Subject	**Physical Education**
Course	**A-Level**
Awarding Body	**Edexcel**

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Course/specification overview

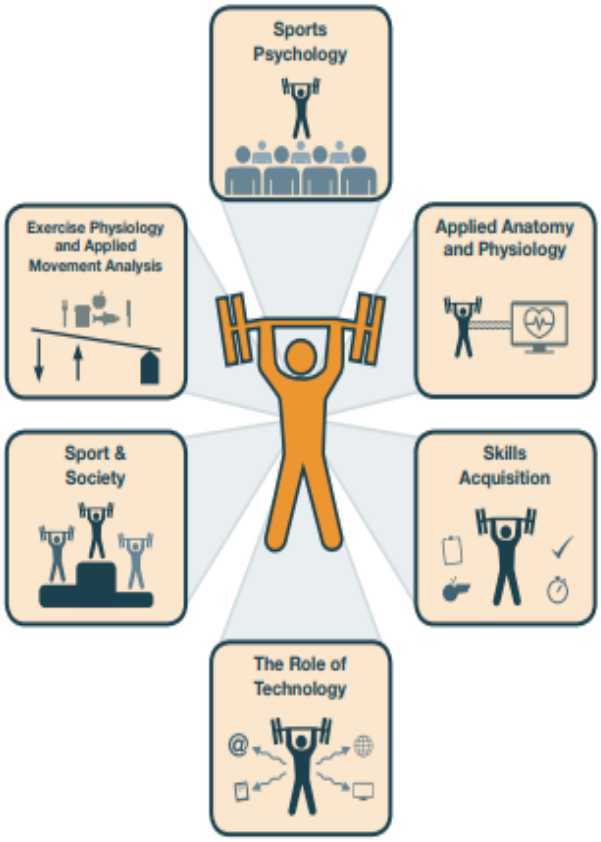
A Level PE is a linear course and will be studied over two years. Below is the specification overview. If you click on the links it will take you to the AQA specification online.

Subject content (click on links below)

- 1. Applied anatomy and physiology
- 2. Skill acquisition
- 3. Sport and society
- 4. Exercise physiology
- 5. Biomechanical movement
- 6. Sport psychology
- 7. The role of technology in physical activity and sport

Encourages a holistic understanding of PE

Our new AS and A level PE qualifications will further develop students' understanding of how the mind and body works in relation to performance in physical sport whilst also engaging them with key issues and themes relating to contemporary global influences on physical education.



Nurtures skills and knowledge for progression to further study

Our Edexcel AS and A level Physical Education specifications have been designed to ensure sensible progression of content from GCSE to A level and include similar approaches to assessment.

- **Builds on the understanding developed at GCSE** while also supporting learners choosing to begin their study of PE for the first time.
- **Encourages learners to become more competent, confident and expert** in their techniques, and apply them across different sports and physical activities.
- **Helps students develop important transferable skills** for progression to the next level, including numeracy, communication and an understanding of practical performances.
- The blend of scientific and social knowledge **strongly positions students to access** a growing number of physical education, sport and physical activity **higher education** programmes **or employment** in the sport, leisure and tourism sector.
- The **AS and A level** Physical Education specifications have been designed to be **co-teachable**, with the same topics at both AS and A level.

Topic links from GCSE to A level

GCSE	AS and A level
Applied Anatomy and Physiology →	Applied Anatomy and Physiology
Movement Analysis →	Exercise Physiology and Applied Movement Analysis
Sports Psychology →	Skills Acquisition and Sports Psychology
Socio-Cultural Influences →	Sport and Society
Health Fitness and Well-being	
Physical Training	
Personal Exercise Programme (PEP) →	Performance Development Programme (PDP) through Performance Analysis at AS level.

The role of technology is embedded throughout AS/A level.

The use of data is embedded throughout GCSE and AS/A level.

AS and A level Physical Education 2016

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How is the course structured?

The course consists of **four** components:

- **Component 1** - you will learn about the physiological and biomechanical workings of the body. You will be introduced to the anatomical make-up of a performer and how this works alongside training, nutrition and recovery to impact performance.
- **Component 2** you will develop knowledge of the psychological and social principles that underpin physical education and sport. You will explore the role that sports psychology has in facilitating optimal sporting performance of an individual athletes and sports teams.

