaction/annoyance (emotional intensity) and through physical and mental preparedness, for example, (Thorndike). Justify the appropriate use of reinforcement.

Phases of Movement Skill Learning

- Identify cognitive, associative and autonomous phases of learning (Fitts and Posner). Knowledge of the characteristics of these phases and awareness of the practical implications for improving the candidate's learning and performance.

- Characteristics of these phases and awareness of the importance of guidance in improving the candidates' learning and performance. This should include visual (early phases of learning), verbal (later phases of learning); manual and mechanical (development of kinaesthetic awareness together with knowledge of safety issues). Justification of the effective use and limitations of these types of guidance.

Transfer of Learning

- Identify different types of transfer that occur in practical performance including: positive transfer (and knowledge of ways of optimising its effect); negative transfer (and knowledge of ways of limiting its effect); proactive transfer; retroactive transfer; bilateral transfer. Awareness of links with Schema Theory. Awareness of the importance of the practice method in the transfer of learning.

Practice Conditions

- Knowledge of setting up of practice/training sessions to maximise effectiveness. Justify the appropriate use of massed and distributed practice methods (for different ability levels and for different activities). Awareness of the importance of variability of practice. Appraisal of the role of mental practice rehearsal (vs. physical practice rehearsal).

Candidates should analyse the methods by which performers can most effectively learn movement skills.

5.1.2.5 Module 2562: Section B - Examples of Learning Experiences

The following tables highlight a progressive approach to the development of knowledge, understanding and application of the Section B content by the candidate.

Required Knowledge: The classification of movement skills

Theoretical Learning Experience	Practical Learning Experience
Recall the descriptors used to classify a variety of movement skills. *(acquire)*	During the performance of practical activities, recognise and classify the types of movement skills performed. *(acquire)*
Explain how and why we classify movement skills via the use of continua. *(acquire, apply)*	During the performance of practical activities, analyse and classify on continua the movement skills produced by another performer. *(acquire, apply)*
Select a variety of movement skills and classify them on a single continuum (for example. open-closed), justifying their placement relative to one another. *(acquire, apply, evaluate)*	Perform techniques from one practical activity that could be classified ranging from one end of a single continuum to the other. *(acquire, apply, evaluate)*
Discuss the importance of the awareness of the classification continua for the effective teaching and learning of movement skills. *(acquire, apply, evaluate, appreciate)*	By using knowledge of classification, devise in a practical lesson progressively more advanced practices for the performance of movement skills. *(acquire, apply, evaluate, appreciate)*

Required Knowledge: The importance of reaction time and response time

Theoretical Learning Experience	Practical Learning Experience
Define the terms reaction time, movement time and response time. *(acquire)*	Identify and perform practical activities in which a short reaction time is important. *(acquire)*
Describe how to assess reaction time/ response time in a number of different practical activities. *(acquire, apply)*	Assess reaction time/response time in a variety of different practical activities for all the members of your class. *(acquire, apply)*
Explain the factors that can affect response time, describing both the positive and the negative effects. *(acquire, apply, evaluate)*	Compare the results from the reaction time/ response time tests. Explain the results that you have gathered. *(acquire, apply, evaluate)*
Discuss the importance of having both a short reaction time and a short response time for the efficient performance of practical techniques. *(acquire, apply, evaluate, appreciate)*	By using knowledge of reaction time and its associated concepts, devise strategies to enhance performance in a practical activity of your choice. *(acquire, apply, evaluate, appreciate)*

5.2 Module 2563: Contemporary Studies in Physical Education

C3.1a, C3.1b, C3.2, C3.3

WO3.1

5.2.1 Introduction

Contemporary Studies is a core AS module which builds on knowledge gained in Key Stage 4 and which requires an application of the experience of physical performance by individual candidates. This requires links being made with knowledge and understanding of physical education as a field of study in its own right and of its role in society. It encompasses the three dimensions of Physical Education: as an intrinsically valuable physical experience; a multi-disciplinary field of study and as a vehicle for the promotion of desired patterns of behaviour. It is directly concerned with philosophical and sociological investigation, and while it is a reflection of present day institutional physical education and sport within the social setting of the United Kingdom, there are opportunities to reflect upon historical causation and global perspectives. Candidates study major issues such as excellence in sport as well as sub-cultural issues such as 'women and sport', and 'deviance in sport', with particular reference to their own experiences of physical performance. They also gain an awareness and appreciation of the environment through the study of Outdoor Education and Outdoor Recreation.

The analysis moves from candidate awareness of the skills and activity/experience of personal performance, through to the values which arise from this experiential and educational learning situation, and enacted in practical situations. The outcome should enhance the knowledge and understanding of the contemporary scene and demonstrate a developmental learning process by individual candidates. This application should consist of a synthesis of theory and practice as reflected in the aims and objectives of the specification, together with exemplars to illustrate links between physical performance and theoretical study. This module is a sound basis for further study in A2 Module 2565: Historical Studies in Physical Education (Option A1) and/or Comparative Studies in Physical Education (Option A2).

5.2.2 Unit Assessment

Candidate knowledge and understanding of Module 2563 is assessed in Unit 2563, where a candidate answers two compulsory questions (2 x 21 + 3 marks for quality of written communication). Candidates may be required to respond to and interpret visual material, including photographs and diagrams.

5.2.3 Candidate's Learning Experience

Candidates should gain knowledge and understanding as a result of involvement in, and reflection on practical experiences. The tables in Section 5.2.5 provide examples of possible learning experiences.

Throughout Module 2563 candidates should use the information to help improve their own practical performance and that of others.

5.2.4 Module Content

Defining the Field of Study

Categories of Physical Performance including play, physical recreation, sport and physical education with the associated sub-categories of outdoor recreation and outdoor education. Recognition of the broader concept of leisure and an awareness of the continuum from mass participation to sporting excellence.

5.2.4.1 Physical Education in Schools

(i) Concepts

Towards a Concept of Play

- Characteristics of play: freedom and time, space and spontaneity, enjoyment orientation, intrinsic values, and non-serious non-productive assumptions. Child at play increasing mastery over reality. Adult at play: escape from reality, stress release. Indirect educative values: physical, social, cognitive, moral, emotional and environmental learning.

Physical and Outdoor Education

- Definitions and characteristics: knowledge and values; physical values of health and motor skill; preparation for active leisure; personal values of self-realisation and socialisation; qualitative influence on lifestyle.
- Dimensions of physical activity in school, set P.E. curriculum; extra-curricular sport and recreational opportunities.
- Outdoor and adventurous education as a part of physical education. Definitions and characteristics of the outdoor and adventurous experience, including risk and safety.

(ii) Issue Analysis

Sport in Schools

- A review of two current initiatives and strategies in school sport: TOPSPORT (Dragon Sport) in the primary sector and Specialist Sports Colleges in the secondary sector. To include the work of the Youth Sport Trust and Sports Development Officers. Advantages and disadvantages of these initiatives.

5.2.4.2 Sport in Society

(i) Concepts

Physical and Outdoor Recreation

- Interpreting physical recreation in a leisure and cultural framework. Analysis of characteristics and their links with play using the candidate's experience of physical recreation.
- Concepts associated with outdoor recreation: appreciation of the natural environment; adventure, risk and safety for the individual and respect for the countryside.

Towards a Concept of Sport

- Candidates' interpretations of sport and sporting attitudes from their own experiences. Definitions and characteristics of sport including such values as prowess, endeavour and fair play in the context of amateurism and professionalism.
- Defining the twin concepts of Sport for All and elite sport using the Performance Pyramid as an effective framework.

Role of the Coach

- An analysis of the various relationships between the coach and the performer (for example, as motivator, disciplinarian, friend, publicity agent etc), with particular reference to the roles of instructor, trainer and educator.

(ii) Sport and Culture

Present Day Local/Ethnic, National and Global Sport

- Ethnic Sports: Characteristics of traditional sports and festivals in Britain eg. festival, local, traditional, isolated, social with reasons for their survival eg. Tourism and retention of ethnic identity. Examples are the Lakeland and Highland Games or any traditional local festival.
- The transition from Tribal to Emergent status in the context of sport.

Tribal societies: including natural, functional, ritual, ceremonial, survival and community characteristics. Analysis of effects of pre-colonialism, colonialism and post colonialism on the life and physical activities of tribal cultures such as the Samoans.

The positive and negative effects of colonialism (eg schools) on Emergent societies, including nation building, integration, health and social control, disproportionate funding, with initial focus on a specific sport, developing into a broader programme of sponsored sport leading to increased integration. The significance of initial elitism, role models, appeasement and international recognition. Examples from such countries as Kenya.

- Characteristics of sport and commercialism as epitomised in the ' American Dream'; and sport and politics, as epitomised in the notion of a 'Shop Window'.

(iii) Issue Analysis

Policy, Provision and Administration of Sport and the Pursuit of Excellence

- Function of UK Sport and home country organisations (for example Sport England) in the pursuit of excellence. The role and effectiveness of National Governing Bodies and supportive agencies (for example sportscoach UK); professionalised coaching policies and their level of enactment.
- Problems associated with elitism and discrimination: disproportionate and inadequate funding; financial aid and the National Lottery; work of Sport Aid; analysis of policy and new initiatives and their enactment, including The United Kingdom Sports Institute (UKSI) and devolved National Institutes of Sport; sponsorship for promising young performers; funding for capital projects; improvement in coaching policies.
- Performance, professionalism and business; links with mass media and sponsorship; financial support at voluntary, private and public levels.
- Ethics and high level sport: amateur and professional attitudes; win-ethic analysis; violence among players and spectators; international pressures and modern Olympism; corruption in high level sport; performance enhancing drugs and random testing. In each case, identify, analyse and theoretically resolve the issue.

Sport and Mass Participation

- Functions of UK Sport and work of home country organisations in increasing participation (for example, the More People, More Places, More medals initiative and the Sport For All campaigns of the former Sports Council). Socio-economic and other factors limiting implementation (for example, school, friends, family, funding, stereotyping, age, gender etc); opportunity, provision and esteem. The work of special interest groups such as Women's Sports Foundation and Disability Sport England. Sport For All provision in a mixed economy.
- The role of the media: informing, educating, entertaining and advertising, with examples of each.

Physical Education, Sport and Sub-Cultures

Initial candidate experience and interpretation of discrimination at different levels. Social class and wealth discrimination, gender, ethnic minorities, disability and the treatment of the young and elderly through an analysis of opportunity, provision and esteem.

5.2.5 Module 2563 - Examples of Learning Experiences

The following tables highlight a progressive approach to the development of knowledge, understanding and application of the module content by the candidate.

Required Knowledge: An understanding of the issue of 'sport and the pursuit of excellence' in the UK

Theoretical learning experience	Practical learning experience
Identify the meaning(s) of the term 'excellence'. *(acquire)*	As a result of experience in a variety of physical performance activities, recognise that excellence can be interpreted in more than one way. *(acquire)*
Identify constraints regarding the pursuit of excellence. *(acquire, apply)*	Identify the national governing body of each physical performance activity and examine its policy for promoting excellence. *(acquire, apply)*
Critically evaluate current provision for elite sports performers in the UK. *(acquire, apply, evaluate)*	Reflect upon personal practical experiences in school/college and identify opportunities and constraints that might effect the potential for achieving excellence. *(acquire, apply, evaluate)*
Hypothesize with regard to whether increased sporting excellence in the UK could have aesthetic, moral, social and/or health outcomes. *(acquire, apply, evaluate, appreciate)*	With reference to personal practical experiences, discuss the extent to which aesthetic, moral, social and/or health values have been experienced. *(acquire, apply, evaluate, appreciate)*

Required Knowledge: An understanding and appreciation of the various roles that may be adopted and/or required by Physical Education teachers and sports coaches

Theoretical learning experience	Practical learning experience
Identify the various roles of the Physical Education teacher and the sports coach. *(acquire)*	During an individual activity lesson, for example, swimming, recognise the various roles adopted by the teacher. *(acquire)*
Explain two different roles, for example, scientist and student, which the coach might need to adopt in order to be effective. *(acquire, apply)*	Analyse and appraise a swimming lesson to identify why specific roles may have been adopted by the teacher. *(acquire, apply)*
Justify the need for a variety of roles to be adopted by an effective teacher/coach. *(acquire, apply, evaluate)*	By using knowledge gained from personal practical experience, compare the variety and balance of roles adopted by the Physical Education teacher: (a) during lesson time (b) coaching representative teams *(acquire, apply, evaluate)*
In role-play as a teacher, justify your refusal to accept gamesmanship from your pupils. *(acquire, apply, evaluate, appreciate)*	Compare the variety and balance of roles adopted by the coach in each situation. *(acquire, apply, evaluate, appreciate)*

Required Knowledge: An understanding of the concept of sport, and an appreciation of its similarities to and differences from other related concepts

Theoretical learning experience	Practical learning experience
Using appropriate video stimuli, identify and record the characteristics of sport and investigate the level of organisation in sporting activities. *(acquire)*	Arising from the performance of a game, identify characteristics of sport, for example, competition, rules, team play. *(acquire)*
Establish how many sporting characteristics exist in a selected range of physical activities. *(acquire, apply)*	Identify 'sporting' elements within practical lessons, for example, competition, skill, commitment. *(acquire, apply)*
Observe, compare and analyse a range of physical activities and justify their position in a rank order, based on evidence of sporting characteristics. *(acquire, apply, evaluate)*	Perform and appraise physical performance activities and justify the extent to which each may be classed as sporting in nature. *(acquire, apply, evaluate, appreciate)*
Discuss the main values associated with the sporting experience. *(acquire, apply, evaluate, appreciate)*	Reflect upon physical performance experiences as a vehicle for the promotion of various sets of values, for example, physical, emotional, social. *(acquire, apply, evaluate, appreciate)*

5.3 Module 2564: Performance and its Improvement through Critical Analysis

C3.1b

WO3.1 LP3.3 PS3.1 PS3.3;

5.3.1 Introduction

Physical Education hinges on physical performance and its significance is acknowledged within Arnold's first dimension when the intrinsic value of Physical Education as an experience is recognised. This module focuses on the acquisition and development of physical skills, recognising that they can be performed in isolation, but usually in combination with others. Skills need to be practised in order to be performed as specific movements or activities which are then repeated consistently, with precision. This module links the physical activities with both Key Stage 4 where pupils 'develop and apply advanced skills and techniques' and to GCSE Physical Education where candidates 'perform increasingly advanced techniques' and apply them in increasingly demanding situations.

