Wath Sixth Form Subject Preparation Pack

A-LEVEL PHYSICAL EDUCATION

<table>
<thead>
<tr>
<th>World-class learning</th>
<th>The highest expectations</th>
<th>No excuses</th>
<th>Growth mindset</th>
<th>Never give up</th>
<th>Everyone is valued</th>
</tr>
</thead>
<tbody>
<tr>
<td>World-class learning every lesson, every day</td>
<td>Everyone can be successful; always set and expects the highest standards</td>
<td>Create solutions not excuses; make positive thinking a habit</td>
<td>Believe you can improve; work hard and value feedback</td>
<td>Resilience is essential; be relentless in the pursuit of excellence</td>
<td>Diversity is celebrated; see the best in everyone</td>
</tr>
</tbody>
</table>
A LEVEL PHYSICAL EDUCATION Transition Pack

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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 outperform others, mentally and physically. You will also delve into the ethical considerations behind the use of drugs and the influence that modern technology has 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.
Meet the staff

Mr Thompson – Head of PE Faculty

I am an experienced 6th form teacher. I have led BTEC National L3 Sport for a number of years and lead on a number of units including Sports Coaching, Application of Fitness Testing, Skill Acquisition and the exam unit Investigating Business in Sport. At University I studied Sport Psychology and love teaching the Sport Psychology section of A level PE. I enjoy sharing my passion for this subject and hopefully passing some of that passion onto my students.

I love all sports and have played competitive cricket, rugby and skiing over the years. I have played at Wath Rugby Club since I was 8 years old and still try to play as I get older (just at a slower pace!). I love playing because of the sense of team spirit you get from battling physically with your mates for 80 minutes as well as enjoying the social side afterwards with your team and often opponents. My greatest achievement in Sport has been playing to county standard in both cricket and rugby up to U18 and I look forward to playing for a little while longer yet.

Mr Hopkin – PE Teacher and Assistant Vice Principal

As you will see from my sporting background below, I have a passion for sport! By studying A level and BTEC sport you get to cover such a wide range of topics ranging from Physiology and Sport Psychology to Coaching and Leadership. I particularly enjoy teaching Sport Psychology as I particularly enjoy analysing the various ways in which your mind and mental state can impact on your physical performance.

I grew up playing as many sports as possible. At school, my main sport was swimming as I competed at a national level, but I also played a lot of football, rugby, hockey and badminton. As an adult I focused a lot more rugby. I started playing for Wath Rugby Club when I started to teach P.E at Wath Academy. I have had the privilege of playing in cup finals at Twickenham twice which were awesome experiences. Playing sport teaches you so much about yourself. The feeling when you achieve a goal, after pushing yourself further than you thought was physically possible is a rewarding experience somewhat unique to the world of sport!

Mr Wesson – PE Teacher and Associate Assistant Vice Principal

I currently deliver the Practical Sport unit to Y12 students. This is my favourite unit to teach as it requires students to investigate, in detail, all elements of the sports they play. This develops their understanding of performance and teaches them how to improve their own personal skills. Students will study their favourite and often best sport but studying a second sport widens their understanding of sport in general.

I have always loved playing many sports and at school I was most successful at athletics and rugby. In athletics I competed at the English Schools Championships as a Junior Hurdler and in rugby I represented Yorkshire and the North of England as well as trialling for England in the U16 age group. As an adult I have continued to play rugby for Wath Rugby Club, playing at Twickenham in 2012. I also have a passion for other sports and run the school ski trip each year. I have also competed in the London Triathlon and regularly exercise to keep fit and healthy.
Mr Evans – PE Teacher i/c Alternative Provision Base

I am an experienced teacher of both A level Exercise Physiology and various units at BTEC National. I will work hard at maximising your potential and take great pleasure in assisting you to the next stage of your PE journey be that into further education in a sports related course or securing a full-time job.

I have been involved in sport now for about 45 years. I first started at junior school where I was captain of the West Wales under 11 rugby team. The success of representative sport was definitely my key driver as I loved being good at something and challenging myself to get better. Rugby became even more important as I moved through secondary school. I have been really lucky to travel and play in different countries and made lots of lifelong friends. The relationship you build on the field of play is like no other. It’s one of the reasons I became a PE teacher and am still actively involved in watching sport.

Mrs Thompson – Leader of A Level PE

I am an experienced Sixth Form teacher, having been at Wath for many years, both as Head of Faculty, and now as a semi-retired part timer! I still love the challenges of teaching and the satisfaction of seeing hardworking students attain their goals. I have seen many of my ex-students go on to university and develop careers in sport / activity related fields, which makes me extremely proud. Indeed, some of them are now teaching colleagues at Wath! I teach across both the A level and BTEC specifications. My specialist areas are Anatomy and Exercise Physiology and I enjoy keeping up to date with the current science in the sporting / fitness and training world. I also enjoy teaching the historical socio-cultural aspects of sport and the contemporary issues that affect sport globally, which give a fascinating insight into the relationship between sport and society.

A love of sport was instilled through my sports mad parents and my favourite lessons were always PE, whether it was games, athletics, gym or dance. I played county netball and took part in representative athletics. My two best friends were made through sport, I met my husband through sport, and my career has been based on a love of physical activity, - teaching PE and trying to inspire children to lead healthy, active lives. My competitive playing days are long gone, but I'm still a bit of a fitness fanatic. I regularly attend a gym, cycle and run, and have just taken up tennis after years of never having time to play!