AS and A level Physical Education 2016

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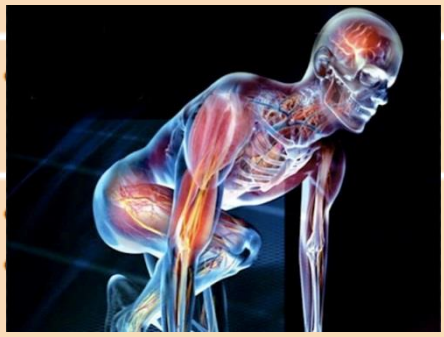
- **Component 3** you will develop your practical skills in the role of either a player or a coach. You will demonstrate a range of skills, tactics and strategies or compositional ideas while under pressure, in both a conditioned practice and a formal/competitive situation.

- **Component 4** you will undertake an independent study to complete a Performance Analysis and a resulting Performance Development Programme (PDP) in your chosen sport as a performer or coach.

	• Sport and society	⚖ 30%
Component 3: Practical performance		✓ 40 marks ⚖ 15%
Component 4: Performance Analysis and Personal Development Programme		✓ 40 marks ⚖ 15%



Here you can see how parts of the A level specification can be explored through students producing a Performance Analysis and then developing a Personal Development Plan (PDP)* in their chosen physical activity. Students will investigate two components of their activity - first the physiological component and then either the technical or tactical component.

Physiological component

Analysing a physiological component of an activity

2.2 – Preparation and training methods in relation to maintaining and improving physical activity and performance.

Analyse appropriate fitness tests

2.2.2 Fitness tests: functional thresholds, lactate threshold/anaerobic threshold/maximum steady state, gas analysis, multi-stage fitness test, step tests, yo-yo test, Cooper minute run, Wingate test, maximum accumulated oxygen deficit (MAOD), RAST (repeat anaerobic sprint test), Cunningham and Faulkner, jump tests, Margaria-Kalaman, strength tests, agility tests, sprint tests < 100m.

2.2.3 Interpret, calculate and present data (tables and graphs) based on fitness test results.

Analyse which component of fitness will help to enhance performance

2.2.5 Components of fitness: localised muscular endurance, vO2 max, anaerobic capacity, maximal strength, strength, power, speed, agility, coordination, reaction time, balance, flexibility, exercise economy, maximal and submaximal aerobic fitness.

Explore which method of training is appropriate and why?

2.2.11 Methods of training and their appropriateness for different activities: interval, circuits, cross, continuous, fartlek, flexibility (static, ballistic and proprioceptive neuromuscular facilitation (PNF)), weights (free weights and machines), resistance (including pulleys, parachutes), assisted (including bungees, downhill), plyometrics, speed agility quickness (SAQ) and functional stability. Advantages and disadvantages of each method of training.

Technical component

Analysing a technical component of the activity

- Analyse data.
- Analyse 3 phases of one core skill.
- Compare results with a higher level performer.
- Identify strengths and weaknesses and justify areas for development.

Choose one

Tactical component

Analysing a tactical component of the activity

- Analyse qualitative and/or quantitative data of one tactic in the activity.
- Analyse how to adapt the tactic to changing circumstances.

* AS does not include a PDP

Our department expectations

Have at least a **97%** or higher attendance to lessons.

It is important that you attend all lessons as this will allow you to gain the knowledge you need to complete the course. Reading around the subject to develop your knowledge is also recommended.

Work at or above your target grade in homework and module tests.

Complete work set on the Everlearner. You will need to also ensure you use the Everlearner effectively for independent learning

Complete **ALL** homework and classwork even if you are absent from lessons.

Participate in extra-curricular sport and have a commitment to an active healthy lifestyle.

It is vital that you take part in a sport on a regular basis, at least once a week. This will help with your final assessment and it shows your commitment to sport. Your final assessment will either involve video evidence or a live moderation of one sport looking at skills in isolation and competitive performances

Attend PE moderation if called by exam board. Moderation of your practical is **compulsory** and part of your exam. It is a requirement of the exam board that you attend.

Attend mock and final practical assessments.

Read around the subject. It is vital that you not only complete the work you are set but you read about each of the topics you are working on. This will not only help you understand the work being covered it will also give you valid examples to use in your answers. See possible articles to read below.

The following pages outline several resources that you can use to start your knowledge for the topics covered in A Level PE. You will find podcasts to listen to, YouTube clips and TED talks to watch and books/articles to read. It is not vital that you complete them all, but it will help with information and knowledge relating to A Level PE before you start the course in September. You should be able to click on the link and this will take you to the relevant resource.