Once specific movements or actions can be repeated consistently it enables candidates to adapt them and ultimately perform them autonomously to meet the needs of a variety of conditions and environments within the context of Module 2567.

Candidates are able to draw on and apply subject matter from Modules 2562 and 2563 which is appropriate and relevant to the selected activities pursued. This application should consist of a synthesis of theory and practice as reflected in the aims and objectives of the specification together with exemplars to illustrate links between physical performance and theoretical study.

5.3.2 Candidate's Learning Experience

Candidates gain knowledge and understanding as a result of involvement in, and reflection on, practical experiences. These experiences should be recorded in the candidate's Personal Performance Portfolio leading to a greater awareness of the interaction between the theory and practice of Physical Education.

Throughout this module candidates should add to and update their Personal Performance Portfolio, with the ultimate aim of using this information to help improve their own practical performance and that of others.

5.3.3 Unit Assessment

The candidate's practical performance, knowledge and understanding developed in Module 2564 is assessed in Unit 2564. The candidate is assessed in the selection and application of acquired and developed skills in two activities, together with a Personal Performance Portfolio. The two activities and the Personal Performance Portfolio are each assessed out of 30 marks. The candidate must offer two activities from different activity profiles.

Appendix B gives further details about coursework guidelines.

5.3.4 Module Content

The candidate must follow a minimum of **two** activities from **different** activity profiles.

Ten Activity Profiles

1. Athletic Activities	Track and Field athletics
2. Combat Activities	Judo
3. Dance Activities	Dance
Game Activities **4. Invasion Games**	Association Football Basketball Field Hockey Gaelic Football Hurling Netball Rugby League Rugby Union
5. Net/Wall Games	Badminton Squash Tennis Volleyball
6. Striking/Fielding Games	Cricket
7. Target Games	Golf
8. Gymnastic Activities	Gymnastics Trampolining
9. Outdoor and Adventurous Activities	Canoeing Mountain Walking Sailing Skiing
10. Swimming Activities	Competitive Swimming

Additional Activities

A range of additional activities have been approved in which candidates can be assessed for this coursework unit (2564). The list of additional activities together with assessment requirements and criteria can be found on OCR's website (www.ocr.org.uk).

No new additional activities will be added.

Each of the practical activities offered to candidates should be carried out in accordance with the recommendations in 'Safe Practice in Physical Education' (BAALPE 2004).

The Selection and Application of Acquired and Developed Skills

Candidates are assessed on their ability to select and perform patterned specific movements consistently in an applied conditioned skill environment. For each physical activity, acquired and developed skills have clearly identified phases in the Coursework Guidelines. There may be more than one acceptable model and teachers should refer to the appropriate governing body technical publication for guidance.

Acquired and developed skills are assessed within a conditioned competitive context which ensures that candidates are able to select the appropriate skill whilst also performing them repetitively and consistently as specific movements and adapting and adjusting them to match a variety of situations. This context is determined by the nature of the activity and the assessment context is influenced by the activity's position on the open/closed continuum.

The conditioned competitive situation aims to improve the candidate's performance. Centres must devise their own conditioned competitive situations which place emphasis on the acquired and developed skills in question and pressurise candidates by utilising features such as restricting numbers of players, space and range of skills. These conditioned competitive situations identify the individual candidate's level of autonomy whilst providing a range of contexts in which ability differentials will be displayed.

The nature of the conditioned competitive situations devised by Centres should:

- focus on the range of applied and acquired skills to be assessed;
- enable candidates to be placed in a rank order in terms of ability;
- be structured to allow candidates to develop tactical awareness;
- be realistic situations in which acquired and developed skills are assessed whilst applying the normal rules/regulations and codes of practice.

Personal Performance Portfolio

In addition to the practical work in Module 2564 candidates produce a Personal Performance Portfolio which is formally assessed in Unit 2564. The portfolio is a working document which is unique to each candidate and reflects their personal experiences and development. It should ultimately give the candidate an understanding of the factors that interact and affect performance, providing them with the necessary skills to develop strategies for improvement.

The Personal Performance Portfolio should focus on one practical activity which should be on one of the candidate's two assessed activities. It **must** however be on an activity that is on the list of activities/additional activities approved by OCR.

Centres **must** refer to the detailed guidance and support for the Personal Performance Portfolio which is given in the Teacher Support: Coursework Guidance Booklet 2nd Edition and update.

These are available from OCR's Publications Department.

The candidate should consider three main aspects of performance, namely Physiological, Psychological and Socio-cultural aspects. This provides the candidate with the knowledge and understanding to identify the strengths and weaknesses in their own performance and to plan a strategy for improvement. This strategy for improvement should then be implemented and the changes in performance should be recorded. In conclusion the candidate should offer an explanation to account for any changes in their performance. In the majority of cases the candidates' performance may improve; however it is possible that for some candidates their performance may remain constant or even deteriorate. In these instances the explanation should clearly outline reasons for the outcome. It is the intention that the candidate draws from experiences from all three AS modules and any other relevant experience.

5.3.5 Personal Performance Portfolio Structure

5.3.5.1 Section A:

The theoretical concepts identified in this section **must** be included in the portfolio and applied to the chosen practical activity.

i. Application of Anatomical and Physiological Knowledge to Improve Performance

1 The identification and justification of the four components of physical fitness (strength, suppleness, stamina and speed) important in the chosen activity.

2 Give a detailed description of the personal warm up and cool down for the chosen activity. This should include an explanation of its effect on the

i. speed and force of muscular contraction

ii. vascular system.

ii. Acquiring and Performing Movement Skills

1 The major coaching points of one named essential skill in the chosen activity.

2 Progressive practices for developing the essential skill identified in 1 of the chosen activity.

The identification of coaching points for an identified skill will provide the blueprint for the candidate to undertake further research when they analyse their own strengths and weaknesses. Access to the coaching points of skills will enable the candidate to accurately assess the skills they use in their performance.

The identification of suitable progressive practices for the identified skill provides the blueprint for the candidate to develop a strategy for the enhancement of skills which they identify as having weaknesses. It should be noted that the nature of the progressive practices identified should permit performers of all standards access to practices. The progressive practices should allow the skill to be developed from its simplest closed form to its normal competitive environment.

The candidate should be encouraged to develop their own warm up and cool down routines specifically designed for their own chosen activity.

iii. Contemporary Studies in Physical Education

1 Information on the governing/organising body of their chosen activity. This should include:

- name, address, phone and website address
- regional structure
- coaching qualification awards
- promotional/grass root schemes to develop particiaption
- regional and national competitions
- doping control and testing.

[Candidates using website information should adapt it to each of the above]

2 The candidate's assessment of their developmental placement on the performance pyramid of their chosen activity, including a discussion on the ways in which the governing/organising body has helped them progress.

5.3.5.2 Section B:

The second part of the portfolio will focus on the **chosen** practical activity, which must be identified. The activity should be one of the two in which the candidate is going to be assessed for the AS Physical Education coursework.

i. Evaluation of Chosen Activity – Identification of Strengths and Weaknesses

The evaluation should identify initially the strengths of the candidate's performance before focussing on faults and weaknesses. It is possible that the candidate may well decide within their action plan to work on making the strengths of their performance even stronger.

Observing and evaluating their performance is something that the candidate needs to practise and they can do this by looking at others performing their activity and evaluating their performances. The candidate can be helped by their teacher/coach with this.

When the candidate observes a performance they will need to be focussed on what they are actually looking at. They should try to focus on one aspect at a time. They should look at:

- skills/techniques;
- strategies/tactics;
- fitness.

They will need to make notes – do not assume that they will remember points that they identify. It is easier to observe a video of the performance because they can see it as many times as they wish.

The candidate will need to:

- have a clear picture in their mind as to what it is they are actually comparing the aspect of the performance they are observing, i.e. what is the perfect performance or what do they expect the performer to achieve? They may have set themselves a target to achieve and then ask whether or not they achieved it?
- be positive and look for the strengths in their performance to start with - to identify the aspects of their performance that are good, to ask themselves why these are good?
- maybe breakdown the aspect of the performance they are observing into phases. For instance, the Coursework Guidelines booklet identifies phases for skills/techniques.

The candidate is going to concentrate on their performance in their **chosen** activity. They will need some detailed knowledge of this activity and they can get this from:

- information given by teacher/coach when they have participated in the activity;
- the information they have collected in the section A of the Personal Performance Portfolio;
- Coaching manuals for the activity.

The candidate should also seek help and advice from their teacher/coach.

The candidate has already identified, in Section A, the coaching points of the skills/techniques, as well as the progressive practices to develop those skills. They need also to be aware of the fundamental tactics and strategies used in the activity. Using this information the candidate needs to assess their strengths and weaknesses. Primarily the candidate should do this, but they may also seek opinions from their teacher/coach, team-mates and peers. A very useful tool would be to get someone to video their performance. Candidates should identify and explain what methods they have used to reach their conclusion.

ii. Action Planning

Creating the Action Plan.

As a result of their evaluation of the strengths and weaknesses of their performance, the candidate now needs to design one or more action plan aimed at improving their performance in general and specific aspects in particular. They may decide to create a series of simple action plans each with a short-term goals/objective or a more complex action plan with long-term goal/objectives.

Whichever method they decide to use, the action plan should identify:

- Clear, specific, realistic goals that are achievable;
- The detailed timescale in which they are going to achieve the goals;
- the method by which they are going to achieve the goals;
- the method by which they are going to evaluate whether or not they have achieved their goals/objectives.

The candidate should also keep a record of how they:

- implement their action plan;
- implement their evaluative method.

The time-scale of the action plan will be determined by the goals it is intended to achieve.

iii. Review

The candidate should comment on the effectiveness of their action plan. They should identify whether or not the action plan was successful identifying any improvements made. Where no improvement has been made suggestions as to why this is, should be made as well as improvements to the action plan for future use.

Bibliography

All sources of information and references should be listed using an appropriate method.

5.4 Module 2565: Physical Education: Historical, Comparative, Biomechanical and Sport Psychology options

5.4.1 Introduction

This Module has four options:

Option A1: Historical Studies in Physical Education;

Option A2: Comparative Studies in Physical Education.

Option B1: Biomechanical Analysis of Human Movement;

Option B2: Psychology of Sport Performance.

Candidates study two of the four possible options, but must study at least one of Options A1 and A2. Allowable combinations of options, therefore, are:

either A1 and A2

or A1 and B1

or A1 and B2

or A2 and B1

or A2 and B2.

The inclusion of two optional studies is based on the importance of candidates being able to study their preferences in more depth. This principle facilitates candidate choice; allows study in more depth, given the time constraint of timetabling; helps candidates prepare for the more specific requirements of higher education undergraduate courses; and helps smaller schools cope with this multi-disciplinary subject more effectively.

5.4.2 Candidate's Learning Experience

Candidates gain knowledge and understanding as a result of involvement in, and a reflection on, practical experiences. These experiences are recorded during A2, building an even greater awareness of the interaction between the theory and practice of Physical Education explored in the AS. This process also helps the candidate to prepare for the synoptic assessment in Unit 2566. The Personal Performance Portfolio is **not** assessed at A2. The tables in Sections 5.4.4.5, 5.4.5.5, 5.4.6.5 and 5.4.7.5 provide examples of possible learning experiences.

5.4.3 Unit Assessment

Candidate's knowledge and understanding of Module 2565 is assessed in Unit 2565 where a candidate answers two questions, at least one question being from Section A. Candidates may be required to interpret photographs and frameworks. Candidates are awarded marks for the Quality of Written Communication in this section.

5.4.4 Module 2565: Option A1 - Historical Studies in Physical Education

C3.1a, C3.2

5.4.4.1 Introduction

Historical study is an approach which involves an analysis of the knowledge and understanding of physical education as a field of study and its application to 'intelligent' physical performance on a specified time scale. It is concerned with those aspects of our past which have influenced the present scene. This means a focus on the recent past and demands a candidate's awareness of the links between past and present.

The intention is to build on the Contemporary Studies in Physical Education Module in AS (Module 2563), where candidates are made aware of the influence of the past on the contemporary study of physical education in the United Kingdom.

