



Wath Sixth Form Subject Preparation Pack

A LEVEL PHYSICAL EDUCATION

World-class learning

World-class learning every lesson, every day

The highest expectations

Everyone can be successful; always expect the highest standards

No excuses

Create solutions not excuses; make positive thinking a habit

Growth mindset

Believe you can improve; work hard and value feedback

Never give up

Resilience is essential; be relentless in the pursuit of excellence

Everyone is valued

Diversity is celebrated; see the best in everyone

Integrity

Be trustworthy and honest; deliver on promises and walk the talk

A LEVEL PHYSICAL EDUCATION Transition Pack

Contents

- What is A level Physical Education?
- Why should I study A level Physical Education?
- What careers could A level Physical Education lead to?
- What will I study?
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What is A level Physical Education?

A Level Physical Education is an academic discipline that develops knowledge, understanding and skills relevant to sporting performance. There is an increasingly scientific approach to sport today, and students can gain an understanding of the science that underpins physical activity. You will also learn how socio-cultural factors in sport affect and contribute to society.

A level PE will allow you to evaluate and analyse your own and others physical performance, as well as demonstrate your ability as either a performer or coach

Why should I study A level Physical Education?

This is an interesting and challenging learning experience, linking key sporting ideas with practical performance and the science behind it, gaining an insight into the relationships they have with each other. You will learn

- The reasons why we do things, why some people out perform others, mentally and physically. You will also delve into the ethical considerations behind the use of drugs and also the influence that modern technology is having in and on physical activity and sport.
- The development of transferable skills including: decision making, psychological understanding of people, independent thinking, problem solving and analytical skills as well as thinking and acting under pressure.

A level PE lessons are enjoyable and productive and delivered by experienced staff in a supportive and nurturing environment. Occasional practical lessons are delivered to teach theoretical concepts and link them with practical skills.

The study of A Level Physical Education opens up a range of possibilities for further study at University degree level, and future careers associated with the subject.

What careers could A level Physical Education lead to?

A Level Physical Education is an excellent base for a university degree in sports science, sports management, healthcare, or exercise and health. Physical Education can also complement further study in human biology, physics, biomechanics, psychology, nutrition, sociology and many more.

It can open up a range of career opportunities to work at the cutting edge of elite sport. For example, supporting top athletes as sports scientists, psychologists, nutritionists, strength and conditioning coaches etc

Alternatively, you may opt to pursue a career in becoming one of the next generation of PE teachers or working within the health or leisure sector, where an understanding of the human body is desirable.

Avenues of progression for students have included careers in medicine, physiotherapy, sports coaching, personal training and careers in the armed services.

The transferable skills you learn through your study of Physical Education, such as decision making and independent learning are also useful in any career path you choose to take.

What will I study?

At Wath Academy we cover the OCR syllabus which covers a breadth of knowledge split across 4 units of study.

Paper 1

Physiological factors affecting performance

Learners develop knowledge of:

Anatomy and physiology

The structure and function of the key systems in the body

Exercise Physiology

Diet, nutrition and ergogenic aids and their effects on physical activity

Fitness components and training principles and methods to improve

Environmental factors affecting sporting performance

Energy for exercise and recovery processes that influence performance

Injury prevention and rehabilitation

Biomechanics

Newton's laws and force.

Lever systems and use of technology to improve performance

Linear and angular motion

Fluid mechanics and Projectile motion

The examination will be two hours in length.

The number of marks for the examination is 90.

30% of total

Paper 2

Psychological factors affecting performance

Learners develop knowledge of:

Skill Acquisition

Skill classification and theories of learning of motor skills.

Stages of learning including guidance, feedback and memory models

Sports psychology

Individual differences affecting performers, group and team dynamics and goal setting

The role of attribution in motivating performers

Confidence and self-efficacy in sport

Leadership in sport

Stress management to optimise performance

The examination will be one hour in length.

The number of marks for the examination is 60.

