

BTEC Level 3

Extended Diploma in Sport

TRANSITION PACK

Year 11 – Year 12



The expectation is that the entire
booklet is completed.

<u>Unit Section</u>	<u>Time Estimated</u>
Unit 1: Anatomy and Physiology	2.5 hours
Unit 2: Fitness Training and Programming for Health, Sport and Well-Being	4 hours
Unit 4: Sports Leadership	2 hours
Unit 7: Practical Sports Performance	2 hours
Unit 31: Current Issues	2 hours

Work through this pack and type it in a word document (create PowerPoint slides where indicated) If you prefer to print and fill in by hand that is accepted. Ensure your name is clearly stated in the header. Submit ALL work by 1st July. As this is Year 12 preparation, your first port of call is to do some research yourself, however if you are still struggling and require help please email

BTEC Sport Extended Diploma Specification:

For the full specification please visit <https://qualifications.pearson.com/en/qualifications/btec-nationals/sport-2016.html>

YEAR UNIT COVERED	UNIT NUMBER	UNIT TITLE	HOW IT IS ASSESSED?
First	1	<u>Anatomy and Physiology</u>	<u>External – Written Exam (1.5 hours)</u>
First	2	<u>Fitness Training and Programming for health, Sport and Well Being</u>	<u>External – Written (scenario given; notes taken in) 2 hours 30 mins</u>
First	3	Professional Development in the Sports industry	Internal – coursework
First	4	Sports Leadership	Internal – coursework
Second	6	Sports Psychology	Internal – coursework
First	7	Practical Sports Performance	Internal – coursework
Second	8	Coaching for Performance	Internal – coursework
Second	9	Research Methods in Sport	Internal – coursework
First	10	Sports Event Organisation	Internal – coursework
Second	17	Sports Injury Management	Internal – coursework
Second	19	<u>Development and Provision of sport and Physical Activity</u>	<u>External – Written (scenario given; notes taken in) 2 hours 30 mins</u>
Second	22	<u>Investigating Business in the Sport and Active Leisure industry</u>	<u>External – Written (scenario given; notes taken in) 3 hours</u>
Second	23	Skill Acquisition in sport	Internal – coursework
First	31	Current Issues in Sport	Internal – coursework

This course is equivalent to three A Levels. It is a full time two year course.

Each unit will be graded: Pass, Merit, Distinction

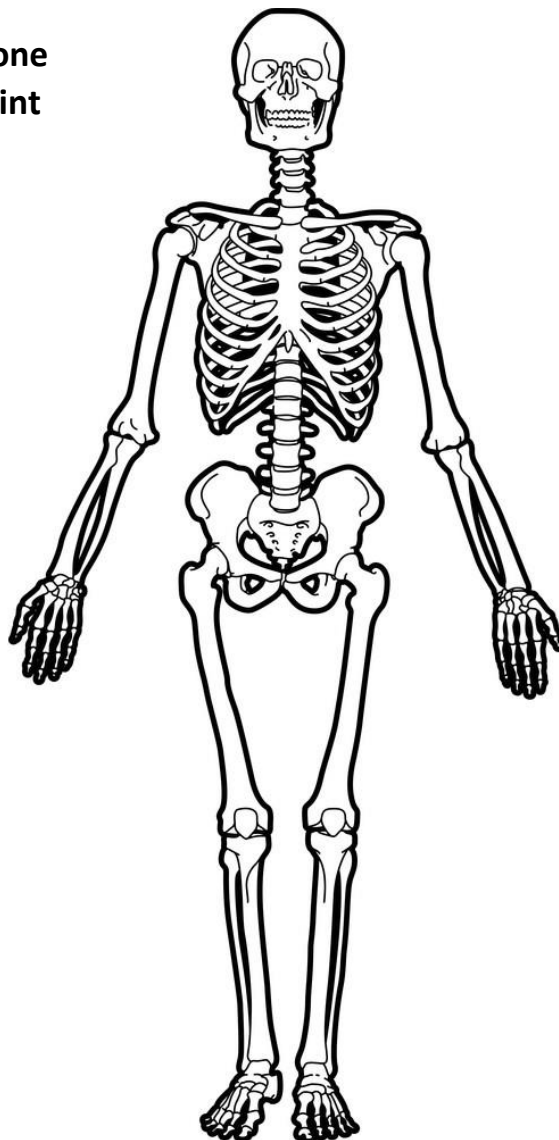
The overall grades at the end of the course will be presented as PPP - DDD