By looking at history in this dynamic way, the three dimensions identified in the Rationale (see pages 1 and 2) can be fully explored in terms of the experience of popular and rational recreation; the use institutions have made of physical education and sport as an educational and social control vehicle; and the value of being able to access and apply historical techniques and evidence to understand the present better.

The analysis moves from the simplicity of early nineteenth century popular recreation, to the emergence of a public school ethic of athleticism, which stimulated the adoption of a sophisticated interpretation of rational recreation to match an emerging industrialised society. While there is a developmental trend from popular to rational, elements and influences of all these institutional and social situations can be witnessed today. In addition, as a society with a past bound by social class and gender inequalities, it also provides an opportunity to look at the development of institutionalised physical education for the working classes, as well as their sports.

This leads to an increased understanding of the many contemporary issues in this field of study, insofar that many of the causes can be traced to changes in the make-up of society over the last 150 years. This application consists of a synthesis of theory and practice as reflected in the aims and objectives of the specification, together with exemplars to illustrate links between this historical dimension, contemporary studies and physical performance.

5.4.4.2 Candidate's Learning Experience

Candidates gain knowledge and understanding as a result of involvement in, and a reflection on, practical experiences. These experiences can be recorded during A2, building an even greater awareness of the interaction between the theory and practice of Physical Education explored in the AS. This process could also help the candidate to prepare for the synoptic assessment in Unit 2566 (Section B) and in Unit 2567. The tables in Section 5.4.4.5 provide examples of possible learning experiences.

5.4.4.3 Unit Assessment

Candidate's knowledge and understanding of Module 2565 Option A1 is assessed in Unit 2565 Section A, where a candidate who has chosen this option, answers one compulsory question (21 marks). The question is structured into a series of short sub-questions. Candidates may be required to respond to and interpret visual material including photographs and diagrams.

5.4.4.4 Option Content

The Development of Popular Recreation in the United Kingdom

- An outline of the types and functional links in sports and pastimes (for example, combats and militarism) with practical role play of some combats. Characteristics of popular recreation (for example, occasional wagering, etc) with practical insight into some of these activities. Reference should be made by candidates to identify these characteristics in their own physical activities.
- Cultural factors which influenced the development and relevant popularity of certain activities. These should include fixed social class constraints; limited communications and localisation; changing attitude of the church; occupations and free time, limited literacy and publicity. Candidates should relate to the present day social class relationship in sport, the major differences in terms of social characteristics and communications and, therefore, their impact on sport in this country.
- The development of sports and pastimes in river towns. The development of various activities, with particular reference to bathing and its links with recreation, survival, health and the initial development of competitive swimming. Candidates should make reference to changes in the contemporary waterfront scene today.

The Development of Sports Festivals

- The development of community activities, such as rural sports and festivals, with particular reference to commercial fairs and wakes, pedestrianism and the emergence of athletics. Candidates should be encouraged to collect evidence on the traditional festivals in their area and comment on the form they take today, if they still exist.

Games in Popular Recreation

- The emergence of various types of game in the United Kingdom, with particular reference to mob football, cricket and real tennis. Candidates should be encouraged to comment on the continued existence of village cricket and changes which have occurred in modern football and tennis.

19th Century Public School Developments of Athleticism

- The characteristics of boys' boarding schools with particular reference to the gentry schools identified by the Clarendon Commission, for example, fee-paying, non-local, etc. Attempts should be made to visit one of these schools or read about it as a modern institution.

Technical and Social Developments: stage one

- The emergence of a boys' sporting culture arising from the experiences they brought into the school. Reference should be made to the extract on Bathing and Fishing in *Tom Brown's School Days*. Candidates should link elements they bring into the school from their family, peer group and community today.

Technical and Social Developments: stage two

- The influence of liberal headmasters, such as Dr Thomas Arnold of Rugby School; links between the development of Christian gentlemen and manliness, the responsibility given to the Sixth Form and the emergence of the playground as a central feature of school life. Reference should be made to the extract on the Football Match and The Fight in *Tom Brown's School Days*. Candidates should compare the responsibilities those boys had compared with their own school today.

Technical and Social Developments: stage three

- The emergence of a full expression of public school athleticism, arising from Oxbridge 'blues' returning to their schools; the 'melting pot' influence of the schools and universities on the emergence of rational sport. Reference should be made to the extract on Cricket from *Tom Brown's School Days*. Explanations for the delay in the development of athleticism in girls' public and private schools. Candidates should compare the dominant values given to athleticism at that time with those they have now.

Rational Recreation in an Urban Industrial Society

- A recognition of the new set of characteristics of rationalised sport as they contrast with the older popular characteristics, for example, respectability, regularity, codification, etc. Candidates should be able to identify additional changes which have occurred over the last few years.

Urban-Industrial Factors which influenced the development of Rational Sport

- The influence of the agrarian, industrial and urban revolutions on sport with particular reference to the emergence of an urban middle class; gender variables and female participation in sport; changes in work conditions; free time and the Saturday half day for the industrial working classes; and changes in opportunity for sport and holidays resulting from the development of the railways.

The Rationalisation of Bathing and Swimming in Post-Industrial Communities

- Review of changes from popular development to rational with particular reference to the significance of health and survival; the organisation of amateur swimming; and the provision for indoor public and private swimming baths. Candidates should consider reasons why natural facilities are seldom used for swimming today.

The Emergence of Track and Field Athletics as a new form of Urban Festival

- Review of changes from the rural festivals and wakes to the amateur athletic sports meetings. The emergence of amateur athletics and opportunities for working class involvement. A summary of the Modern Olympic Movement, up to *Chariots of Fire* and the 1928 Olympics. Candidates should be aware of the changes in the scope and status of their own assessed activities in the context of opportunity and provision today.

The Rationalisation of Games

- Changes which occurred in the concept and organisation of football, cricket and tennis as rational games. This includes the growth of amateur and professional aspects; the significance of the crowd in urban communities; the place of tennis in the emancipation of female sport; and the development of international competition and administration. Candidates should be able to explain the changes which have occurred in one or other of these games since the turn of the 19th century.

The Development of Drill, Physical Training and Physical Education in Elementary Schools

- Designed to set the scene through drill and physical training, links should be made with drill and instruction in the modern context, such as regulations in dangerous situations. Physical training, with its focus on health, should be linked with the modern developments in health related activity and adaptive physical education.

- An outline of elementary schools and drill at the end of the 19th century and the impact of the Boer War on the establishment of the 1902 Model Course and Early Syllabuses of Physical Training. Candidate role play of these approaches should lead to a discussion on the extent to which militarism and physical training have been gradually replaced by educational values in modern physical education and the reasons why this has happened.

Later Syllabuses and the Transition from PT to Physical Education

- Reaction to the 1914-1918 War and the adoption of the 1919 and 1933 Syllabuses, particularly the introduction of play for under 7s; and gymnastic skills and group work, as they concern objectives, content and methodology. Candidates should be aware of the changes which occurred in the 1933 syllabus which marked the emergence of the modern concept of physical education in a society undergoing major economic problems, with the Modern Olympic Movement emerging as a major expression of international sport. Candidate role play of the 1933 Syllabus should help them to understand the transition to modern concepts of physical education.

Physical Education and Modern Trends

- The adoption of the publications, *Moving and Growing* and *Planning the Programme* in the 1950s: including, new objectives, content and methodology; the expansion of facilities, curriculum broadening and outdoor education development. Debates should include the extent to which the idealism of this post war period compared with the emphasis on accountability in school physical education today, together with the new values which are seen to be important in the climate of a market economy and changing pressures of international sport.

5.4.4.5 Module 2565: Option A1 - Examples of Learning Experiences

The following tables highlight a progressive approach to the development of knowledge, understanding and application of the option content by the candidate.

Required Knowledge: Using the development of sport as an example

Theoretical Learning Experience	Practical Learning Experience
What popular recreation characteristics dominated mob games? *(acquire)*	What behaviour problems do you often see at a professional soccer match? *(acquire)*
What social factors delayed the national development of modern sport? *(acquire, apply)*	What financial problems have you met in pursuing your chosen physical activity? *(acquire, apply)*
Appraise the transition to rational sport in the context of attitudes to sportsmanship. *(acquire, apply, evaluate)*	How would you assess the place of fair play in your physical activity? *(acquire, apply, evaluate)*
Compare the opportunities for women in sport with the opportunities today *(acquire, apply ,evaluate, appreciate)*	Discuss the level at which gender discrimination exists in your practical activity. *(acquire, apply, evaluate, appreciate)*

Required Knowledge: Using the development of Public School Athleticism as an example.

Theoretical Learning Experience	Practical Learning Experience
Use the video of the rugby match from *Tom Brown's School Days* to identify changing characteristics of the game. *(acquire)*	What basic rules and regulations would you apply to beginners in your assessed practical activity? *(acquire)*
What was the effect of boarding school on the development of athleticism in 19th century public schools? *(acquire, apply)*	What time and support restrictions have you encountered in attempting to improve your physical performance? *(acquire, apply)*
Explain the extent to which non-local schooling by the middle classes led to the widespread adoption of rational sport. *(acquire, apply, evaluate)*	What part has the scope of your personal performance and media influence had on your pursuit of excellence? *(acquire, apply, evaluate)*
Discuss the need to maintain sporting values in school sport. *(acquire, apply, evaluate, appreciate)*	Discuss the extent to which you able to maintain the letter and spirit of your practical activity in the heat of competition. *(acquire, apply, evaluate, appreciate)*

Required Knowledge: Using the development of physical education in schools as an example.

Theoretical Learning Experience	Practical Learning Experience
Describe a physical training lesson where the focus was on improving physique. *(acquire)*	Identify the features of your physical preparation programme which could be seen to be health related. *(acquire)*
To what extent did sport become part of the primary curriculum with the publication of the 1933 Syllabus? *(acquire, apply)*	How might your primary school physical education have acted as a foundation for your practical performance activity? *(acquire, apply)*
Explain the changes to the role of the teacher in the 1950's. *(acquire, apply, evaluate)*	Explain your teacher/coach relationships in the context of your assessed practical activity. *(acquire, apply, evaluate)*
Critically analyse the emergence of physical education values as we know them today *(acquire, apply, evaluate, appreciate)*	Discuss your practical performance activity in terms of the ways you have tested yourself physically and temperamentally. *(acquire, apply, evaluate, appreciate)*

5.4.5 Module 2565: Option A2 - Comparative Studies in Physical Education and Sport

C3.1b, C3.3

PS3.2

5.4.5.1 Introduction

Comparative Study is an approach which involves the analysis of knowledge and understanding of physical education as a field of study and its application to 'intelligent' performance on a global scale. The intention is to build on the Contemporary Studies module in AS (Module 2563), where various types of culture are studied to establish relationships between physical education and culture in different societies.

This global perspective, whilst providing information about other countries and their levels of development, has the primary function of leading to a better understanding of our own society. It is, however, important to be aware that though many of the aspects of this field of study have international commonality, each society has its own unique combination of cultural influences, which makes cultural borrowing a hazardous pursuit.

While using global studies to become better informed about the possible development of our own system, an awareness develops that the three dimensions identified in the rationale (see pages 1 and 2) can be fully explored in terms of the experiential significance of physical performance in these countries; the varied ways in which physical education is used as a vehicle at educational and societal levels in other societies; and the extent to which academic credibility is given to the field of study through their sports academies and educational institutions.

The three countries reviewed in more detail are France, because it is a fellow member of the European Community; Australia, with the shared heritage that it has with the United Kingdom and the United States, because of its very considerable political and economic influence on the world stage. The study of physical education in a specific social setting, develops into an analysis of similarities and differences between each of the other countries and our own, followed by an analysis of specific problem areas, leading to involvement in producing a policy and programme for the future. This concerns the improvement of our own institutionalised physical education, sport in its broadest sense, and establishing a global perspective on the balance between recreation and conservation in our natural environment.

This leads to increased understanding of the many contemporary issues in this field of study in the United Kingdom, and also increases the sensitivity with which the needs of other societies are recognised. Application consists of a synthesis of theory and practice, stimulating numerous learning experiences and developing candidates as self-directed learners, as identified in the aims and objectives of this specification.

5.4.5.2 Candidate's Learning Experience

Candidates gain knowledge and understanding as a result of involvement in, and a reflection on, practical experiences. These experiences are recorded during the A2 half of the Advanced GCE course, building an even greater awareness of the interaction between the theory and practice of Physical Education explored in the AS. This process could also help the candidate to prepare for the synoptic assessment in Unit 2566 (Section B) and in Unit 2567. The tables in Section 5.4.5.5 provide examples of possible learning experiences.

5.4.5.3 Unit Assessment

Candidate's knowledge and understanding of Module 2565 Option A2 is assessed in Unit 2565, Section A, where a candidate who has chosen this option, answers one compulsory question. (21 marks). The question is structured into a series of short sub-questions. Candidates may be required to respond to and interpret visual material including photographs and diagrams.

5.4.5.4 Option Content

North America with Particular Reference to the USA

Cultural Background of the USA

- Analysis of society including historical factors for example, ethnic and European games; environmental factors, including demographic and topographic variables; socio-economic influences; institutional frameworks, for example, education; ideologies and counter cultures. Candidates should be aware of the ethnic games which reached America via colonialism; the small size of the UK compared with the USA, which results in huge climatic and topographical variables in the US which do not exist in the UK; and the considerable differences in the ideology and pluralistic culture which are not matched in the UK.

