An introduction to A Level PE Summer Transition Booklet

Welcome aboard!

We are delighted that you have chosen to study A level Sport. At Boston High School we have used the AQA syllabus at GCSE, and so also follow this syllabus at A level, but we do not presume that you have done a PE GCSE or BTEC and so do not expect you all to be already familiar with this material.

Being organised, independently motivated, focussed and willing to read around the subject are just a few key skills that will help with success, along with the most obvious a love of sport. Sports performers use their understanding of Physiology, Sports Psychology and Socio-Cultural issues to excel in their own ways and you will find out how.

I have put together some information for you to both read and complete which will help the transition from year 11 into year 12. This will enable you to find out about the course content for PE at A level and hopefully inspire and motivate you to enjoy the course that you have chosen. The students who take PE for A level do enjoy the course (that is not just my biased view) but do understand that there is a great deal of work both in the classroom or virtual one and outside the lesson that needs to be put in to achieve great results.

- If you have done the GCSE then it is important that you revise the core elements which are most valuable for success at the A Level, and if not then the tasks below will give you an opportunity to become familiar with some of this GCSE material. It would be to your advantage if by the start of term, you have completed the following tasks:

Section A - Physiology and anatomy

Task 1 : Musculoskeletal system

Find a LARGE action picture of a sportsman/woman from the internet and print out

Add the following to your picture (it is up to you how you do this but keep it as neat as possible);

Review the major bones and muscles of the body (if you were not sure then https://www.youtube.com/watch?v=8SNZFJM2BhA might help you)

a) Label as many bones as possible

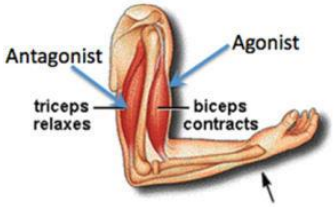
b) Label as many joints as possible

c) Annotate the movement that is occurring at the joint (i.e. flexion, extension etc.) and indicate the direction of the movement

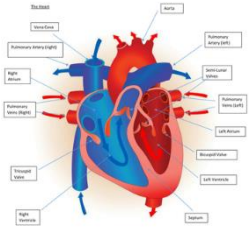
d) Label as many muscles as possible

e) Identify three antagonist pairs in your diagram – stating which muscle is acting as the agonist and antagonist in each pair

f) Explain how an antagonist pair work.



Task 2: Cardiovascular system



As we start by examining the Cardiovascular system, I thought it would be a good idea to check out our understanding of the anatomy of the heart and how it works.

Please access the following 21 minute clip on you tube. Have a plain piece of paper handy and some coloured pens / pencils. https://www.youtube.com/watch?v=VWamhZ8vTL4 Your first task is to draw along with the diagram which Dr John Campbell is drawing. Please produce a labelled diagram of the heart including the following terms: • Vena Cava (inferior and superior) • Aorta • Pulmonary Vein • Pulmonary Artery • Bicuspid/Tricuspid Valves • Septum • Ventricles • Atria

Make sure any labels go right at the edge of your paper so you have space to draw the heart.

Please stop and re watch any parts of the video which are new to you or which you do not understand.

Next, you should answer the following questions (write the question or copy and paste it into a text document - write your answer [word processed OR hand written on lined A4 is acceptable] in a different colour.

1. Where does the human heart lie in the body?
2. Why does the left ventricle have a thicker muscular wall?
3. Valves contained in the heart, open and close in different directions – why is this so?
4. What names are given to the valves which separate the atria and ventricles on both sides of the heart?
5. What names are given to the valves which are found in the Aorta and the Pulmonary Artery?
6. Arteries and Veins are blood vessels which transport blood around the body. In which direction does the blood flow in each of these vessels?
7. Why does the Pulmonary Artery split into two when it leaves the heart?
8. What is oxygen saturation, and what is considered 'normal range'?
9. What helps the valves to open and close and how are they fixed into the walls of the heart?
10. What is regurgitation?
11. Name the 3 layers of the heart and explain the role of each layer.
12. Make a glossary of all of the words you have used or learned in watching this video clip.