Watch

TED Talks

Watch this TED talk with Martin Hagger who is a Professor of Psychology at Curtin University.

Martin will provide an overview of the kinds of techniques that elite athletes use to prepare psychologically for their sport, give details of the scientific research into these techniques and how they work, and how the techniques might be used by competitive athetes and coaches to maximise performance.

https://www.youtube.com/watch?v=yG7v4y_xwzQ

Watch this TED talk in which Valorie Kondos Field, long-time coach of the UCLA women's gymnastics team, shares the secret to her success. Hint: it has nothing to do with "winning."

Why Winning doesn't always equal success

https://www.youtube.com/watch?v=JJyeKiT8g4g

Watch this TED talk in which Diana Nyad tells her inspirational story.

In the pitch-black night, stung by jellyfish, choking on salt water, singing to herself, hallucinating ... Diana Nyad just kept on swimming. And that's how she finally achieved her lifetime goal as an athlete: an extreme 100-mile swim from Cuba to Florida -- at age 64. Hear her story.

Watch this TED talk in which David Epstein discusses the role of technology in sport and how the sporting body type and shape has evolved.

When you look at sporting achievements over the last decades, it seems like humans have gotten faster, better and stronger in nearly every way. Many factors are at play in shattering athletic records, and the development of our natural talents is just one of them.

https://www.youtube.com/watch?v=8COaMKbNrX0

Television

Gamechangers (Netflix) – A really interesting film which looks at uncovering the truth about meat, protein and strength, showcasing elite athletes and cutting edge science.

Icarus. 2017- A film around doping within sport and current issues surrounding the use of drugs within sport.

Stop at Nothing 2014 – Filmmaker Alex Holmes creates an explosive portrait of disgraced cyclist Lance Armstrong.

Live Sporting Events- This will support how you show your understanding by using current examples from sport.

YouTube Clips

- Venous Return https://www.youtube.com/watch?v=J80hhCkLuaA
- Stages of Learning https://www.youtube.com/watch?v=n7UcobScnck
- The ancient origins of the Olympics https://www.youtube.com/watch?v=VdHHus8IgYA
- Diet and Supplements https://www.youtube.com/watch?v=pBAPapMCRIo
- Newton's Laws https://www.youtube.com/watch?v=08BFCZJDn9w https://www.youtube.com/watch?v=e1lzB36aHD4 https://www.youtube.com/watch?v=qu_P4lbmV_I
- Aggression in Sport https://www.youtube.com/watch?v=DlrTha8cbAI
- Doping in athletics https://www.youtube.com/watch?v=NLfbqqAEKwo
- BBC Lionesses World Cup 2019 https://www.youtube.com/watch?v=y_OaFsaY-ck
- "Is Professionalism Killing Sport?" https://www.youtube.com/watch?v=h8eKMdHxig8
- The Kobe Bryant short animated film - https://www.youtube.com/watch?v=8Q1LSZc4hDg https://www.youtube.com/watch?v=J3N5HewglNs
- Tom Browns School days https://www.youtube.com/watch?v=-jXaGC4Ta_4
- Addicted to Protein https://www.youtube.com/watch?v=sxy6mYW94ws

Listen to

Listen to this radio programme from the BBC World Service. Sports Hour is a lively Saturday morning sports show with reports, debate and humour. There are over 280 shows available covering all world sport.

BBC World Service: Sports hour

Listen to this radio programme.

This is a daily podcast bringing you the latest from the Premier League, EFL, European football and more.

BBC Radio 5 live

Talksport radio

Listen to this podcast with ex professional footballer Peter Crouch which documents his experiences as a professional footballer

The Peter Crouch Podcast

Listen to this podcast from the British Journal of Sports Medicine. It covers all sorts of aspects of Sports Medicine, from the science behind running shoes to the power of sleep.

BJSM Podcast

Read

Reading List

Books

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

Walder, P. 1998. *Mechanics and Sport Performance*. Feltham Press

Honeybourne, J. 2006. *Acquiring Skill in Sport: An Introduction*. Routledge

Bean, A. 2017. *The Complete Guide to Sports Nutrition.* Bloomsbury Publishing.

Gareth Thomas Proud – Autobiography of Britain's first openly-gay professional rugby player

Tyson Fury Behind the Mask – Tyson opens up about his life, career and struggles with mental health. A real inspirational story

Serena Williams My life – Story of arguably the greatest female tennis players of all time. An inspirational story.