Physical Education in Schools

- Provision and attitudes; co-education and Title IX (9); extra-curricular sport and sport in high schools. Candidates should be aware that there are many similarities in the US with UK primary school Physical Education, but the extra-curricular sport in the UK has a very much lower profile than in the USA.

Ethnic Sport and the Evolution of New Games

- From baggatoway to lacrosse; cultural adaptation of older games, American football (grid iron), baseball, ice hockey; invention of new games, basketball and volleyball. Candidates should be able to discuss the introduction of cricket and polo from the UK which has remained exclusive, and the evolution of baseball from rounders and gridiron from British rugby football, via the ivy league colleges.

Mass Participation in Sport

- Private clubs and community recreation; the role of the media and the status of sport. Candidates should analyse why, unlike the UK, there is no tradition of private sports clubs in the US, with the exception of golf. Opportunity, provision and esteem, particularly among minority cultures in the US.

Sport and the Pursuit of Excellence

- Sport as an institution; game occurrence and organised sport; professionalism and commercialism; preparation of amateur performers and the transition to the professional ranks; pluralism and stacking in an unequal society. Candidates should have a view on why only professional Association Football in the UK is approaching the level of commercialism of all US professional games; the UK is less obviously pluralistic and stacking in sport is almost a thing of the past in Britain.

Outdoor Recreation and Outdoor Education

- The natural environment: outdoor recreation organisation and provision; national parks; backpacking and the wilderness; range of summer camps for children; outward bound trust and adventure experiences. Candidates should be aware that the small size of the UK results in the UK having no true wilderness areas and only small national parks. The UK and the USA do have outward bound schools in common, reflecting the shared values of the two countries.

The European Community with Particular Reference to France

Cultural Background of France

- Analysis of society including historical perspectives and educational developments; Ideologies linked with French nationalism, intellectualism, militarism and naturalism; Centralised policies and provincial counter culture and the recent policy of devolution. Candidates should be able to explain the differences which exist between the UK and France, particularly regarding the experience of war time invasion; climatic and scenic variables; the demographic differences in size and population; and nationalist variables.

Physical Education in Schools

- Attitudes towards Physical Education and the curriculum programme; Sports Sections and assessment in schools; joint use of community provision; school sport and UNSS; Primary Sports School. Candidates should understand the focus of school sport on community provision compared with the UK.

Ethnic Sports and Cultural Links

- Basque rural sports, bullfighting and pelota, Breton wrestling, boules as the French street game. Candidates should be encouraged to identify similarities in the context of rural ‘strongman sports’ and wrestling in some of the traditional games of the UK, but recognise the aversion many British have to bullfighting.

Mass Participation (Sport for All)

- Centralised and devolved programmes and facilities; high state funding of joint use provision; Ministry for Youth and Sport: administration of the four types of federation (Olympic, non-Olympic, multi-sports and school & university); the rise of 'new ' sports like golf and tennis reflecting affluence and international influence. Candidates should understand that Sport for All is an international campaign and that France has much the same problems as the UK encouraging citizens that physical activity is a desirable and healthy leisure experience.

Sport and the Pursuit of Excellence

- Policies and funding for Olympic sports; professionalism, Tour de France and football (rugby league and Association Football); Amateur sport and nationalism; provision and special facilities, the change of ENSEP (traditional educational national centre for sport at Joinville, Paris) to INSEP (national 'academy' for sport and Physical Education in Paris); Font Romeu (National high altitude centre). Candidates should be able to comment on the suggestion that France has already made giant strides forward and is well ahead of the UK in producing elite performers as reflected in their recent Olympic and World Championships successes in 1996 and 1999 respectively.

Outdoor Recreation and Outdoor Education

- Le plein air: national parks and French scenery; rural/rustic simplicity; holiday patterns and tourism; colonies (centres) de vacance (camps for deprived children); outdoor pursuits, sailing, canoeing, climbing, skiing, etc. Transplantee classes (vert, mer and neige) as subsidised outdoor education experiences for all French children on an educational basis. Candidates should discuss the suggestion that the UK is way behind the French in this area, largely because of limits to funding, arising from an inadequate policy and poorer natural potential.

Australasia with Particular Reference to Australia

Cultural Background of Australia

- Tribal origins: Aboriginal, Melanesian and Polynesian cultures. Colonial historical perspectives and educational developments. Demography and population distribution; ideologies and pluralism (Anglo-Saxon-Celt dominance). Federal and State policies and the regional emphasis of certain games, for example, Rugby in N.S.W. and Queensland and Aussie Rules in Victoria. Candidates should be aware of the colonial implications of Australia being dominated by the emigration from the British Isles until the 1950s, and of the major differences in size and population.

Physical Education in Schools and Colleges

- The Australian Sports Commission and the introduction of Aussie Sports; S.E.P.E.P. (national sport education and physical education project) and P.A.S.E. (as a professional development programme); significance of fair play; selection policy through testing; assessment in physical education. Candidates should be aware of how much of the Australian approach in schools is under review in the UK.

Ethnic Sports and New Games

- Aboriginal sports and pastimes: survival activities, for example, bows and arrows, hide and seek, land diving, ritual dances;
- The development of Aussie Rules as a new game.

Candidates should be made aware of the struggle for Aboriginal human rights which has been successively achieved by the working classes and ethnic minorities in the UK.

Mass Participation in Sport

- State policies and programmes; popularity of colonial games and attempts to defuse ethnic soccer. The development of the Active Sport policy and the renewal of focus on the infrastructure for mass sport and the need for this in an affluent society. Candidates must assess the view that both the UK and Australia are aware of the need to continue the effort to encourage more people to recognise the value of health related activities and lifetime sport.

Sport and the Pursuit of Excellence

- Traditions of swimming and athletics; cricket, Australian Football (Aussie Rules) and rugby league as professional games; rugby union and 'amateurism' in the southern hemisphere; influence of the ethnic groups on performance, particularly the Polynesians; sport and gender; ASC (Australian Sports Commission), AIS (Australian Institute of Sport and devolved state institutions), Canberra and devolved sports institutes/academies; VIS (Victorian State Institute for Sport) also devolved; development of youth sports programmes. Candidates should be encouraged to be aware of problems we might meet copying the Australian system; of the need to address aboriginal problems; and of the urbanisation and media impact of sport in Australia.

Outdoor Recreation

- National and Regional Parks and their highly regulated organisation; outward bound, outdoor adventure and the outback; frontier experiences and coastal scenery. The significant role of outdoor education given the placement of the majority of the population within reach of the coast and hill country. Candidates should recognise the scope of wilderness in Australia compared with the UK and that our situation is one of pollution by saturation rather than risk through isolation.

Cross-Cultural Issues in Physical Education and Sport

Comparison of Similarities and Differences

- This will normally be between the UK and either Australia, France or the United States, on a thematic basis under headings already identified in the area analysis.

Physical Education in Schools

- Variations in the administration and status of sport in schools; policies involving specialist sports schools.

Ethnic Sports and Pastimes

- A comparison between British ethnic sports and those already identified in the other three countries; the impact of colonialism on the early development of certain sports in some of these countries.

Mass Participation (Sport for All)

- Comparisons of policies and enactment: levels of discrimination against minorities, opportunity, provision and esteem; funding mass sport, state and commercial sponsorship; lotteries, advertising and the media.

Sport and the Pursuit of Excellence

- A comparison of elitist and personal achievement ethics; win-ethic variables; status and funding of high level sport; policies to achieve excellence in sport; professionalism and behaviour.

Outdoor Recreation and Outdoor Education

- A comparison of the demography and natural scenery; adventure education and outward bound; national parks and the wilderness concept; outdoor education and children's camp school systems. Candidates are directed towards understanding these similarities and differences as they directly concern their own lives and future developments in the UK.

Cultural Factors Influencing these Four Different Countries

- Candidates should be able to analyse the place of these comparisons in the context of the different cultural settings, and be able to explain why these variables exist in historical, environmental, political, economic and social terms.

Reformative Conclusions

- Policy decisions have to be made to take Physical Education and Sport into the 21st century and care must be taken with this process, bearing in mind that cultural traditions tend to resist change. This process should be discussed as it concerns candidates themselves and the problems this country might face when adopting and adapting systems from other countries. Where possible, the candidates should be encouraged to collect and present specific elements from the other three countries which might be useful, but always in the context of whether the new items are likely to be culturally acceptable.

5.4.5.5 **Module 2565: Option A2** - Examples of Learning Experience

The following tables highlight a progressive approach to the development of knowledge, understanding and application of the option content by the candidate.

Required Knowledge: The study of sport in Australia and links with the UK.

Theoretical learning Experience	Practical Learning Experience
Describe the Sport Education and Physical Education Project (SEPEP) in Australian schools. *(acquire)*	Describe your curriculum and extra-curriculum commitment in your assessed practical activity. *(acquire)*
How is the infra-structure of Australian sport at State level organised? *(acquire, apply)*	How might your assessed practical activity be linked with your local community? *(acquire, apply)*
Compare the status of women in sport in Australia with women's sport in the United Kingdom. *(acquire, apply, evaluate)*	Compare the opportunities for the other sex with your own in the context of your assessed practical activity. *(acquire, apply, evaluate)*
Explain why Australian professional teams are much more successful than their British counterparts. *(acquire, apply, evaluate, appreciate)*	Explain the limitations you have faced in your attempt to achieve excellence in your assessed practical activity. *(acquire, apply, evaluate, appreciate)*

Required Knowledge: The study of sport in the United States linking it with the UK.

Theoretical learning Experience	Practical Learning Experience
Describe Title IX legislation in American schools and colleges. *(acquire)*	What funding problems have you met in the pursuit of your practical performance activity? *(acquire)*
What reasons are given for American schools focusing on testing and measuring? *(acquire, apply)*	How have you physically prepared for your assessed practical activity? *(acquire, apply)*
Compare extra-mural sport in the U.S.A. with extra-curricular sport in the U.K. *(acquire, apply, evaluate)*	Appraise your competitive schedule for the current year in your practical performance activity. *(acquire, apply, evaluate)*
Discuss the role of the coach in American senior high schools. *(acquire, apply, evaluate, appreciate)*	Discuss the extent to which your prowess in your practical performance activity has influenced by the limited availability of professional coaches. *(acquire, apply, evaluate, appreciate)*

Required Knowledge: The study of French Physical Education linking it with the UK.

Theoretical learning Experience	Practical Learning Experience
Describe the function of the Union National Scolaire Sportive (UNSS). *(acquire)*	Describe the links between your school and schools sports bodies in your practical performance activity. *(acquire)*
Explain the status of physical education in French schools given the comment 'every Frenchman is born a soldier'. *(acquire, apply)*	Explain how you have progressed from a participant to a performer in your assessed practical activity. *(acquire, apply)*
Compare the multi-sport provision in France with our elite single sport facilities. *(acquire, apply, evaluate)*	Appraise the value of joint club and school links in the context of your practical performance activity. *(acquire, apply, evaluate)*
Discuss the tarnished status of the Tour de France *(acquire, apply, evaluate, appreciate)*	Discuss the issue of drug abuse in your practical performance activity. *(acquire, apply, evaluate, appreciate)*

5.4.6 Module 2565: Option B1 - Biomechanical Analysis of Human Movement

C3.1a, C3.1b, C3.2, C3.3

5.4.6.1 Introduction

The Biomechanical Analysis of Human Movement is a scientific method of enquiry, which enables the candidate to understand and use intelligent physical performance more efficiently. The intention is to build upon study previously undertaken in the "Motion and Movement" part of Module 2562, preparing the candidate for more detailed study in this module. By looking at movement analysis in the context of physical performance, candidates achieve an applied knowledge of force and motion in a physical domain, which leads to a greater appreciation of efficient and effective performance. This analysis progresses from knowledge about linear motion, to the forces causing that motion and extends into projectile and angular motion using physical education experiences. Learning experiences draw upon the performance background of candidates so that they become analysts, planners and critics as well as performers. Additionally, as a result of experience in this study area, candidates develop the ability to understand and use technical terms and specialist vocabulary, which facilitate a greater understanding of physical performance as a valuable part of the process of scientific enquiry. Application consists of a synthesis of theory and practice as reflected in the aims and objectives of the specification, together with exemplars to illustrate links between physical performance and theoretical study.

5.4.6.2 Candidate's Learning Experiences

Candidates should gain knowledge and understanding as a result of involvement in, and a reflection on, practical experiences. These experiences are recorded during A2, building an even greater awareness of the interaction between the theory and practice of Physical Education explored in the AS. This process also helps the candidate to prepare for the synoptic assessment in Unit 2566 (Section B) and in Unit 2567. The tables in Section 5.4.6.5 provide examples of possible learning experiences.

5.4.6.3 Unit Assessment

Candidate's knowledge and understanding of Module 2565 Option B1 is assessed in Unit 2565 Section B, where a candidate who has chosen this option, answers one compulsory question. (21 marks). The question is structured into a series of short sub-questions. Candidates may be required to interpret and to sketch graphs and diagrams. The use of technical language is expected.

5.4.6.4 Option Content

Candidates should use their experiences gained through their performance of practical activities as a basis on which to improve their biomechanical understanding. They can use this understanding to help in the overall process of improving performance.