The aim of this transition pack is to give you a taster into some of the units that are studied across BTEC Sport. It is broken down into the 5 of those units All content is an insight into the first year of the BTEC Course. For any GCSE PE students you should use this knowledge as a foundation to answer the pack in detail. Each Unit should take no more than 3 hours.

Unit 1: Anatomy and Physiology

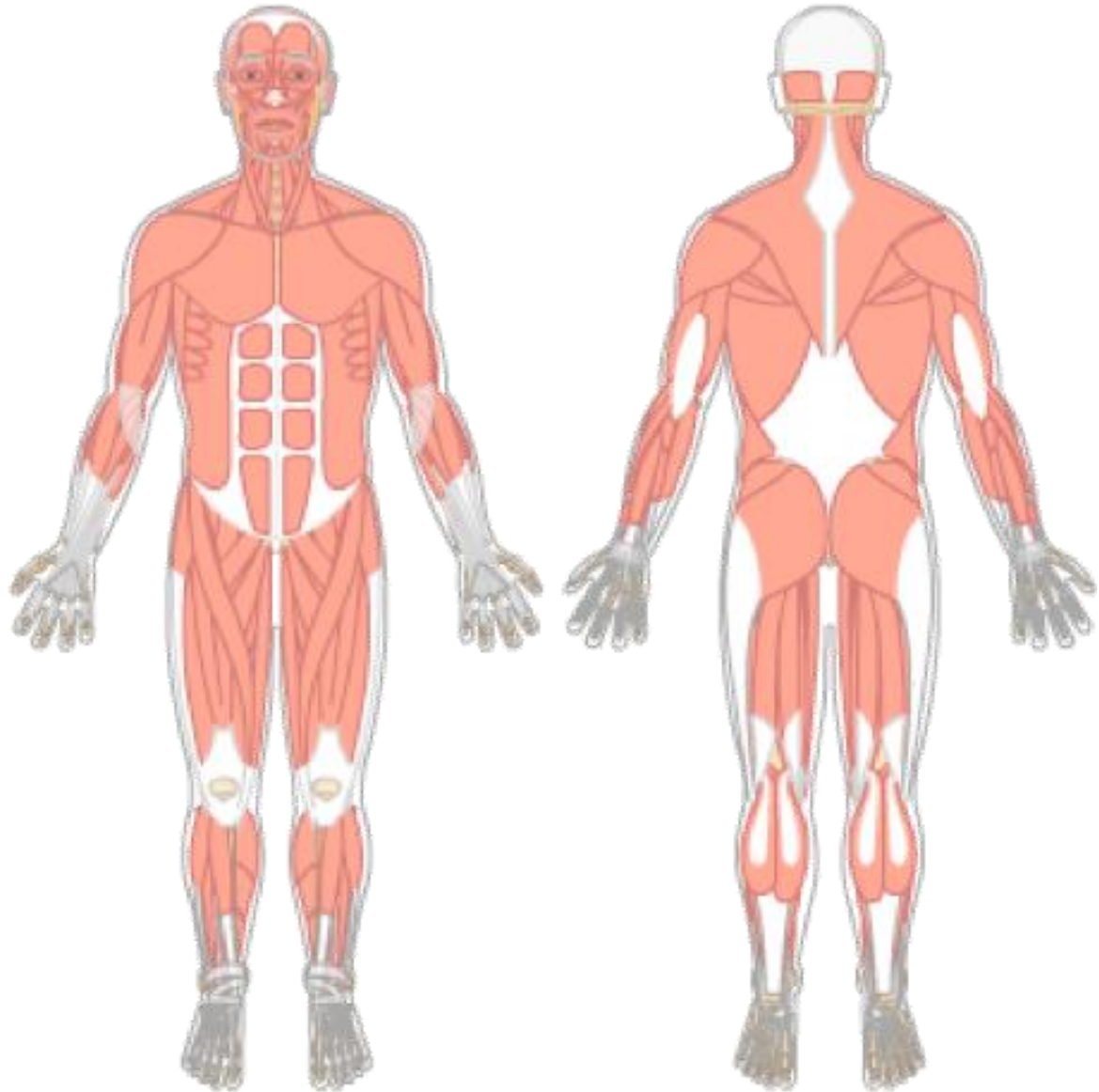
Skeletal System: Use your prior knowledge from GCSE to answer these questions