20% of total

Paper 3

Socio-cultural factors and contemporary issues affecting performance

Learners develop knowledge of:

Sport and Society

Emergence and evolution of modern sport

Global sporting events, - Olympics, hosting impact

Contemporary Issues in Sport

Ethics and deviance in sport, - drugs, violence, gambling

Commercialism and media influences in sport

Routes to excellence in UK

Modern Technology and the impact on sport

The examination will be one hour in length.

The number of marks for the examination is 60.

20% of total

Practical unit

Performance or Coaching in ONE activity

Oral Evaluation and Analysis of performance for improvement

Assessment is internal, with an external moderation

The number of marks for the examination is 60.

30% of total

How will I be assessed?

Three external examinations as above, in the Summer of Y13.

The written papers have questions ranging from 2 to 6 marks, with one extended answer of 10 or 20 marks.

Students will be expected to interpret graphs and figures, and make calculations for quantities in biomechanics.

Internal assessment consisting of an oral analysis of performance, and practical performance or coaching ability, externally moderated in Y13

Recommended resources

OCR A Level PE (Year 1 and Year 2)

Author: John Honeybourne, Sarah Powell

ISBN: 9781510473317

Publisher: Hodder Education

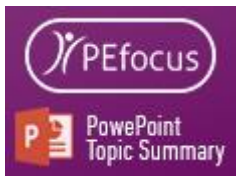


All-in-one textbook for OCR A Level Physical Education. This updated and accessible textbook combines Year 1 and 2 content with brand-new assessment material to provide students with comprehensive support for both the academic and practical elements of the course.

Also available as an etextbook

PE focus do a series of power point summaries for each topic area:

Publisher: Pefocus



Topic Summaries. These cover essential theory knowledge of each topic area in an attractive and appealing format. Both the layout and writing style are clear and logical with carefully chosen and stimulating pictures. For teachers - colourful, custom animated slides, ideal for presenting new work and summing up. For students - a clear set of PDF files with blanks to 'fill in' and keep as a workbook for each area. Each Summary is supplied electronically.

Course Companion for OCR A Level PE: AS & A Level (Year 1)

Author: Thomas Reid

Publisher: ZigZag Education



These clear and comprehensive course notes for AS and A Level (Year 1 only) PE have been written in a student-friendly language and organised in specification order. Includes a topic overview page, accessible notes, end-of-topic consolidation questions and thought-provoking visual images and diagrams.

Some useful websites as well:

OCR Website:

<https://www.ocr.org.uk/qualifications/as-and-a-level/physical-education-h155-h555-from-2016/specification-at-a-glance/>

This website contains the specifications, sample assessment materials and additional resources needed for the course.

You Tube

James Morris, an experienced teacher, delivers some excellent online lessons for all topics of A level PE

Additional resources

There are lots of resources in the media and online that link to the specification and may be useful in developing your wider understanding of key theories and concepts.

Documentary TV programmes on Sport are often useful to watch, for example on Fitness / Training / Nutrition etc.
Or **Netflix** series such as:

- The English Game [Socio cultural history of Football]
- Lance Armstrong Documentary [Drugs/deviance in sport]

TASKS

Aim: The aim of these tasks is to develop your understanding of key content and specific technical language / terms to ease the transition into the study of a new subject at A Level standard. Whilst GCSE PE is not a pre requisite to study A level, by completing the tasks below, you will consolidate or develop knowledge of important content which will inevitably aid your understanding of the course over the first few weeks.

ANATOMY AND EXERCISE PHYSIOLOGY

Skeletal System

To help you prepare for next year you could do some independent research into the first topic of the physiological part of the A level PE which will be the musculoskeletal system.

TASK ONE

Identify the major joints on the skeleton and determine the type of joint for each one.