Analysis should relate to the activities that the candidate has chosen for their practical assessment.

Mechanics of Motion

- Definitions and sporting examples of linear motion, angular motion and general motion when applied to human bodies and projectiles in practical activities.

Newton's Laws of Motion

- Description and sporting examples of the application of Newton's first, second and third laws.

Linear Motion

Measurements

- Definitions of the following terms in relation to describing linear motion in sport to include units of measurement where appropriate: mass; inertia; distance; displacement; speed; velocity; acceleration; deceleration; scalar quantity; vector quantity. Numerical calculations involving these measurements

- It is essential that candidates analyse information relating to practical situations. It is suggested that the 100m sprint could be used for such analysis. Having recorded the relevant information, candidates can analyse it in the form of graphs.

Graphical Representation

- Plotting, interpreting and calculating measurements from distance/time and speed/time graphs. Numerical calculations of speed or acceleration from the gradient or slope of these graphs when applied to sporting events.

Momentum

- The importance of optimising momentum in a variety of practical techniques, for example, long jump approach. Understanding the relationship between the change in momentum and Newton's second law. Numerical calculations of momentum in sporting situations.

Forces

Force

- Definitions to include units of measurement. The vector nature of force. Numerical calculations of force, in a sporting context, using F=ma. Appreciation of the different effects a force has on an athlete or projectile.

Net Force

- Understanding of the link with Newton's first and second laws when applied to sporting situations. The implication of net force to the resulting motion of an athlete or projectile.

Types of Force Acting on a Sports Performer

Weight

- Definition of the weight of an object as opposed to its mass. Numerical calculations of weight from mass and vice versa using W=mg, where g is approximated to 10 m/s^2.

Reaction

- Appreciation that when a sportsperson exerts a force on the ground or other object then it exerts an equal and opposite force on the sportsperson. Use of sporting examples to understand the advantages of large reaction forces when changing the state of motion, for example, high jump take off, sprint start.

Friction

- Definition and understanding of the relevance of increasing and reducing friction when applied to various sporting situations, for example, swerving in rugby compared to downhill skiing. Understanding and examples of the frictional effects of different types of footwear on different surfaces.

Air Resistance/Fluid Friction

- Definition with relation to the force acting against the direction of motion of an athlete or projectile travelling through air/water. Factors affecting the size of this force: velocity; cross-sectional area; surface characteristics; streamlining; body position.

Free Body Diagrams

- Drawing pin diagrams to show the forces acting on a sports performer at a particular moment in time, when under the influence of balanced or unbalanced forces. Vector representation of forces with attention to the origin of the arrow, the direction of the arrow and the length of the arrow to explain any net force acting. Application to an athlete/object on the earth's surface or travelling through water.

Impulse

- Definition and sporting examples to include units of measurement. The effect of impulse on change in momentum. Force/Time graphs and the appreciation that the area under them represents the impulse. Numerical calculations from I=Ft. Appreciation of the advantages gained by increasing impulse in sporting situations, for example, use of follow through, use of the turn in discus throwing.

Work and Power

- Definitions and applications of work and power to sporting situations, for example, field events in athletics, the start in the bobsleigh. Numerical calculations of work and power from relevant equations to include units of measurements.

Projectile Motion

- If appropriate to the candidate's chosen practical activity, they should relate the knowledge and understanding gained in this section to a particular projectile used in their activity.

Release

- Identification of the factors before take off which determine the trajectory of flight paths: speed of release; angle of release; height of release. Appreciate that by optimising these factors for particular sporting events performance can be improved.

Flight

- Forces acting on the human body or an object in flight. Resolving these forces using the parallelogram of forces. Understand how the relative sizes of these forces and the direction of the resultant force affect the fight path. Sporting examples of bodies following symmetrical flight paths (true parabolas) and asymmetrical flight paths (distorted parabolas and definitely-not parabolas). The Bernoulli effect and its application to sporting situations, for example, the discus, ski jumpers and motor racing cars.

Spin

- Understand types of spin used in sport and the effect they have on flight paths: top spin; back spin; hook; slice. Appreciation of the Magnus effect when explaining these deviations in flight. Sporting examples of the application of the Magnus effect, for example, corner kicks in soccer, top spin in tennis. The effects of spin on bouncing.

Angular Motion

Centre of Mass

- Definition and principles associated with centre of mass and equilibrium to include line of gravity and base of support. Principles associated with centre of mass and direction of force to generate linear or angular motion in a sporting situation. Appreciation that a change in body position during sporting techniques can change the position of the centre of mass and in fact the centre of mass can lie outside the body, for example, the Fosbury flop technique in the high jump.

Body Levers and Moment of Force or Torque

- Classification of levers found in the performer, in terms of the relative positions of fulcrum, load and effort and their relevance to specific anatomical sites on the human body. Application of leverage to human physical activity in terms of length of lever arm. Definition of moment of force or torque to include units of measurement. The principle of moments for balanced positions. Numerical calculations of the moment of force (Moment of force = Fd), and the balancing force from the principle of moments when applied to sporting situations.

Principle Axes of Rotation

- Identification and examples of sporting movements around the major axes of rotation: frontal (front to back), for example, cartwheel; transverse (side to side), for example, somersault; longitudinal (head to foot), for example, full twist.

Analogues of Newton's Laws of Motion

- Application of Newton's first, second and third laws to angular motion in sport. Familiarity with the terminology used for angular forces: eccentric force; couple; torque.

Measurements

- Definitions of the following terms in relation to describing angular motion in sport to include units of measurement where appropriate: angular distance; angular displacement; radians and degrees and the relationship between the two; angular speed; angular velocity; angular acceleration. Numerical calculations of these measurements when applied to sporting situations.

Moment of Inertia

Definitions and sporting examples of how the body or a body part can change its moment of inertia in a rotational situation, for example, spinning skater, leg positions during the recovery phase of running/sprinting.

Conservation of Angular Momentum

Definition of angular momentum as moment of inertia multiplied by angular velocity, and appreciation of the law of conservation of angular momentum as an analogue of Newton's first law. Sporting examples of the application of this law, for example, trampolinist, slalom skier.

Having completed this option it is strongly recommended that candidates use the theoretical knowledge gained to review the techniques used in their practical activities and also various winter sports where obvious applications can be made. The examples given in this option are not intended to be exhaustive.

5.4.6.5 Module 2565: Option B1 - Examples of Learning Experiences

The following tables highlight a progressive approach to the development of knowledge, understanding and application of the option content by the candidate.

Required Knowledge: Newton's laws of motion

Theoretical learning experience	Practical learning experience
Recall the principles behind Newton's third law when applied to a sprinter pushing from the blocks. *(acquire)*	Identify the importance of Newton's third law in your chosen practical activity. *(acquire)*
With reference to Newton's second law, explain the importance of building up as much speed as possible during the start in the bobsleigh. *(acquire, apply)*	Apply each of Newton's laws to your chosen practical activities. *(acquire, apply)*
Compare measurements for a standing broad jump and a long jump for each member of your group. Compare the results and justify any patterns that can be identified with reference to Newton's laws. *(acquire, apply, evaluate)*	Observe a member of your group who is performing in a team game. Use Newton's laws of motion to analyse how your subject accelerates/decelerates or changes direction. *(acquire, apply, evaluate)*
Explain the significance of a low and balanced starting point before take off in a vertical jump to achieve maximum height. *(acquire, apply, evaluate, appreciate)*	During an athletics lesson, observe a novice performing the high jump. Using your knowledge of Newton's third law, give your performer some coaching points to enable them to clear a greater height. *(acquire, apply, evaluate, appreciate)*

Required Knowledge: Flight

Theoretical learning experience	Practical learning experience
From a side view, sketch the flight path of a number of different projectiles used in sport. *(acquire)*	During a badminton lesson, sketch the path followed by the shuttle during: (a) a high serve; (b) a net shot. *(acquire)*
Apply your knowledge of forces to draw pin diagrams of the forces acting on two objects during flight, which follow contrasting flight paths. *(acquire, apply)*	Explain the differences in the flight paths of the two shuttles given above. *(acquire, apply)*
Formulate assumptions that will enable you to predict the flight paths followed by sporting objects that vary in shape, size and weight. *(acquire, apply, evaluate)*	Observe a performer carrying out a high serve with shuttlecocks of different speed categories. Justify any variations in distance travelled by the shuttlecocks. *(acquire, apply, evaluate)*
Discuss the significance of changing the design of javelins. What effect did this have on their flight paths? *(acquire, apply, evaluate, appreciate)*	Observe an expert performer in the discus event. Explain the advantages of the discus spinning off the index finger at the point of release. *(acquire, apply, evaluate, appreciate)*

Required Knowledge: Conservation of Angular Momentum

Theoretical learning experience	Practical learning experience
From your experience of performing in and watching a variety of practical activities that involve angular motion, identify positions that have a high moment of inertia and positions that have a low moment of inertia. *(acquire)*	During a gymnastics or trampolining lesson, identify a situation where a performer has a high moment of inertia and a situation where they have a low moment of inertia. *(acquire)*
From the examples given above, take a position with a high moment of inertia and explain how the moment of inertia can be reduced. *(acquire, apply)*	Observe a performer who carries out a tucked forward roll and a forward roll to straddle. Explain why balance is easier to achieve at the end of the tucked forward roll. *(acquire, apply)*
Evaluate the advantages of reducing moment of inertia in the case of a spinning skater. *(acquire, apply, evaluate)*	Observe a group of novice gymnasts and explain why they find it easier to do a cartwheel with bent legs than straight legs. *(acquire, apply, evaluate)*
Discuss the techniques used by an efficient slalom skier as they turn through the gates and as they regain control after the turn. *(acquire, apply, evaluate, appreciate)*	During an athletics lesson, observe a performer in the long jump event. Using your knowledge of angular momentum, explain why there is a tendency to rotate clockwise and suggest how the effective performer keeps this rotation to a minimum. *(acquire, apply, evaluate, appreciate)*

5.4.7 Module 2565: Option B2 - Psychology of Sport Performance

C3.1a; C3.2; C3.3

WO3.2; PS3.3

5.4.7.1 Introduction

This option builds on the knowledge and understanding by applying the principles that candidates have learned in Module 2562 Section B (Acquiring, Performing and Teaching Movement Skills). Psychology of Sport Performance enables candidates to investigate the important role that the human mind has prior to, during, and after performance. Candidates gain an understanding of the theoretical concepts that may improve their personal performance in both individual and game situations, as well as the performance of others. The focus of study should increase the candidate's awareness of the individual different characteristics that may be encountered; an understanding of the dynamics of group performance; the planning of psychological strategies for pre-competition preparation; the implementation of a variety of techniques to achieve and optimise performance in the performance environment; and strategies for evaluating the consequences of performance. Candidates should relate their knowledge both to their own practical activity experiences and to those of elite performers in global competition. This application consists of synthesis of theory and practice as reflected in the aims and objectives of the specification, together with exemplars to illustrate links between physical performance and theoretical study.

It is recommended that, in this option, an emphasis is placed upon performance in a sporting environment. Candidates should seek to apply psychological theories and to utilise psychological techniques primarily to improve their own performance in their selected practical activities, and also to be able to suggest strategies to improve the performance of others.

5.4.7.2 Candidate's Learning Experience

Candidates gain knowledge and understanding as a result of involvement in, and a reflection on, practical experiences. These experiences are recorded during the A2 half of the Advanced GCE course, building an even greater awareness of the interaction between the theory and practice of Physical Education explored in the AS. This process also helps the candidate to prepare for the synoptic assessment in Unit 2566 (Section B) and in Unit 2567. The tables in Section 5.4.7.5 provide examples of possible learning experiences.

5.4.7.3 Unit Assessment

Candidate's knowledge and understanding of Module 2565 Option B2 is assessed in Unit 2565 Section B, where a candidate who has chosen this option, answers one compulsory question. (21 marks). The question is structured into a series of short sub-questions. Candidates may be required to respond to and interpret visual material, including photographs and diagrams. The use of technical language is expected.

5.4.7.4 Option Content

Analysis should relate to the activities that the candidate has chosen for their practical assessment.

Individual Aspects of Sport Performance

Personality

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

Attitudes

- Knowledge of the nature of attitudes, inconsistencies and prejudice in sporting situations. Understand their origins and influences (including the effects of socialisation). Identify the components of attitudes (cognitive, affective, behavioural). Identify the links between attitudes and behaviour in sporting situations. Awareness of methods of changing attitudes from negative to positive, including knowledge of the concepts of cognitive dissonance and persuasive communication.

Motivation

- Knowledge of Atkinson and McClelland's theory of Achievement Motivation (need to achieve and need to avoid failure). Awareness of sport-specific achievement motivation (i.e. competitiveness).

Group Dynamics of Sport Performance

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) and co-ordination/co-operation factors (Ringlemann Effect). Knowledge of factors affecting the formation and development of a cohesive group/team.

Leadership

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

Mental Preparation for Sport Performance

- Awareness of the use of the NCF's four C's: *Commitment,* (Self) *Confidence, Concentration, and* (Emotional*) Control.*

Commitment

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

Self Confidence

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

Concentration

- Knowledge of attentional control. Awareness of cue utilisation (Easterbrook) and its links with arousal. Knowledge of attentional styles (for example, Broad/Narrow, Internal/External) (Nideffer).