- **Label diagram**
- **Identify types of bone**
- **Identify types of joint**

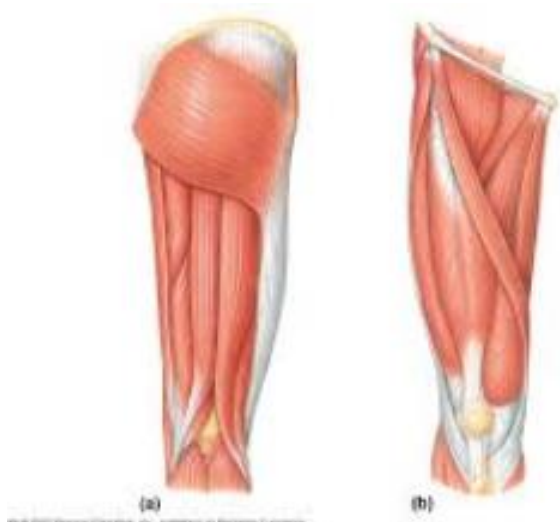


Joint	Joint Type	Movement	Agonist	Antagonist
<i>Elbow</i>	<i>HINGE</i>	<i>FLEXION</i> <i>EXTENSION</i>	<i>Biceps Brachii</i> <i>Triceps Brachii</i>	<i>Tricep Brachii</i> <i>Biceps Brachii</i>
Knee				
Ankle				
Wrist				
Hip				
Shoulder				

Use your prior knowledge from GCSE to answer these questions
Muscular System



Label the parts of the Quadricep and Hamstring: You may need to research this.



Use your prior knowledge from GCSE to answer these questions

<https://www.youtube.com/watch?v=psmOMBYTj5w>

Describe the following muscle fibre types:

Type 1

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Type 2A

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Type 2X

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Explain two Adaptations of the muscular system:

Hypertrophy.....

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Tolerance to Lactate

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What is cramp?

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What is effect does altitude have on the respiratory system?

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Heart Rate regulation – nervous control

Research and Explain the following:

<https://www.youtube.com/watch?v=FnXyja0zV0E>

1. Sympathetic Nervous System

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2. Parasympathetic Nervous System

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3. Cardiac Control Centre

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Receptors

	Baroreceptors	Chemoreceptors	Proprioceptors
Detect what?			
Where?			

Define Hyperthermia

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What Blood Pressure is in the 'normal' range?

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Unit 2: Fitness Training and Programming for Health, Sport and Well-Being

Investigate the following chronic diseases: Describe basic symptoms, causes, the condition, treatment.

Coronary Heart Disease	
Cancer	
Type 2 Diabetes	

Arthritis	
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Explain the negative effects of Alcohol on health and wellbeing

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Explain the negative effects of Smoking on health and wellbeing

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Diet: Using your knowledge from GCSES Describe the following macronutrients and micronutrients. Give examples of specific foods where possible, And their benefit to an athlete.