Next watch the shorter video about the flow of blood through the heart and then answer the questions which follow: https://www.youtube.com/watch?v=sh5DZU2eVxk

1. The bottom of the heart has a special name, related to its' shape – what is it?
2. 2/3 of the blood returning to the heart goes straight through the atria to the ventricle – how does the remaining 1/3 get into the ventricles?

3. Dr Campbell says that the Atria and Ventricular walls are contractile – what does this mean?
4. How is volume decreased in the ventricles? and what happens to the pressure in the chamber as a result?
5. Explain how the slamming shut of the various valves (explain which) result in us being able to 'hear' the sound when listening with a stethoscope (or feeling the pulse) Which 'noises' are made?
6. Add to your glossary from video clip 1. Ok so that's the first bit of anatomy finished.

"Crash Course Anatomy and Physiology- Cardiovascular System" Fast paced youtube videos that cover the cardiovascular system in great depth. Make sure you are regularly stopping and making notes as you progress as you can easily miss things. Focus on the heart and blood vessels. You should also look into the conduction system of the heart, writing a brief summary outlining the process of how a heart beats. These cover a variety of points and all aspects of the heart physiology required in the specification.

Well done for finishing this work. Hopefully you will already be familiar with much of this information but we can certainly add some new terms to our glossary as a result of seeing these video clips.

Section B – Skill Acquisition

Task 1. The importance of Sports Psychology- view this website link https://www.youtube.com/watch?v=d8DSzLpEru0--this gives you an insight into why sports psychology is important.

Task 2. Pick two athletes of your choice – one team athlete and one individual athlete. e.g Jess Ennis and Jo Harten

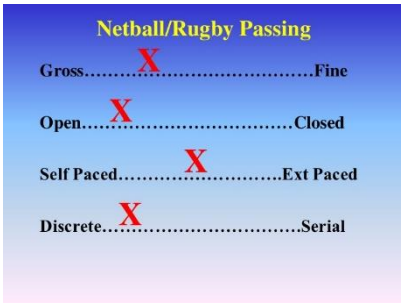
Research how that athlete keeps their nerves when competing. You may wish to recap some GCSE knowledge here (deep breathing, mental rehearsal, positive self-talk). Your athletes may use different techniques.

On Spotify/iTunes/BBC Sounds, find a podcast called "Flintoff, Savage and The Ping Pong Guy" and you want to listen to the episode called "Going to Mexico" where they discuss their own experiences of controlling nerves.

Task 3 Skill continuums - One of the first topics you will study is 'skill continuums'. Research the role of skill classification https://www.youtube.com/watch?v=MyJzoXqfVx4 or on you tube – skills continuum by Flip Teach

Look at the different types of skills and be able to define and describe them according to the following continuums –

- open – closed
- Discrete – serial – continuous;
- Self paced - externally paced;
- High – low;
- Simple – complex.



You should be able to provide an example of each type from different sports.

Task 3. Create a glossary for the following key terms for methods of presenting practice:

- Whole practice
- Whole-part-whole practice
- Progressive part practice

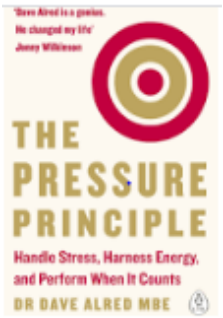
Then research which athletes may use each method of presenting practice and why that method suits that sport.

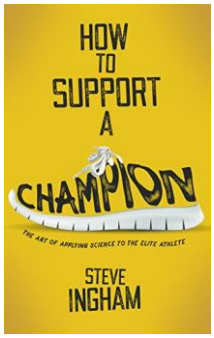
Potential reading/listening for to get you excited about sport psychology:

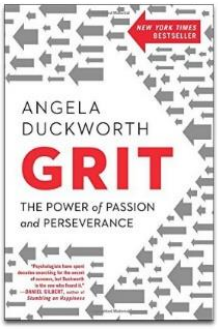
Podcasts - Flintoff, Savage and The Ping Pong Guy -Don't Tell Me The Score

Reading

- How To Support A Champion
- The Pressure Principle
- Grit







Section C - Socio/Cultural Issues

Task 1 a) Find and keep an article on two of the following subjects:

*Drug taking in sport

*Violence in sport (players or spectators)

*Increase in sedentary lifestyles or initiatives to reduce sedentary lifestyles

*Sport and Public (private) Schools

* Role of Technology in sport

Task 1b) Have a look at the following sports performers who have tested positive for banned substances.