Emotional Control

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

Competition Effects on Sport Performance

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 (Zajonc). Knowledge of 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 with the use of selective attention and mental rehearsal should be applied to practical activities and justified.

Aggression

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

Consequences of Sport Performance

Attribution Theory

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

Candidates should also have an awareness of how performance can effect their subsequent performances: (a) as an individual; (b) as a part of a group/team; (c) in their mental preparation for future performance(s); and (d) dealing with ensuing competition effects.

5.4.7.5 Module 2565: Option B2 - Examples of Learning Experiences

Psychology of Sport Performance

The following tables highlight a progressive approach to the development of knowledge, understanding and application of the option content by the candidate.

Required Knowledge: Personality and its assessment

Theoretical Learning Experience	Practical Learning Experience
Define the trait characteristics of Introversion, Extroversion, Neuroticism, Stability, Type A and Type B behaviour. *(acquire)*	Observe the behaviour of performers in a practical activity. Identify any characteristics that are evident. *(acquire)*
Complete a self-report personality questionnaire (such as the EPI) and interpret its results. *(acquire, apply)*	Administer a self-report personality questionnaire to a team and describe any similarities or differences that are evident. *(acquire, apply)*
Compare your personality profile with that of the rest of your class. Explain any trend(s) that you discover. *(acquire, apply, evaluate)*	Assess the personality profiles of team members. Compare the results with those from your previous observations. *(acquire, apply, evaluate)*
Discuss the advantages and disadvantages of using self-report questionnaires for the assessment of personality, suggesting ways to more effectively assess personality. *(acquire, apply, evaluate, appreciate)*	Discuss the effectiveness of both self-report questionnaires and observation as methods of assessing personality. Devise a method of assessing personality specific to a practical activity of your choice. *(acquire, apply, evaluate, appreciate)*

Required Knowledge: Group and team dynamics.

Theoretical Learning Experience	Practical Learning Experience
Describe the characteristics of a functional group/team. *(acquire)*	In the performance of a team game, observe how individuals interact with one another. *(acquire)*
Explain the factors that may either enhance or hinder the effective performance of a group/team. *(acquire, apply)*	Describe and explain the pattern of interaction, by one team member, with the rest of the team. *(acquire, apply)*
Compare a variety of strategies that may be used to reduce losses due to faulty processes (i.e. lack of co-ordination and loss of motivation). *(acquire, apply, evaluate)*	In a team game situation, attempt a number of different techniques to increase team cohesion. Compare their effectiveness. *(acquire, apply, evaluate)*
Discuss the ways in which teachers/ coaches/performers can efficiently improve team cohesion and performance in a variety of different activities. *(acquire, apply, evaluate, appreciate)*	By using knowledge of groups/teams, suggest a pre-competition strategy to be used to increase team cohesion and/or performance. *(acquire, apply, evaluate, appreciate)*

Required Knowledge: Anxiety management techniques used for controlling emotions.

Theoretical Learning Experience	Practical Learning Experience
Define the various cognitive and somatic techniques used to control anxiety. *(acquire)*	Describe, using your own practical experiences, the methods used to control anxiety prior to performance. *(acquire)*
Explain the different effects that cognitive and somatic techniques can have on the performer. *(acquire, apply)*	Prior to performing a practical activity, use a number of cognitive and somatic techniques to control anxiety. Describe the different effects of these techniques. *(acquire, apply)*
Compare the effectiveness of one cognitive technique and one somatic technique to control anxiety. *(acquire, apply, evaluate)*	Prior to performing a practical activity, use one cognitive technique and one somatic technique to control anxiety. Evaluate the effectiveness of each method. *(acquire, apply, evaluate)*
Explain how a combination of both cognitive and somatic techniques may be used most effectively to control anxiety. *(acquire, apply, evaluate, appreciate)*	Devise a pre-competition strategy to control anxiety and enhance performance in one of your practical activities. *(acquire, apply, evaluate, appreciate)*

5.5 Module 2566: Exercise and Sport Physiology and the integration of knowledge of principles and concepts across different areas of Physical Education

C3.1a C3.1b C3.2 C3.3

LP3.1, PS3.3;

5.5.1 Introduction.

This module builds on the knowledge and understanding gained by applying the principles that the candidates have learned about how the body performs and responds to physical activity (Module 2562 Section A). Exercise Physiology looks at how the structure and function of the body changes as a result of exercise. Sport Physiology applies concepts from Exercise Physiology with the aim of enhancing sports performance through training. Therefore, the focus of study is on how a candidate may improve their own physical performance and that of others. This involves the measurement, appraisal and critical analysis of performance, and the application of Exercise and Sport Physiology concepts, in order to formulate a plan of action for improvement. Candidates are able to relate their knowledge and understanding to the performance of elite athletes involved in global competition, and to start to consider the ethical questions surrounding performance enhancement. Application consists of a synthesis of theory and practice as reflected in the aims and objectives of the specification, together with exemplars to illustrate links between physical performance and theoretical study.

5.5.2 Candidate's Learning Experience

Candidates should gain knowledge and understanding as a result of involvement in, and a reflection on, practical experiences. These experiences are recorded during the A2 half of the Advanced GCE course, building an even greater awareness of the interaction between the theory and practice of Physical Education explored in the AS. This process also helps the candidate to prepare for the synoptic assessment in Unit 2566 (Section B) and in Unit 2567. The tables in Section 5.5.5 provide examples of possible learning experiences.

5.5.3 Unit Assessment

Candidate's knowledge and understanding of module 2566 is assessed in Unit 2566 Section A, where a candidate answers one compulsory question. (15 marks). The question is structured into a series of short sub-questions. Candidates may be required to interpret and to sketch graphs and diagrams. The use of technical language is expected.

5.5.4 Module Content

Analysis should relate to the activities that the candidate has chosen for their practical assessment.

Energy Concepts

- Definitions of energy, work and power and the units they are expressed in. Forms of energy to include chemical, kinetic and potential.

ATP

The role of ATP. The breakdown and re-synthesis of ATP. The principle of coupled reactions and exothermic and endothermic reactions.

The following concepts of ATP re-synthesis, the energy continuum, the recovery process and principles of training should be applied to the practical implementation of each fitness component.

ATP Re-synthesis

Knowledge of the three energy systems; ATP/PC (alactic) the lactic acid system and 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. Candidates are **not** expected to know the detailed pathways of each energy system, but to have a basic overview of each system and the contribution that it makes when related to the duration and intensity of exercise.

Energy Continuum

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

The Recovery Process

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

Principles of Training

Overload, progression, specificity and reversibility, moderation and variance. The physiological implications of a warm-up and cool-down (for example, reduce the delayed onset of muscular soreness - D.O.M.S.). Periodisation of training to include the macro, meso and micro cycle. The planning and development of a personal fitness programme for one of the candidate's chosen practical activities.

Components of Fitness

- It is essential that candidates evaluate their own level of fitness and that of other students within the group. Candidates need to analyse the fitness demands of their own chosen activities and plan a programme of improvement that they can then follow. This enables candidates to re-evaluate their level of fitness at a later date and to appraise the effectiveness of their training programme. They are also more aware of the physiological adaptations that have occurred as a result of training.

Aerobic Capacity

- Provide a definition of aerobic capacity and be aware of how an athlete's VO_2 max. is affected by individual physiological make-up, training, age and sex.
- Identify and carry out methods of evaluating aerobic capacity (for example, multi-stage fitness test, PWC170 test). A candidate should assess their own VO_2 max. and match their result against the aerobic demand of their chosen activities.
- Identify and perform different types of training used to develop aerobic capacity - continuous running, repetition running, fartlek and interval training. Use of target heart rates as intensity guide.
- Identify the energy system and food/chemical fuels used during aerobic work.
- Identify physiological adaptations that take place after aerobic training, for example, increase in stroke volume.

Candidates should plan a programme of aerobic training based on (a) their own assessment of their aerobic capacity and (b) the requirements of their activity.

Strength

- Provide definition of types of strength to include strength endurance, maximum strength, explosive/elastic strength, static and dynamic strength. Be aware of the factors that affect strength, for example, fibre type and cross sectional area of the muscle. Identify and carry out methods of evaluating each type of strength, for example, grip strength dynamometer.
- Identify and perform different types of training used to develop strength. The repetition, sets and resistance guideline's 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).

- Identify the energy system and food/chemical fuels used during each type of strength training.
- Identify physiological adaptations that take place after training, to include neural and physiological changes to skeletal muscle.

Candidates should plan a programme of strength training based on (a) their own assessment of their strength and (b) the strength requirements of their activity.

Flexibility

- Provide definition of flexibility to include static and dynamic flexibility. Be aware of the factors that affect flexibility, for example, type of joint, length of surrounding connective tissue.
- Identify and carry out methods of evaluating flexibility, for example, sit and reach test, or goniometer (angle measure).
- Identify and perform different types of training used to develop flexibility to including static (active and passive), ballistic and Proproceptive neuromuscular facilitation (PNF).
- Identify physiological adaptations that take place after training, to include physiological changes to skeletal muscle and connective tissue.

Candidates should plan a programme of flexibility training based on (a) their own assessment of their flexibility and (b) the flexibility requirements of their activity.

Body Composition, Balance, Co-ordination, Agility, Reaction Time and Speed

- These components do not have to be studied in as great a depth, but a definition and method of evaluation of each is needed. A candidate should be aware of the contribution of each of these components to their chosen practical activities, and where appropriate, how they might improve each component.

Fitness testing:

Note that maximal testing is not always appropriate and care should always be taken to screen participants before any fitness testing, for example, use of Physical Activity Readiness Questionnaire/PARQ). It is also important to ensure that the test protocol and guidelines are strictly followed. Teachers should refer to *'Safe Practice in Physical Education'* by the Physical Education Association and BAALPE.

Performance Enhancement

Ergogenic aids

- An ergogenic aid is any substance that enhances performance. Candidates need to be aware of current methods of performance enhancement. Candidates should know the effects of the aid being used and which athletes would benefit from its use.

- Aids should include:
    - use of dietary manipulation (for example, carbo-loading), pre/post competition meals and food/fluid intake during exercise (nutritional);
    - use of creatine supplements (nutritional);
    - blood doping and Rh EPO/ recombinant erythropoietin (physiological);
    - use of nasal strips.
- Other aids can be considered and candidates should already have prior knowledge of the effects of alcohol, caffeine and anabolic steroids.

5.5.5 Module 2566: Examples of Learning Experiences

The following tables highlight a progressive approach to the development of knowledge, understanding and application by the candidate.

Required Knowledge: The recovery process

Theoretical learning experience	Practical learning experience
List the changes that take place within the muscle as a result of exercise, for example, an increase in lactic acid. *(acquire)*	Monitor heart rate after you have completed a practical lesson and record how long it takes for the heart rate to return to normal. *(acquire)*
Identify the endothermic reactions that need to take place in order to return the body to its pre-exercise state. *(acquire, apply)*	Compare results within the group and suggest reasons why some people recover quicker than others. *(acquire, apply, evaluate)*
Predict what would happen to phosphocreatine stores, glycogen stores and the amount of lactic acid in the muscle tissue during a circuit training session. Use the test books available to evaluate your answer. *(acquire, apply, evaluate)*	As a group perform a series of shuttle runs with a variety of recovery times. Use your results to determine the optimum recovery time needed to maintain performance times. *(acquire, apply, evaluate)*
Discuss the implications of recovery times on the planning and implementation of different types of training programmes. *(acquire, apply, evaluate, appreciate)*	Identify the opportunities that exists within your chosen practical activity for either full or partial recovery. Suggest strategies/tactics to increase the opportunity for recovery. *(acquire, apply, evaluate, appreciate)*

Required Knowledge: Aerobic capacity

Theoretical learning experience	Practical learning experience
Define the term 'aerobic capacity' and identify typical values for VO_2 max in relation to age, gender and fitness. *(acquire)*	Measure your aerobic capacity. Compare your VO_2 max with others in the group. *(acquire)*
Suggest reasons why VO_2 max values differ in relation to age, gender and fitness. *(acquire, apply)*	Identify and attempt a suitable method of training to improve your aerobic capacity, in line with the requirements of your chosen practical activity. *(acquire, apply)*
Predict physiological adaptations that may take place after a period of aerobic training. Use available text books to evaluate your answer. *(acquire, apply, evaluate)*	Work our your training target heart range. Monitor a training session and appraise your training intensity. *(acquire, apply, evaluate)*
Discuss the varying contributions or each energy system during a fartlek training session. *(acquire, apply, evaluate, appreciate)*	Plan and implement a training programme to improve your own aerobic capacity in line with the requirements of your chosen practical activity. Re-evaluate your aerobic capacity to determine the effectiveness of your programme. *(acquire, apply, evaluate, appreciate)*

Required Knowledge: Performance enhancement: the use of RhEPO

Theoretical learning experience	Practical learning experience
Briefly outline what EPO is and how it enhances performance. *(acquire)*	Identify activities that rely heavily on the aerobic system and therefore athletes who might consider using this performance aid. *(acquire)*
Compare the use of EPO with the results gained from blood doping and altitude training. *(acquire, apply)*	Identify a governing body of sport that are trying to deter the use of RhEPO and highlight the problems they are experiencing. *(acquire, apply)*
Explain why the use of RhEPO has resulted in the death of some athletes. *(acquire, apply, evaluate)*	Why is it so difficult to accurately test the use of EPO in endurance events? *(acquire, apply, evaluate)*
Discuss the ethical and health issues that are associated with the use of EPO. *(acquire, apply, evaluate, appreciate)*	Discuss the effectiveness of random blood tests to deter the use of RhEPO. *(acquire, apply, evaluate, appreciate)*

5.6 Module 2567: The Improvement of Effective Performance and critical evaluation of practical activities with synoptic assessment

C3.1b **WO3.3;**

5.6.1 Introduction

As stated in the Rationale, "Physical Education is a worthwhile experience involving 'intelligent' personal performance at a practical level, which identifies a physically educated person" (see pages 1 and 2). In Module 2567 candidates develop skills which are subsequently assessed in performance situations which require a wide range of acquired and developed skills to be performed with unconscious fluency and adapted easily to varying conditions and circumstances. This application of skills to varying conditions and circumstances requires the candidate to extend and expand the skills acquired and developed within Module 2564 or indeed to acquire a new range of skills and develop them into this autonomous phase. This contextualising of the skills into the open environment permits the candidate to experience the spiritual, moral and cultural aspects of the activity whilst also applying and appreciating these aspects within their own performance. The contextualising of skills into the open environment enables candidates to develop these activities for lifetime use.