Macronutrients	
Carbohydrates	
Protein	
Fats	

Micronutrients	
Vitamins	
Minerals	

What is the recommended daily allowance of each nutrient?

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What are the daily recommend allowance of calories for the following people:

- Female Adult
- Male Adult
- Female 10 year old
- Male 13 year od

Components of Fitness: Use prior knowledge where possible and research if you are unsure.

Component of Fitness	Definition
Aerobic Endurance	
Strength	
Muscular Endurance	
Flexibility	
Speed	
Body Composition	
Agility	
Balance	
Coordination	
Reaction time	
Power	

Types of Training:

Type of Training	Definition including advantages / disadvantages, example of athletes that use it
Continuous Training	
Fartleck Training	
Interval Training	
Agility Training	
Muscular Strength Training	
Flexibility Training	

Unit 4: Sports Leadership



Are all the people pictured above good leaders? List as many qualities that you can think of that would make a leader successful:

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Research Tuckman's Theory of group formation: <https://www.youtube.com/watch?v=oVlp6v6ohP4>

Forming	
Storming	
Norming	

Performing	
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Define the Social Loafing Effect and give an example: (you will need to research this)

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Define the Ringleman Effect: (you will need to research this)

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Pick someone who you think is a 'GOOD/ OUTSTANDING' Leader, (this could be a teacher, football manager, your coach, your captain) Explain why you think they are a good and effective leader. Use examples to support your argument

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Unit 7: Practical Sports Performance

Examining the skills, techniques and tactics required to perform in selected sports

1. Explain the meaning of a sporting technique
2. Explain the meaning of a sporting skill
3. Explain the meaning of sporting tactics

Use the following link to explain the 3 types of skill below

<https://www.brianmac.co.uk/continuum.htm>

1. Discrete
2. Serial
3. Continuous

Type of skill?



Type of skill?



Type of skill?



Now give further examples of each of the 3 types of skill

A large empty rectangular box intended for handwritten or typed examples of skills.

Tactics

Here is an example of tactics in basketball. The two primary aims of basketball are:

Defence-how to stop the other team scoring

- Marking players man-to-man
- Using a zone to keep players away from the basket (marking space)
- Defending players full court

Offence-how the team scores

- Running up the court quicker than the defence-fast break
- Spreading the floor to create space to be able to play 1 on 1 offence
- Setting legal obstacles for players on your team (screening)

Choose one sport and consider tactics for

Attacking/scoring

Defending/stopping scoring

Unit 31: Current Issues in Sport

Sport has evolved to become what we know as sport, something in which people participate, spectate and work. Back in the early days sport was not what we know it as today.

Pick two sports of your choice. Create a PowerPoint Presentation on the history and development of that sport. Try to include information on the following:

- What year was it first seen?
- When were rules introduced?
- What changed thanks to War
- What the sport is now like in 20th century

<https://www.bbc.co.uk/sport/olympics/23434844> <https://www.youtube.com/watch?v=Unngwljxdrs>

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins or other markings on the paper.

Football boot technology has developed at a very fast rate. Explain how technology has developed the football boot from 1536 – the present day. How has the development of the boot aided performance?



[illegible]

Gender and Racism in Sport are two major current issues. It is regularly reported in the news, broadcast on TV and all over social media. There are endless campaigns and support for both these issues and we are starting to see radical changes for both Racism in sport and Gender stereotypes and discrimination.

Investigate ONE of these issues and create a PowerPoint on how that issue may affect sport and people participation in sport.