Mrs Platt – Leader of BTEC Sport

I have been teaching PE for 12 years and over those year I have taught across GCSE PE, Level 2 and 3 BTEC as well as A Level. I joined Wath a year ago and now I have responsibility for the BTEC courses on offer. The success of Wath’s PE department is what drew me back to my roots. Teaching at Wath one day was my dream within my career and I am proud to do so. Across Level 3 BTEC I currently deliver the Professional Development and Sports Leadership units. Both units of work are very different in terms of content but give a great insight into the world of PE and Sport.

I play sport and exercise because of the opportunities that were given to me when I was at school. My PE teachers were my role models and they inspired me to do the job that I love so much. My favourite sport to play is hockey. I have played hockey throughout my school and university years and more recently for Barnsley Ladies 1st Team. In my younger years I was a keen athlete and I have competed for Rotherham on several occasions. I have a love for any team sport and no matter the occasion, my inner competitiveness always appears!
Mr Oldfield – PE Teacher and Academic Year Leader

I have always had a keen interest in Sport especially games such as football, cricket and tennis. My favourite subject at School was always Physical Education which led to me studying it at GCSE, A level and at university. There are some really interesting units that you study at A Level and BTEC with Sports Coaching been my personal favourite. I have coached football for a number of years now and experienced coaching abroad in California, Philadelphia and Hawaii as well as working for a professional football academy at Sheffield United. Other units I enjoy and usually deliver at BTEC National are Leadership and Professional Development and Psychology at A level. Hopefully I will see you in the classroom soon to develop your knowledge and understanding further.

Mr Taylor – PE Teacher and Academic Year Leader

I grew up playing and watching as many sports as possible. I represented school and played for local teams in a variety of sports. Most notably I represented South Yorkshire School boys U18 at Football. This led to a soccer scholarship in the USA after studying A Levels. I have been really lucky to travel and play in different countries and made lots of lifelong friends. After studying PE at university, I was able to play semi-professionally alongside my job as a PE teacher at Wath.

I teach PE as I believe it plays a vital role in promoting physical activities and a healthy lifestyle in a positive and enjoyable way. As a PE teacher, I enjoy the responsibility of helping students develop their abilities in a range of physical activities and sports. I teach across all of the age range at Wath but particularly enjoy teaching Sixth Form students. At A Level I am currently teaching the Sport and Society section of the Year 12 specification and the Contemporary Issues in Physical Activity section at Y13.

Mr Flowers – Football Development Manager

I teach PE because of the opportunity to help students find their career pathway in sport. Sharing a common hobby of sport, and hearing about everyone’s different experience within it, allows you to make the subject enjoyable and relatable. I have predominately taught Professional Development, a unit that specifically focus on career choice and the multiple ways to be successful in interviews, job applications and your pathway in sport.

I play both football and golf in my spare time. I have a handicap of 20 in golf and have played for a variety of local football clubs in Lincolnshire before playing for the Leeds Beckett University men’s side. I also played for Stamford AFC at Youth level, who’s men side competed within the Evo-Stik at the time. I play both sports for the level of competition and enjoyment, both individual and as part of a team.
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 e-textbook

**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. 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.

**Useful websites:**

**OCR Website:**

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

**YouTube**
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]
Transition 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 prerequisite 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, complete independent research into the first topic of the physiological part of the A level PE course 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

Complete the table below, with the addition of ALL the major movements allowed at each of these joints, and with an example from sport.

<table>
<thead>
<tr>
<th>Name of joint</th>
<th>Type of joint</th>
<th>Movements at this joint</th>
<th>EXAMPLE FROM SPORT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shoulder</td>
<td></td>
<td>Eg Flexion</td>
<td>Bowling in rounders</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Circumduction</td>
<td>Butterfly stroke in swimming</td>
</tr>
<tr>
<td>Elbow</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wrist</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hip</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knee</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ankle</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 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:** ilioptosas, 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.*
**TASK FOUR**
Create a table to link the JOINT MOVEMENTS with the MUSCLES that cause those movements. Try and use all the muscles named above

Eg

<table>
<thead>
<tr>
<th>JOINT</th>
<th>JOINT TYPE</th>
<th>JOINT MOVEMENT</th>
<th>MUSCLE RESPONSIBLE [known as the AGONIST]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shoulder</td>
<td>Ball and socket</td>
<td>Adduction</td>
<td>Latissimus dorsi</td>
</tr>
</tbody>
</table>

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

**RESEARCH THE ROLE OF THE ANTAGONIST MUSCLE and complete the table**

1. Kicking a ball (execution phase)

<table>
<thead>
<tr>
<th>Joint name</th>
<th>Type of joint</th>
<th>Joint Movement</th>
<th>Agonist muscle</th>
<th>ANTAGONIST MUSCLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knee</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. Pushing out of the blocks during a sprint start

<table>
<thead>
<tr>
<th>Joint name</th>
<th>Type of joint</th>
<th>Joint Movement</th>
<th>Agonist muscle</th>
<th>ANTAGONIST MUSCLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hip</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. A chest pass in netball (execution phase)

<table>
<thead>
<tr>
<th>Joint name</th>
<th>Type of joint</th>
<th>Joint Movement</th>
<th>Agonist muscle</th>
<th>ANTAGONIST MUSCLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shoulder</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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 glycolytic

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 **continuum** 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-SEGMENTED-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 continuum
- 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

![Gross Skills Image](image)

Fine skills

![Fine Skills Image](image)

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

![Open Skills Image](image)

Closed skills

![Closed Skills Image](image)

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 player 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.
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 Youtube 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!