Eg Elbow = Hinge joint



TASK TWO

Can you now complete the table below, with the addition of ALL the major movements allowed at each of these joints, and with an example from sport

Name of joint	Type of joint	Movements at this joint	EXAMPLE FROM SPORT
Shoulder		Eg Flexion Circumduction	Bowling in rounders Butterfly stroke in swimming
Elbow			
Wrist			
Hip			
Knee			
Ankle			

Extension task

Can you research the THREE PLANES of MOVEMENT and state which plane that each movement takes place in?

EG Flexion and extension at joints occurs on the Sagittal plane

TASK THREE

Identify the following muscles at the joints, on the diagram below:

- SHOULDER: deltoid, latissimus dorsi, pectoralis major, trapezius, teres minor
- ELBOW: biceps brachii, triceps brachii
- WRIST: wrist flexors, wrist extensors
- HIP: iliopsoas, gluteus maximus, medius and minimus, adductor longus, brevis and magnus
- KNEE: hamstring group: biceps femoris, semi-membranosus, semi-tendinosus • quadriceps group: rectus femoris, vastus lateralis, vastus intermedius and vastus medialis
- ANKLE: tibialis anterior, soleus, gastrocnemius

Note: some muscles on the list above are “deep” muscles, meaning that they lie underneath other muscles so may not be visible on the image. Muscles that you can see are known as superficial muscles.

ANTERIOR VIEW



POSTERIOR VIEW



TASK FOUR

Can you create a table to link the JOINT MOVEMENTS with the MUSCLES that cause those movements?

Try and use all the muscle named above

Eg

JOINT	JOINT TYPE	JOINT MOVEMENT	MUSCLE RESPONSIBLE [known as the AGONIST]
Shoulder	Ball and socket	Adduction	Latissimus dorsi

Extension task

For each movement listed below, apply your knowledge to a sporting example.

.RESEARCH THE ROLE OF THE ANTAGONIST MSCLE and complete the table

1. Kicking a ball (execution phase)

Joint name	Type of joint	Joint Movement	Agonist muscle	ANTAGONIST MUSCLE
Knee				

2. Pushing out of the blocks during a sprint start

Joint name	Type of joint	Joint Movement	Agonist muscle	ANTAGONIST MUSCLE
Hip				

3. A chest pass in netball (execution phase)

Joint name	Type of joint	Joint Movement	Agonist muscle	ANTAGONIST MUSCLE
Shoulder				

Can you create your own movement analysis examples from three other different joints?

Find a photo of yourself and create a movement analysis for some of your joints!

TAKE IT FURTHER- BE CREATIVE!!!

Investigate the following types of MUSCLE FIBRES:

- Slow oxidative
- Fast oxidative glycolytic
- Fast gylcolytic

Create a vlog/ video presentation/ podcast to describe these different fibre types. The presentation could also give an explanations of which fibre types are used in which sporting activities and why!

SKILL ACQUISITION

What is skill?

The term “skill can be used in different ways. We can use the word to refer to a task being performed, e.g. the hook in football or the lay-up shot in basketball. We could also use the term to describe how good a performer is at performing in their sport. In other words, it can be used in a qualitative manner.

Classification of Movement Skills

Psychologists have identified a series of characteristics to use when analysing movement skills.

The classifications are not simple or indeed an exact science, due to the changing nature of sporting situations. As a result a **continua** is used to illustrate that skills have characteristics to a greater or lesser extent.

What are continua?

An imaginary scale between two extremes which shows a gradual increase/ decrease in a number of characteristics.

The main classification continua are as follows:

- **MUSCULAR INVOLVEMENT CONTINUUM (GROSS-FINE)**
- **ENVIRONMENTAL INFLUENCE CONTINUUM (OPEN-CLOSED)**
- **CONTINUITY CONTINUUM (DISCRETE-SERIAL-CONTINUOUS)**
- **PACING CONTINUUM (SELF PACED-EXTERNALLY PACED)**
- **DIFFICULTY CONTINUUM (SIMPLE-COMPLEX)**
- **ORGANISATIONAL CONTINUUM (LOW-HIGH)**

TASK ONE - For each of the continua given over the next few pages, you need to:

- Describe each continua
- Give examples of activities that fit into the continua

MUSCULAR INVOLVEMENT CONTINUUM (GROSS-FINE)

What is it?