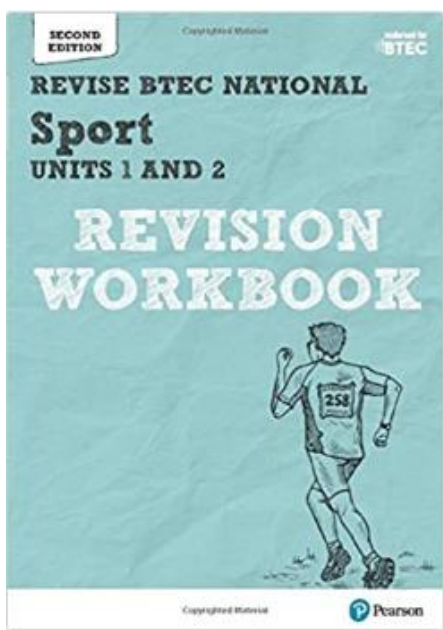
Include:

- National Campaigns / initiatives
- Negative cases in the media
- Positive cases in the media
- What Negative effect could this have on the reputation of sport?
- Give examples of sports where it is more prominent
- Are there any specific initiatives / campaigns trying to change the concept?

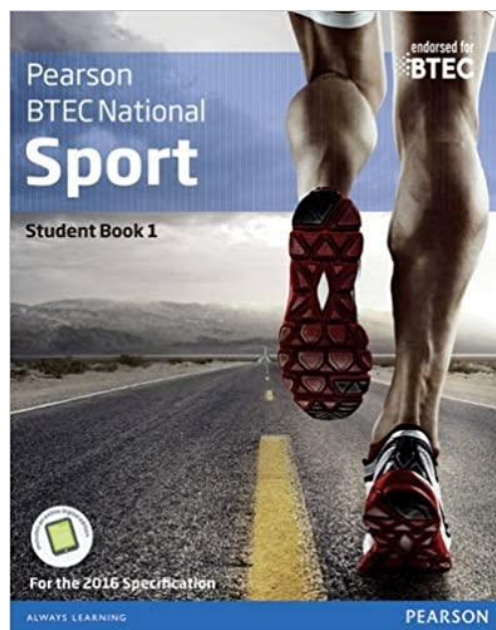
Essential Reading:

We strongly recommend that you purchase the following textbooks. They should be readily available online via sites such as Amazon & WHS Smith. **These books will be available from the P.E. office to borrow during school hours.**

Revise BTEC National Sports Unit 1 and 2: Revision Workbook



BTEC Nationals Sport Student Book For the 2016 Specifications



Recommended reading.

Although not BTEC Specific endorsed books the following will help you to develop a deeper understanding of sports that you will be able to apply to many different aspects of the specification. You may prefer to access some of these on Audible.

1. **The Sports Gene: Inside the Science of Extraordinary Athletic Performance (By David Epstein)**

This book explores the question of nature versus nurture as it pertains to training for athletes in sports using anecdotes which favor both sides of the argument. These anecdotes are combined with the results of statistical studies to give the reader an understanding of the magnitude that biology plays in athletics. Topics such as the effects of gender, race, genetics, culture, and physical environment are discussed as contributors to success in specific sports.

2. **The Science of the Tour de France Training secrets of the world's best cyclists (By James Witts)**

Find out why Formula One telemetry is key to more bike speed; how power meters dictate training sessions and race strategy; how mannequins, computational fluid dynamics and wind-tunnels are elevating aerodynamics to the next level; why fats and training on water alone are popular in the peloton; and why the future of cycling will involve transcranial brain stimulation and wearable technology.

3. **Training Secrets of the World's Greatest Footballers How Science is Transforming the Modern Game (By James Witts)** Why does Paul Pogba wear custom-made compression socks? Why does Sergio Agüero altitude-train when returning from injury? From virtual-reality units to the omnipresence of GPS vests, taking in brain-training, innovative gear and performance nutrition along the way, you'll discover what it takes to reach the top of the game - and how to apply this knowledge to your own training.