Read this article which explores the impact that coronavirus has had on global sport

https://www.weforum.org/agenda/2020/04/sports-covid19-coronavirus-excersise-specators-media-coverage/

Read this article which explores the science behind wearing a helmet in sporting activities and how helmets are there to stop brain fracture and not concussion.

Football helmets don't protect against concussion - and we're not sure what does

Read this article

which explores some of the key gender issues in sports.

Sports are designed around men - and that needs to change

Ideas TED

Read this article

Which looks at the 6 technological advancements that have changed the face of sport

https://www.workinsports.com/blog/six-technological-advancements-that-have-changed-sports/

Research

Scholarly Articles

Polley, M. 2008. *'The amateur rules': Amateurism and professionalism in post-war British athletics*. Contemporary British History, pages 81-114.

Quennerstedt, M. Ohman, M & Armour, K. 2014. *Sport and exercise pedagogy and questions about learning.* Sport, Education and Society, pages 885-898.

Alexandris, K. Tsorbatzoudis, C. & Grouios, G. 2017. *Perceived Constraints on Recreational Sport Participation: Investigating their Relationship with Intrinsic Motivation, Extrinsic Motivation and Amotivation*, Journal of Leisure Research, pages 233-252.

Zaichkowsky, L. 2004. *Arousal in Sport*. Applied Psychology.

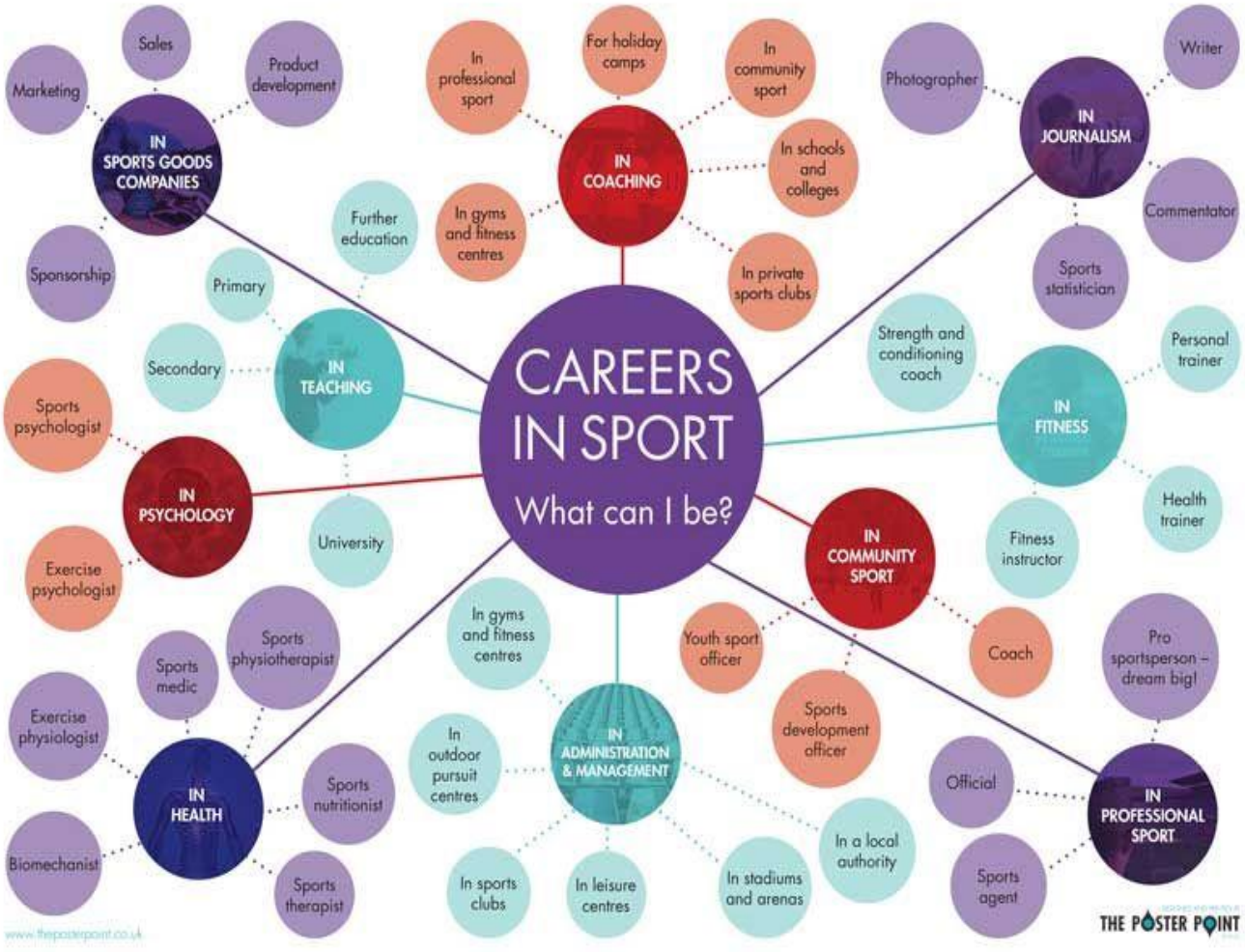
Weinberg, R. S. (2002) *Goal setting in sport and exercise: Research to practice*. *Exploring sport and exercise psychology,* pages 25-48.