Within this module the candidate is also required to evaluate and appreciate the performance of a fellow student. Candidates should draw on and apply subject matter from physiological, psychological and socio-cultural disciplines in order to prescribe and prioritise strategies to improve the performance observed. This synthesis of theory and practice is reflected in the aims and objectives of the specification and exemplifies the link between physical performance and theoretical study. The experience of performing and observing provides a variety of learning experiences, which allows candidates not only to understand relationships between physical activity and the complexity of factors underlying performance, but also to experience these relationships themselves.

5.6.2 Candidate's Learning Experience

Candidates should gain knowledge and understanding as a result of involvement in, and a reflection on, practical experiences. These experiences are recorded during the A2 half of the Advanced GCE course, building an even greater awareness of the interaction between the theory and practice of Physical Education explored in the AS. This process helps the candidates to prepare for the synoptic assessment in Unit 2566 (Section B) and in Unit 2567.

5.6.3 Unit Assessment

The candidate's practical performance, knowledge and understanding of Module 2567 is assessed in Unit 2567. The candidate is assessed in the selection, application and improved performance of skills in an open environment (effective performance) in **two** activities together with the evaluation and appreciation of performance through observation and synopsis of knowledge (oral test). Each of the two effective performances and the oral test is assessed out of 30 marks. The evaluation and appreciation of performances through observation and synopsis of knowledge, which is classed as synoptic assessment, contributes 5% to the candidate's final overall assessment. Each candidate offers two activities from different activity profiles. The oral test focuses on **one** of these activities.

5.6.4 Module Content

Candidates will follow a minimum of **two** activities from **different** activity profiles

Ten Activity Profiles

1. Athletic Activities	Track and Field activities
2. Combat Activities	Judo
3. Dance Activities	Dance
Game Activities **4. Invasion Games**	Association Football Basketball Field Hockey Gaelic Football Hurling Netball Rugby League Rugby Union
5. Net/Wall Games	Badminton Squash Tennis Volleyball
6. Striking/Fielding Games	Cricket
7. Target Games	Golf
8. Gymnastic Activities	Gymnastics Trampolining
9. Outdoor and Adventurous Activities	Canoeing Mountain Walking Sailing Skiing
10. Swimming Activities	Competitive Swimming

Additional Activities

A range of additional activities have been approved in which candidates can be assessed for this coursework unit (2567). The list of additional activities together with assessment requirements and criteria can be found on OCR's website (www.ocr.org.uk)

No new additional activities will be added.

Each of the practical activities offered to candidates should be carried out in accordance with the recommendations in '*Safe Practice in Physical Education*' (BAALPE 2004).

The selection, application and improved performance of skills in an open environment

Candidates are assessed on their ability to perform effectively in the contextual situation in which the activity is normally performed. This effective performance is assessed against the criteria identified for each activity.

Throughout the course the candidates is assessed in the normal environment in which the activity takes place. This enable the candidate to develop the acquired and applied skills from the activities they have previously experienced. Centres may want to adapt this 'normal' environment for a variety of reasons, amongst them being:

- the numbers taking part;
- placing greater emphasis on particular skills or tactics;
- making candidates perform under pressure amongst colleagues and opponents of similar abilities;
- time restrictions.

Centres may also wish to utilise situations, which occur outside the normal curriculum time for example, extra curricular activities, representative/club opportunities.

The environment in which the candidate selects, applies and improves their skills as well as being assessed in, must meet the following criteria:

- reflect the open environment in which the activity normally takes place;
- involve the application of the activity's rules, regulations and code of practice;
- have the aim of candidates performing to their optimum;
- enable the candidates to be placed in rank order according to ability.

Evaluation and appreciation of performance through observation and synopsis of knowledge

The candidate's oral response to their observation of a live performance in **one** of their chosen activities is assessed.

The evaluation and appreciation of performance through observation and synopsis of knowledge, which is classed as synoptic assessment, has a maximum of 30 raw marks which contribute 5% to the candidates' final overall assessment.

Video evidence must be available when requested by OCR.

5.6.5 Personal Performance Portfolio

It is recommended that candidates continue to update their Personal Performance Portfolio produced during their AS course. **The Personal Performance Portfolio is not assessed in Unit 2567.** It is a focus of study in the form of a working document that is unique to each candidate and reflects their personal experiences and development. It should enhance the candidate's understanding of the factors that interact and affect performance as well as their skills in developing their strategies for improvement. It provides an invaluable resource to support the candidate's synoptic assessment in Unit 2566 (Section B) and in Unit 2567.

The candidate considers the three main aspects of performance, namely Physiological, Psychological and Socio-cultural aspects. This provides the candidate with the knowledge and understanding to identify the strengths and weaknesses in their own and others' performance and to plan a strategy for their improvement. It is the intention that the candidate draws from experiences in Exercise Physiology together with their studies in Modules 2565 and 2567.

Appendix B gives further information about coursework guidelines.

Further support for Module 2567 is provided in the Teacher Support: Coursework Guidance booklet (2nd Edition) available from OCR Publications Department.

6 Further Information and Training for Teachers

To support teachers using these specifications OCR will make the following materials and services available:

- a full programme of In-Service Training (INSET) meetings;
- specimen question papers and mark schemes;
- past question papers and mark schemes after each examination session;
- coursework guideline materials;
- individual feedback to each Centre on the moderation of coursework;
- a Report on the Examination, compiled by senior examining personnel, after each examination session.

If you would like further information about the specification, please contact OCR.

Other useful contacts are:

BAALPE (British Association of Advisers and Lecturers in Physical Education), 6 The Beacon, Exmouth, Devon, EX8 2AG.

Sports Coach UK, 114 Cardigan Road, Headingley, Leeds, LS6 3BJ

Sport England, Upper Woburn Place, London, WC1H 0QP

The Philathletic Newsletter - Frank Galligan, 9 St Mary's Road, Droitwich, Worcs.

- provides news of events, publications and issues.

7 Reading List

The resources referred to below may prove useful in delivering AS GCE and Advanced GCE Physical Education.

Heinemann have produced a number of textbooks and resources to accompany this course. They have been endorsed by OCR for use with these specifications.

AS

Carnell, D. et al, *Advanced PE for OCR: AS* (Student Book), Heinemann, ISBN 0 435 49954 8

Carnell D. et al, *Advanced PE for OCR: AS* (Teacher Resource Pack – includes CD-ROM), Heinemann, ISBN 0 435 49955 6

Carnell D. et al, *Advanced PE for OCR: AS* (Evaluation Pack – contains one copy of the Student Book and the TRP/CD-ROM), Heinemann, ISBN 0 435 49960 2

Bonney D et al, *Revise for AS PE for OCR* (Revision Book), Heinemann, ISBN 0 435 58315 8

A2

Bonney D. et al, *Advanced PE for OCR: A2* (Student Book), Heinemann, ISBN 0 435 50612 9

Bonney D. et al, *Advanced PE for OCR: A2* (Teacher Resource Pack – includes CD-ROM), Heinemann, ISBN 0 435 50608 0 (Due to be published Oct 2004)

Bonney D. et al, *Advanced PE for OCR: A2* (Evaluation Pack – contains one copy of the Student Book and the TRP/CD-ROM), Heinemann, ISBN 0 435 50607 2

Bonney D. et al, *Revise for A2 PE for OCR* (Revision Book), Heinemann, ISBN 0 435 58314 X (Due to be published Nov 2004)

The list is not intended to be exhaustive nor does inclusion on the list constitute a recommendation of the suitability of the resource for the specification. The list below contains books that are available in spring 2002. The possibility exists that more up to date texts which have been prepared for the revised GCE specifications may become available. Teachers will need to use their professional judgement in assessing the suitability of the material contained in this list.

Centres are advised to stock a selection of magazines/periodicals related to the sport activities in the practical options. PE professional journals are also useful, for example PEA Journal and the BAALPE Bulletin. Sports Coach UK publishes a number of useful handbooks and videos relating to much of the theoretical and physical preparation areas. (Asterisked items are particularly suitable for candidates as well as teachers.)

7.1 Module 2562: The Application of Physiological and Psychological Knowledge to Improve Performance

Section A: Application of Anatomical and Physiological Knowledge to Improve Performance.

Bastian G.F. *An Illustrated Review of Anatomy and Physiology*, Harper Collins 1994

Clegg. C. E*xercise Physiology and Functional Anatomy,* Feltham Press 1995

* Davis R.J. et al. *Physical Education and the Study of Sport*, Mosby 1997

* Davis R.J., Kimmet T. and Auty M. *Physical Education in Theory and Practice*, Macmillan 1986

* Honeybourne J.W., Hill M. and Moors H. *Advanced Physical Education and Sport*, Stanley Thornes 1996

* Kapit W. and Elson L.M. *The Anatomy Colouring Book*, Harper Collins 1993

* Rowett H.G.Q. *Basic Anatomy and Physiology*, John Murray 1975

* Seeley R.R., Stephens T.D. and Tate P. *Essentials of Anatomy and Physiology*, Mosby 1995

Thompson C. *Manual of Structural Kinesiology*, Mosby 1989

* Wesson K, Wiggins N, Thompson G & Hartigan S*. Sport and PE: A Complete Guide To Advanced Level Study*, Hodder & Stoughton 1998.

Section B: Acquiring, Performing and Teaching Movement Skills

*Beashel P. & Taylor J. *Advanced Studies in Physical Education and Sport,* Nelson 1996

*Davis R.J., Bull C.R., Ruscoe J.V, and Ruscoe D.A.. *Physical Education and the Study of Sport*, Mosby 1997

*Davis R.J., Kimmet T. and Auty M. *Physical Education in Theory and Practice*, Macmillan 1986

*Honeybourne J.W., Hill M. and Moors H. *Advanced Physical Education and Sport*, Stanley Thornes 1996

*Magill R.A. *Motor Learning Concepts and Applications*, Brown & Benchmark 1998

Schmidt R.A. *Motor Learning and Performance*, Human Kinetics 1991

* Sharp B. *Acquiring Skill in Sport, Sports Dynamics* 1992

* Wesson K, Wiggins N, Thompson G & Hartigan S. *Sport and PE A Complete Guide To Advanced Level Study,* Hodder & Stoughton 1998.

* Woods B. *Applying Psychology To Sport*. Hodder & Stoughton 1998.

7.2 Module 2563: Contemporary Studies in Physical Education

Cashmore E. *Making Sense of Sport*, Routledge 1997

CCPR *The Palmer Report: Enquiry into Amateur Status*, CCPR 1988

Coakley J.J. *Sport in Society: Issues and Controversies*, Mosby 1998

* Coe S. et al. *More Than a Game*, BBC Books 1993

* Davis R.J. et al. *Physical Education and the Study of Sport*, Mosby 1994

* Honeybourne J.W., Hill M. and Moors H. *Advanced Physical Education and Sport*, Stanley Thornes 1996

Mortlock C. *The Adventure Experience*, Cicerone 1984

* English Sports Council. *England the Sporting Nation: A Strategy*, 1997

*Sports Council. *Why Physical Education*. 1994

*Sports Council. *Good Conservation Practice*. 1991

7.3 Module 2565: Physical Education: Historical, Comparative, Biomechanical and Sport Psychology options

Option A1: Historical Studies in Physical Education

* Davis R.J. et al. *Physical Education and the Study of Sport*, Mosby 1994

* Dunning E. and Sheard K. *Barbarians, Gentlemen and Players*, Robinson 1979

* Harris H.A. *Sport in Britain*, Routledge and Kegan Paul 1975

* Holt R. *Sport and the British*, Clarendon Press 1992

* Mason T. *Sport in Britain*, Faber & Faber 1988

* Polley M. *Moving the Goal Posts*. Routledge. 1998

* Roscoe J. et al. *Physical Education and Sport Studies*. Jan Roscoe Pub. 1998

Option A2: Comparative Studies in Physical Education

* Adair D. & Vamplew W. *Sport in Australian History.* Oxford U.P. 1997

* Calhoun D.W. *Sport, Culture and Personality.* Human Kinetics. 1987

* Cashman R. *Paradise of Sport. Oxford U.P. 1995*

* Davis R.J. et al. *Physical Education and the Study of Sport*, 3rd Ed. Mosby 1998

* Davis, Kimmet and Auty. *Physical Education Theory and Practice,* Macmillan 1986

* Holt R. *Sport and Society in Modern France*, Archon 1982

* ISCPES *Comparative PE & Sport* Vols 3, 4, 5 HK 1986-88, Vol. 6 Stanley Thornes 1989

* Roscoe J. et al. *Physical Education and Sport Studies*. Jan Roscoe Pub. 1998

Option B1: Biomechanical Analysis of Human Movement.