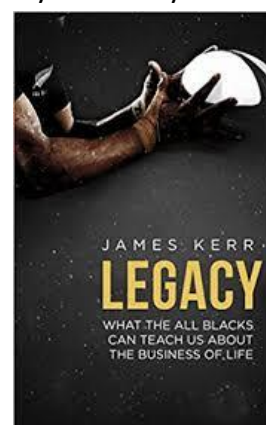
4. **Peak : How All of Us Can Achieve Extraordinary Things (By Anders Ericsson)**

Ericsson's research focuses on the real world, and he explains in detail, with examples, how all of us can apply the principles of great performance in our work or in any other part of our lives.' Do you want to stand out at work, improve your athletic or musical performance, or help your child achieve academic goals? Anders Ericsson has made a career studying chess champions, violin virtuosos, star athletes, and memory maven.

5. **The Talent Lab: The secret to finding, creating and sustaining success. (By Owen Slot)** The Talent Lab is the inside story of exactly how a

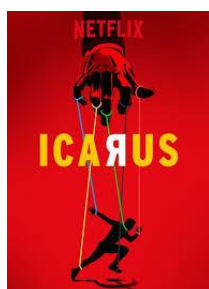
smart-thinking army of athletes, coaches, talent finders, innovators, disruptors, analysts and psychologists utilised the cutting-edge insight of elite performance to succeed where other nations failed – and turn Britain into an Olympic superpower.

6. **Legacy: What the All Blacks can teach us about life. (By James Kerr)** The All Blacks are the world's most successful sporting outfit, undefeated in over 75% of their international matches over the last 100 years. What is the secret of their success? And what can we - as individuals, companies and teams - learn from them?



Relevant Documentaries & Media

Watching the following documentaries will add to your depth of knowledge that will add to your understanding of sport. Many of these can be found on YouTube or on Netflix or Prime TV. If you are struggling to access, please see a member of the P.E. team who will try to assist.



Icarus - When filmmaker Bryan Fogel sets out to uncover the truth about doping in sports, a chance meeting with a Russian scientist transforms his story from a personal experiment into a geopolitical thriller. Dirty urine, unexplained death and Olympic gold are all part of the exposure of the biggest scandal in sports history.
<https://www.netflix.com/title/80168079>

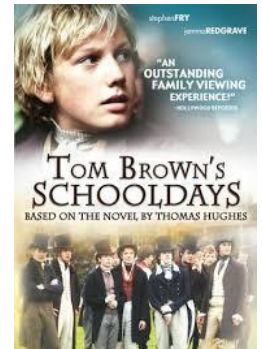
Murderball - This documentary introduces the U.S. quad rugby team -- a team composed entirely of young paraplegic men. Using special wheelchairs and very little protection, the players play full-contact competitive rugby, using rules only slightly altered to accommodate

their limitations. The film follows the team as they discuss the sport, their lives, and how they ended up in their chairs to begin with, while they play their way to the 2004 Paralympic Games in Athens, Greece. This has great links to disability sport and factors effecting participation.

<https://www.amazon.co.uk/Murderball-Joe-Soares/dp/B00EUX57DI>

Lance & Oprah – This Interview – In this interview disgraced cyclist Lance Armstrong has held a "no-holds barred" interview with chat show host Oprah Winfrey. The 41-year-old American lifts the lid on one of the most high-profile stories in sporting history. Links to the drugs in sports and deviance areas of the course. <https://www.youtube.com/watch?v=2jtDH-10m2s>

Tom Browns Schooldays - Drama about life at Rugby School in Victorian England. The headmaster is fair but not effective and life is brutal for the young boys because of bullying and its consequences. Links the era of popular recreation and the influence of Public Schools on rational recreation. A DVD copy can be borrowed from the P.E. office.



The Crazy Gang – When Wimbledon Won the Cup – This documentary spills the beans on the notorious Wimbledon football team who climbed from non-league status to the pinnacle of the British game in less than a decade. In this revealing documentary, Crazy Gang members disclose for the first time the extent of the brutality between the players themselves and how being part of that process was the making of them all. Links to deviance in sport and group dynamics. <https://www.youtube.com/watch?v=kdU1qUN7LX8>



ESPN Films: Enhanced (Six Episode Docuseries 2019) Unprecedented behind-the-scenes look at how athletes are using modern technology and science to achieve greatness.

https://www.espn.com/video/clip/_id/24055829 Can be found on the media platform vimeo.com. Great links to sports technology physiology & psychology.