This is concerned with the precision of movement.

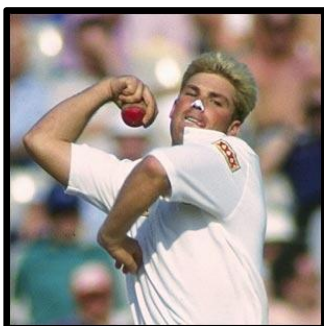
GROSS _____ FINE

What are...

Gross skills



Fine skills



Place the two examples on to the continuum above and add two more examples of your own.

TASK TWO

ENVIRONMENTAL INFLUENCE CONTINUUM (OPEN-CLOSED)

What is it?

This is concerned with how environmental conditions affect the movement skill. Factors such as teammates, opponents, playing surface and weather affect performance.

OPEN _____ CLOSED

What are...

Open skills



Closed skills



Place the two examples on to the continuum above and add two more examples of our own.

TASK THREE

CONTINUITY CONTINUUM (DISCRETE-SERIAL-CONTINUOUS)

What is it?

This is concerned with how clearly defined the beginning and end of the movement skill are.

DISCRETE_____SERIAL_____CONTINUOUS

What are...

Discrete skills



Serial skills



Continuous skills



Place the three examples on to the continuum above and add two more examples of your own.

TASK FOUR

PACING CONTINUUM (SELF PACED-EXTERNALLY PACED)

What is it?

This is concerned with the level of control that the performer has over the timing of the movement skill.

SELF PACED _____ EXTERNALLY PACED

What are...

Self paced skills



Externally paced skills



Place the two examples on to the continuum above and add two more examples of your own.

TASK FIVE

DIFFICULTY CONTINUUM (SIMPLE-COMPLEX)

What is it?

This is concerned with how complex the movement skill is. It is determined by analysing the following aspects:

- Perceptual load together with the degree of decision making
- Time available to carry out the perceptual and decision making tasks
- Quantity of sub-routines together with their speed and timing
- Use of feedback

SIMPLE _____ COMPLEX

What are...

Simple skills



Complex skills



Place the two examples on to the continuum above and add two more examples of your own.

TASK SIX

ORGANISATIONAL CONTINUUM (LOW-HIGH)

What is it?

This is concerned with how closely linked the sub-routines of the movement skill are.

LOW _____ HIGH

What are...

Low organisation skills



Highly organised skills



Place the two examples on to the continuum above and add two more examples of your own.

SKILL ACQUISITION- TEST YOURSELF

Explain why a sporting activity of your choice is classed as a serial skill.

Explain why a sporting activity of your choice is classed as a highly organised skill.

Explain why a sporting activity of your choice is classed a complex skill.

Justify how a games players could use a range of different types of skill within a performance

TAKE IT FURTHER- BE CREATIVE!!!

Investigate the following types of practice:

- Part
- Whole
- Progressive Part
- Whole Part Whole

Create a vlog/ video presentation/ podcast to describe these types of practices. The presentation should also give details of which skills could be developed via these practice methods and explain why.

SOCIO CULTURAL

Emergence and evolution of modern sport

Watch 'The English Game' series on NETFLIX which charts the history of Football, and gives a good insight into the development of sport in society, and the factors that affected it.

[Spot the ex Wath A level PE student who plays the captain of one of the teams in it!]

Global Sporting Events

Explain the Aims and Background of the Olympic Games [1896]

Research the following Olympic games. There is lots of information on the internet, including you tube videos!

1936 Berlin

1968 Mexico

1972 Munich

1980 Moscow

1984 Los Angeles

These games were particularly significant in the history of the Olympics because of their POLITICAL EXPLOITATION. Write a paragraph on each of the above games, explaining what happened and why.

We look forward to welcoming you in September!