Tyson Gay

Maria Sharapova

Lance Armstrong

Wilson Chandler

Create a brief information case study for each performer based upon your findings. Include:

- Who is the performer/elite? What is their sport? Nationality? Age?
- What did each performer test positive for?
- What are the benefits of that drugs?
- Any information for why they felt they needed to use banned substances
- Any punishments put into place following their positive testing?

Task 2 - Have you watched any big sporting events in the past? Olympic Games, World Championships etc. What are the positive/ negative effects of hosting such a high profiled event to the host country, organisers, athletes, spectators etc. Can you list and explain the benefits and problems?

(thinking of London 2012 and Tokyo 2020 might help you cover a few pros and cons. !)

Task 3 – Mob Football - Research what sporting recreation was like in Pre-industrial Britain (Pre-1780). Research what is meant by the following key terms in relation to sporting recreation.

Key Term	What is meant by the key term?
Rural	
Local	
Two-tier class system	
Mob Football	
Real Tennis	

Write a paragraph to explain what mob football was like.

NEA COURSEWORK

NEA Overview

As part of the A Level Physical Education (7582) course there are two 'coursework' components, these combined are worth 30% of the final grade.

The Non-Examined Assessment consists of two elements:

1. Practical Performance (45 marks – 15%)
2. Written Analysis of Performance (45 marks – 15%)

Both elements are marked by staff in school and the marks are then moderated by and external moderator who is assigned by the exam board AQA.

<u>Practical Performance</u>

- Assessed in one sport as either a coach or a performer
- Assessed on your performance of 'defensive skills'* and your application of 'tactics and strategies'
- Gathered through video footage showcasing as many of the skills as possible

<u>Written Analysis of Performance</u>

- Assessed through a written (typed) piece of work, split in to 3 sections:
  - Analysis of a weakness in your performance (worth 20 marks)
  - Theoretical understanding of why you have the weakness**
  - Theoretical understanding of how to correct the weakness**

* If you don't compete in a competitive game it is slightly different and more information will follow on this

** These elements link to the theory you will be taught throughout the course and you use this knowledge to support your coursework (worth 25 marks combined)

Focus for the Transition Work based on NEA:

Getting a head start on the written analysis of performance is hugely beneficial for lots of reasons but some include:

- It is really interesting to analyse sporting performance – especially your own
- Giving the written analysis enough time over the two years helps access higher marks
- It is worth 15% of your final grade
- It will be quite a large piece of work that can't be rushed
- The model has worked really well over recent years and students have scored high marks

Initial Stages of the Written Analysis of Performance

In order to start the preparation work for this element of the course we undertake some generic work on a number of different sports. This will ensure when you come to analyse your own performance you have all of the necessary skills and understanding. In order to get a step ahead over the summer there are a series of activities that should be completed. These will not only help with the generic work in the early stages but also your own performance analysis.

Activity 1 – Useful Terminology (Some sporting) Complete definitions for the following terms (many if not all of these you will use at some point during your final written analysis. You are assessed for the quality of your technical and tactical terminology, so it is wealth worth investing time in this

Key Term	Definition
Power	
Speed	
Strength	
Agility	
Balance	
Reaction time	
Endurance CVE	
Endurance LME	
Flexibility	
Coordination	
Vision	
Control	
Contact	
Flightpath	

Height	
Landing	
Aerodynamic Resistance	
Spatial Awareness	
Words Applicable to your Sport	
1.	
2.	
3.	
4.	

Activity 2 – Saying what you see

Analysing performance is talking about what you see or feel happening in a movement, skill or movement sequence, but doing it in detail.

Using the link below write a description about what you see happening in the performance of Usain Bolt. We are only analysing this one video *so don't* watch any others!