Whites Vs Blacks: How Football changed a Nation. BBC Documentary. Adrian Chiles looks into an extraordinary game of professional football that took place in May 1979, when an all-white team took on a side comprised solely of black players. <https://www.youtube.com/watch?v=3ne6eRxtBCs> Links to factors effecting participation in sport.



Catch Me if You Can. BBC Panorama Documentary. Mark Daly investigates doping in athletics and explores apparent allegations against Alan Wells, Alberto Salazar and Galen Rupp, allegations which they all strenuously deny. <https://www.youtube.com/watch?v=04ck8LwApd4> Great links to deviance and drugs in sport.

Anatomy for Beginners – The Human Body Dissected. In this series you can see highlights of the dissections and learn more about the human body. Your anatomical guides are controversial anatomist Dr Gunther von Hagens, who dissects the bodies, and pathologist Prof. John Lee who

explains how they work in health and in disease. At the heart of each episode is a human dissection, carried out by von Hagens, each episode focusing on a different set of anatomical systems: movement, circulation, digestion and reproduction. Copy available to borrow from the P.E. office.



Running to the Limits – A 2009 documentary film about filmmaker Alex Vero's journey to qualify for the 2008 Beijing Olympic Marathon. Narrated by Vero and set against the backdrop of a massive decline in British professional marathon running, the film spans over three years and several continents as he works to overcome physical and personal demons and complete his marathon training.

<https://www.youtube.com/watch?v=hwLkPkgMdjk>

The Test of Fitness – A 2014 documentary about cross fit. A look at different methodology of improving fitness. <https://www.youtube.com/watch?v=3eGgWEr-Vv8>

The Truth about Fitness - Medical journalist Michael Mosley teams up with scientists whose latest research is turning common knowledge about fitness on its head. They reveal why 10,000 steps is just a marketing ploy and that two minutes of exercise is all a person needs each week. They discover how to get people to stick to their fitness plans and what exercise can actually make everyone more intelligent. Whether it is for couch potatoes who hate the thought of exercise, someone too busy to consider the gym, or even for fitness fanatics who are desperate to do more - science can help everyone exercise better.

<https://www.bbc.co.uk/iplayer/episode/b09qjl7d/the-truth-about-15-getting-fit>

Born to Run: The Kenyan Secrets- A look at the success of Kenyan distance runners.

<https://www.youtube.com/watch?v=25BywC5-p2U>

Breaking 2 – Brilliant Amazon TV documentary focusing on three athletes attempting to break the 2hr marathon record. <https://www.amazon.com/Breaking2-Season-1/dp/B075QV64XY>

The English Game – Netflix drama that is highly relevant to the Sport and Society section of the course. This series looks at the invention of football and how it rose to become the world's game by crossing class divides. <https://www.netflix.com/title/80244928>



The Test – Great Amazon TV documentary focusing on how the Australian cricket team recovered from the ball tampering controversy. This 8 part series links to both the group dynamics and deviancy section of the specification.

<https://www.amazon.co.uk/Test-New-Era-Australias-Team/dp/B085FV9XL3>

The Man with the Halo. A story of bravery and determination in the face of adversity. This inspirational short documentary tells the unfathomable comeback story of Tim Don, the fastest

Ironman triathlete of all time, after breaking his neck in a cycling crash.

<https://www.youtube.com/watch?v=UhlchWAkAU>

The Game Changers - James Wilks travels the world on a quest for the truth about meat, protein, and strength. Showcasing elite athletes, special ops soldiers, and visionary scientists to change the way people eat and live. <https://www.netflix.com/title/81157840>

Ice Guardians – This documentary looks at the controversial world of Ice Hockey’s enforcers. Great links to the sports psychology, violence in sport, sport and society sections of the specification.