Carr, G. A. *Mechanics of Sport*, 1997

Davis R.J. et al. *Physical Education and the Study of Sport*, Mosby 1994

Hay J. *The Biomechanics of Sports Techniques*, Prentice Hall

* Ecker T. *Basic Track and Field Biomechanics*, Tafnews Press 1985

* Walder P. *Mechanics of Sport Performance* 1994

* Watkins J. *An Introduction to Mechanics of Human Movement*, M.T.P. Press 1986

* Wirhed R. *Athletic Ability and the Anatomy of Motion*, Wolfe 1989

Option B2: Psychology of Sport Performance

* Beashel P & Taylor J. *Advanced Studies in Physical Education and Sport*. Nelson 1996

* Bull S. *Sport Psychology*, Crowood 1991

Cox R H, *Sports Psychology: Concepts and Applications*, McGraw-Hill 1998

* Davis R.J. et al. *Physical Education and the Study of Sport*, Mosby 1997

* Gill D. *Psychological Dynamics of Sport*, Human Kinetics 1986

Hardy L, Jones G and Gould D. *Understanding Psychological Preparation for Sport: Theory and Practice of Elite Performers*, John Wiley 1996

* Honeybourne, J.W., Hill M. and Moors H. *Advanced Physical Education and Sport*, Stanley Thornes 1996

* Gross R.D. *Psychology: The Science of Mind and Behaviour*, Hodder and Stoughton 1992

* National Coaching Foundation *Psychology and Performance* 1996

Weinberg R S and Gould D. *Foundations of Sport and Exercise Psychology*, Human Kinetics 1995

* Wesson K, Wiggins N, Thompson G and Hartigan. *Sport and PE: A Complete Guide to Advanced Level Study*, Hodder and Stoughton 1998.

Willis J and Campbell L. *Exercise Psychology*, Human Kinetics 1992

* Woods B *Applying Psychology To Sport*. Hodder & Stoughton 1998.

7.4 Module 2566: Exercise and Sport Physiology and the integration of knowledge and principles and concepts across different areas of Physical Education.

* Clegg. C. Exercise Physiology and Functional Anatomy, Feltham Press 1995

* Davis R.J. et al. Physical Education and the Study of Sport, Mosby 1994

* Dick F. Sports Training Principles, A. & C. Black 1989

* Fox F.L. Bowen R.W. and Foss M.L. The Physiological Basis for Exercise and Sport, Brown and Benchmark 1989

* Honeybourne J.W., Hill M. and Moors H. Advanced Physical Education and Sport, Stanley Thornes 1996

* Powers S.K and Howley E. T. Exercise Physiology Theory and Application to Fitness and Performance WCB McGraw-Hill 1996.

* Wilmore. J.H. and Costill D.L. Physiology of Sport and Exercise. Human Kinetics. 1994.

* Paish W. Training for Peak Performance, A. & C. Black 1991

* Peak Performance Magazine (subscription only). Stonehart Leisure Magazines Ltd, 67-71 Goswell Road, London EC1V 7EN

* Sharkey B.J. Physiology of Fitness, Human Kinetics 1990

7.5 Modules 2564 and 2567 – Coursework

There are many titles on the market for each of the assessed activities. Centres are advised to select those that include coaching points, strategies and rules, as well as information on the organisation of the sport in the UK. The organisational/administrative aspects are found in publications obtainable directly from governing bodies.

For each of the practical activities it is recommended that candidates should have access to the following texts:

Governing Body Handbook publications covering;

- rules/laws of the activity;
- safety regulations;
- administration and promotion of the activity.

Relevant maps and guides;

A text covering the techniques, tactics and training methods.

The following may be found useful:

All England Netball Association - *Skills in advanced play* – video AENA Netball House 9 Paynes Park Hitchen Herts.

Crouch. H . *Netball Coaching* (2nd Ed), A & C Black 1992

Mortlock C. *The Adventure Alternative*, Cicerone Press 1984

NCF. *Physiology and Performance*, 1995

Mace R. and Benn B. *Gymnastics Skills*, Batsford 1982

Vickers J. *Instructional Design for Teaching Physical Activities*, Human Kinetics 1990

Mountain Activities

Cliff. P. Mountain Navigation 1991

Langmuir. E. Mountaincraft & Leadership, Scottish Sports Council 1984

Mountain & Cave Rescue, M.R.C Handbook

Ogilvie. K. Leading Groups in the Outdoors

Safety in Outdoor Education, D.E.S

Safety on Mountains, British Mountaineering Council

U.K.M.T.B National Guidelines

Appendix A

Key Skills

These specifications provide opportunities for the development of the Key Skills of *Communication, Working With Others, Improving Own Learning and Performance* and *Problem Solving* as required by QCA's subject criteria for Physical Education.

Through classwork, coursework and preparation for external assessment, candidates may produce evidence for Key Skills specifications at Level 3. However, the extent to which this evidence fulfils the requirements of the QCA Key Skills specifications at this level will be dependent on the style of teaching and learning adopted for each module. In some cases, the work produced may meet the evidence requirements of the Key Skills specifications at a higher or lower level.

Throughout Section 5 the symbol  is used in the margin to highlight where Key Skills development opportunities are signposted. The following abbreviations are used to represent the above Key Skills:

C = Communication

WO = Working with Others

LP = Improving Own Learning and Performance

PS = Problem Solving

These abbreviations are taken from the QCA Key Skills specifications for use in programmes starting from September 2000. References in Section 5 and Appendix A, for example **IT3.1**, show the Key Skill (IT), the level (3) and subsection (1).

Centres are encouraged to consider the OCR Key Skills scheme to provide certification of Key Skills for their candidates.

Detailed opportunities for generating Key Skills evidence through this specification are posted on the OCR website, www.ocr.org.uk

Key Skills Coverage

For each module, the following matrix indicates those Key Skills for which opportunities for at least some coverage of the relevant Key Skill exists.

Module	Communication	Working with Others	Learning Performance	Problem Solving
	Level 3	Level 3	Level 3	Level 3
2562	✓		✓	
2563	✓	✓		
2564	✓		✓	✓
2565	✓	✓		✓
2566	✓		✓	
2567	✓	✓		

Appendix B

Coursework Guidelines: Module 2564 and Module 2567

Planning

Coursework is set and marked by the Centre and externally moderated by OCR.

The philosophy of AS GCE and Advanced GCE Physical Education is that the performance of practical activities is a central and integral part of the course. Wherever possible in the delivery of the course, theory is related to practice and practice related to theory. The Advanced GCE course is intended to be taught as a whole rather than as two separate parts. This approach enables candidates to appreciate, as well as to apply, the theoretical concepts.

Physical activities make a significant contribution to aims and objectives, serving as a source of material and to facilitate learning. They should be selected as representative of the varied physical activities available to Centres and to those that candidates have experienced within the National Curriculum and/or GCSE Physical Education. The selection should be influenced by:

- relevance to the course content areas;
- interests, stages of development and abilities of candidates;
- traditions and practices in the Centre and the local community;
- teaching resources and the expertise of staff;
- facilities and equipment;
- time;
- candidate numbers.

Centres may wish to maximise time by combining AS/A2 candidates for some practical activities and indeed the diversity of activities may necessitate the use of extra curricular activities and local clubs as sources of practical activities for candidates. In the latter case the Centre must retain the responsibility for monitoring the work and its assessment.

Centres should also implement continuous assessment, both as a means of allowing candidates to monitor their improvement, and ensuring that if injury/illness occurs, some records are available.

Activity Profiles

These specifications classify physical activities into ten contexts. These contexts are those identified in the National Curriculum with the addition of combat activities. The ten contexts are:

1. Athletic Activities

The performance and refinement of a range of dynamic skills with the intention of improving personal and collective bests in relation to speed, height, distance and accuracy.

Athletic activities - track and field activities.

2. Combat Activities

Performers select, develop, apply and adapt skills, strategies and tactics with the intention of outwitting their opponent in a range of different combats.

Combat activities - judo.

3. Dance Activities

Performers use their imagination and ideas to create, perform, appreciate and develop dances with an awareness of historical and cultural contexts. The artistic intention makes use of rhythm, space and relationships, expressing and communicating ideas, moods and feelings.

Dance activities - dance.

Game Activities

Performers select, apply and adapt skills, strategies and tactics, on their own and in teams, with the intention of outwitting the opposition in a range of different game types.

The Game Activity context is sub-divided into:

4. Invasion Games – *Association Football, basketball, field hockey, Gaelic football, hurling, netball, rugby league, rugby union.*

5. Net/Wall Games – *badminton, squash, tennis; volleyball.*

6. Striking/Fielding Games – *cricket.*

7. Target Games – *golf.*

8. Gymnastic Activities

Performers devise aesthetically pleasing sequences using combinations of skills and agility which they repeat and perform with increasing control, precision and fluency.

Gymnastic activities - gymnastics, trampolining.

9. Outdoor and Adventurous Activities

Performers develop, individually and in teams, the ability to analyse, plan and then respond effectively and safely to physical challenges and problems they encounter in familiar, changing and unfamiliar environments.

Outdoor and adventurous activities – canoeing, mountain walking, sailing, skiing,

10. Swimming Activities and Water Safety

Performers develop the confidence and ability to stay afloat and to swim unaided for sustained periods of time, selecting, adapting and refining their skills so that they can swim safely and engage in a variety of different activities in and around water.

Swimming activities - competitive swimming.

Additional Activities

A range of additional activities have been approved in which candidates can be assessed in for the Coursework Units 2564 and 2567.

The list of additional activities together with assessment requirements and criteria can be found on OCR's website (www.ocr.org.uk).

No new additional activities will be added.

Each Centre will differ in its approach to the range of activities it offers and in the way it structures them. As with their theoretical studies, it is expected that candidates will supplement and enhance their curriculum time with time spent on their practical activities outside their course. Candidates are likely to build on in-depth practical activity experiences gained within Key Stage 4 and in some cases GCSE Physical Education. Centres should enable candidates to continue to experience a broad range of practical activities in order to enhance their application and appreciation of performance issues whilst also specialising in their two selected activities.

In each of Modules 2564 and 2567 candidates follow a minimum of **two** practical activities which are chosen from **two** different activity profiles.

Each of the practical activities offered to candidates should be carried out in accordance with the recommendations in '*Safe Practice in Physical Education*' (BAALPE 2004).

Assessment

Centres must consult the Teacher Support: Coursework Guidance Booklet (2nd Edition) and update which contains the assessment requirements and criteria for practical activities.

In Units 2564 and 2567 candidates are assessed in two activities from two different activity profiles.

Assessment should be continuous, not only to provide candidates with an indication of their progress, but also so that in the case of injury, there is some indication of the candidate's improvement and standard.

In Centres where a diverse range of practical activities is offered to candidates, there may well be occasions when expertise is 'bought in'. This is consistent with the desire to enable candidates, wherever feasible, to capitalise on their strengths in terms of practical activities. Candidates may be assessed in settings outside the Centre by teachers/coaches other than those within the Physical Education department of the Centre. The assessment of practical activities is, however, the responsibility of the teacher who must not only oversee the process, but ensure that there is internal standardisation across the Centre's assessments of all their activities.

These activities must be from **two** different activity profiles. Whilst in many cases candidates progressing from AS to A2 may wish to further their progress in the activities they offered in Unit 2564, they may well wish to enhance the diversity of their physical activity experience by offering different activities for assessment in Unit 2567.

For some physical activities, particularly seasonal activities it may be necessary to assess them in the summer term of the candidate's AS year (ie. cricket, tennis, track and field activities).

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Moderation

Moderation is by means of cluster groups based as far as possible, on geographical distribution. The purpose of the process is to ensure that assessments are standardised across all Centres and that every candidate is treated fairly. A sample of Personal Performance Portfolios will be also be moderated.

A sample of a Centre's candidates will be identified by the Moderator and asked to attend the cluster moderation meeting. Candidates must be accompanied to the moderation by the teacher responsible for internal standardisation, usually the Head of PE Department. This staff member will be fully responsible for the candidates during the moderation and will ensure their health and safety at all times. Candidates may be moderated in both the activities they have been assessed in, but may also be asked to take part in other activities to ensure viable numbers for the standardisation exercise. Cluster moderations will usually last for a day, but Centres can request that, where the programme of activities permits, candidates attend for only part of the day. Candidates should be aware that moderation is part of the examination process. Candidates **must** attend moderation if requested and they should prepare themselves appropriately for the process. If acceptable special circumstances arise which prevent the candidate from attending the moderation session, written evidence confirming the circumstances must be made available to the moderator.