Tomas M and Burns P (2016)The effect of strength training on muscle mass (hypertrophy)

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4836564/

Moraska A (2005) A comprehensive look at sports massage

https://www.researchgate.net/profile/Albert_Moraska/publication/7535422_Sports_massage_A_comprehensive_review/links/0912f5093f2c326722000000.pdf



Career opportunities – Have a look through some of these articles and prospectuses to see where a career in sport could take you.

<u>Information and research on sports related careers</u>

https://www.bachelorsportal.com/articles/606/bachelors-degrees-in-sports-and-related-careers-are-a-slam-dunk-for-future-professionals.html

Example of Sports Science degrees at Leeds University - https://www.youtube.com/watch?v=aaP1PF5Btq8

What is Sports Management? – https://www.youtube.com/watch?v=of-poWTX5NQ

Working alongside the Manchester City Physiotherapist - https://www.youtube.com/watch?v=Zu1EKF_dNVk

A day in the life of a Sports Psychologist - https://www.youtube.com/watch?v=C1K1ySWCS6s

Meet the strength and conditioning coach for Harlequins –
https://www.youtube.com/watch?v=VXv3UAfZ4m4

Sports Nutritionalist and Personal Trainer -
https://www.youtube.com/watch?v=kO6Y9ZXpsGY

Sports Coaching and Physical Education -
https://www.youtube.com/watch?v=v5fdXdgC6tY

BSC Sports Therapy at the University of East London -
https://www.youtube.com/watch?v=bRY9nhPWfU8

Complete

Tasks – to be completed and brought with you to the first lesson in September.

Task 1- Anatomy and Physiology task

Levers in Sport- using the YouTube clip below for background information and recapping from GCSE level, complete a table to demonstrate knowledge and understanding of levers within sport.

https://www.youtube.com/watch?v=d1wS_OlJzmI

Lever Type	1st class lever	2nd class lever	3rd class lever
Diagram of lever			
Where it can be found in the body – provide two examples			
Give 2 examples of where the lever system can be used in sport			
What is the mechanical advantage of the lever system			
What is the mechanical disadvantage of the lever system			

Task 2 – Skill Aquisition

Theories of Learning- research the following four theories of learning. Create a power point presentation highlighting the key features of the theory, how this might relate to learning within sport and the positives and negatives of the theories application within sport.

- Operant conditioning
- Observational learning
- Social development theory
- Insight learning

Task 3 – Sport in Society

Increasing participation in sport- create a promotional video/advert for one of the national partners aiming to increase participation in sport. In the video/advert include the aims of the partner, the benefits to increasing participation and outline strategies already in place.

Task 4 – Exercise physiology

Design 3 different training programs; one for a marathon runner, one for a long jumper and one for a shot putt thrower. Justify your choices of the key training methods you have applied within the program.

- You will need to research and include the components of fitness for each athlete
- You will need to research and include the different principles of training that you would use
- You will need to select the fitness tests most appropriate for your athlete and discuss when you would test their fitness in your plan

Task 5 - Biomechanics

Calculate the speed of Usain Bolt in the 100m.

Time= 9.58 seconds

Calculate the speed of Mo Farah in the 5000m.

Time= 12 minutes 53 seconds

Calculate the speed of Allyson Felix in the 400m

Time= 49.26 seconds

Task 6 – Sports Psychology

Complete the personality test.

https://www.quietrev.com/the-introvert-test/

Explain the role personality plays on sporting performance.

Task 7 – Performance analysis

Watch a sporting match of your choice. Create a notational analysis table including the keys skills demonstrated within the game. Tally the number of times each skill is completed within a game by one of the individual performers.