<https://www.netflix.com/title/80150246>

Crossing the Line – This is the story of the highly controversial 2018 Test series between Australia and South Africa involving the infamous ball-tampering scandal, Sandpapergate. Links to the deviance in sport and group dynamics section of the specification.

<https://www.youtube.com/watch?v=MKcvHAec6GM>

The Last Dance - This is a 2020 American sports documentary miniseries focusing on the 1997–98 Chicago Bulls. The series features film from a crew that had an all-access pass to the Bulls during the National Basketball Association season.

<https://www.netflix.com/title/80203144>



Sunderland 'Til I Die (Season one) is proof that a disaster is so often more entertaining to watch than success. Following the North East club in their 2017/18 EFL Championship season, Netflix likely planned to film the story of a side returning to the riches of the Premier League. Only instead of getting promoted, Sunderland finished bottom of the league and suffered the humiliation of back-to-back relegations. Links to the topics of social class and sport, leadership and group dynamics.

<https://www.netflix.com/title/80207046>

Sir Alex Ferguson – Secrets of Success – A BBC documentary that examines the skills that made Manchester United manager Alex Ferguson one of the most successful football managers of the modern game. Good links the leadership and group dynamics areas of the specification.

<https://www.youtube.com/watch?v=SbtZjEs5r0>

The Edge – Focuses on the England Cricket team in a compelling, funny and emotional insight into a band of brothers’ rise to the top, their unmatched achievements and the huge toll it would take. One of the toughest sports on the planet, and psychologically perhaps the most challenging, The Edge Film explores the ruthless intensity of the game, the impact it can have on players’ mental health and the extreme price of success. <https://www.theedgefilm.com/>
<https://www.amazon.co.uk/Edge-Kevin-Pietersen/dp/B07SR7G9SM>

Podcasts.

- <https://www.bbc.co.uk/programmes/b01cwszw> - Podcast that explores the way global television has changed our relationship with sport forever.
- <https://www.bbc.co.uk/programmes/b01cvk8l> - Why and when the British government got involved in sport, when the country had always prided itself on keeping them apart.

The Science of Sport Podcast on Apple and Android

World-renowned sports scientist Professor Ross Tucker and veteran sports journalist Mike Finch break down the myths, practices and controversies from the world of sport. From athletics to rugby, soccer, cycling and more, the two delve into the most recent research, unearth lessons from the pros and host exclusive interviews with some of the world's leading sporting experts. For those who love sport.

Stand out episodes:

- 23/10/19 - The Shoe That Broke Running
- 23/09/19 - Why the All Black Are The Greatest Sports Team
- 09/09/19 - How to Cheat at Sport and Get Away With It
- 27/08/19 - How to Make a Champion (Part II)
- 13/08/19 - How to Make a Champion (Part I)
- 09/07/19 - The Drugs In Sport Episode
- 18/08/19 - The Science of Cricket with Gary Kirsten
- 29/04/19 - Caster Semenya: Explaining Sex v Gender



That Triathlon Show on Apple and Android

The one triathlon show focusing on practical and actionable advice that you can use in your own triathlon training and racing. New episodes are released twice per week. Includes some excellent discussions on the science of training.

Stand out episodes:

- 24/10/19 - Fueling workouts; Diet and body types
- 14/10/19 - Improve your running speed, endurance and performance
- 03/10/19 - Aerobic and anaerobic capacity
- 19/09/19 - Does compression clothing improve performance and recovery

The Clean Sport Collective Apple

Android

The Clean Sport Collective is a community of powerful voices comprised of athletes, brands, events, clubs, fans and the public to support the pursuit of clean sport and athletics through the absence of performance enhancing drugs.

Stand out episodes:

- 01/02/20 - New Shoe Regulations with Ross Tucker
- 20/10/19 - Tyler Hamilton: Convicted Doper and Whistleblower
- 07/10/19 - Kara and Adam Goucher on the 4-Year Bans