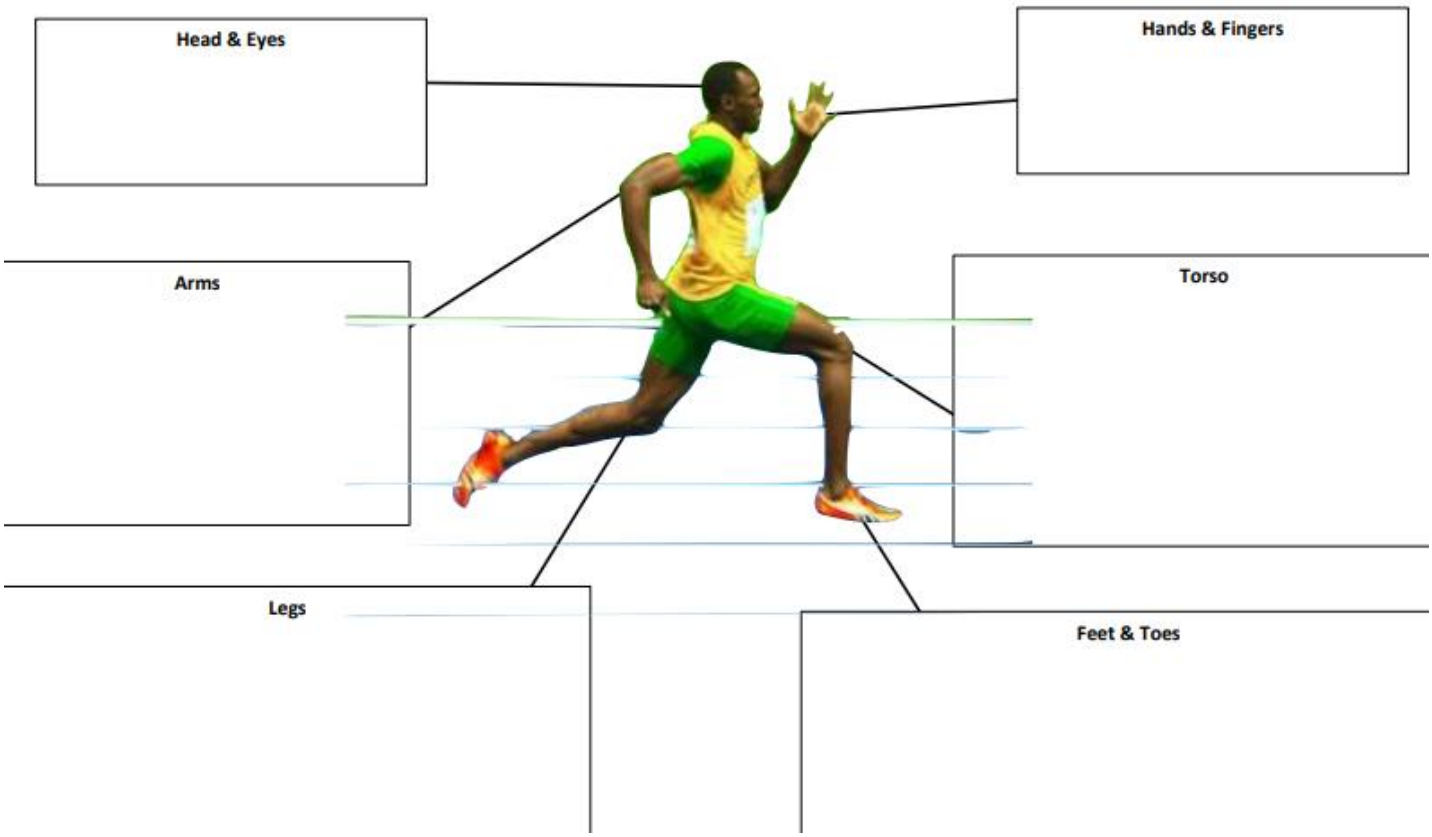
https://www.youtube.com/watch?v=nGDRoK0itCw

Some useful strategies to help you do this:

- Watch the video numerous times – don't expect to see it all in one go
- Pause the video – to help you capture one part of the performance
- Listen to the commentary – does this offer an insight?

Activity 3 – Breaking Down the Analysis

You will have written a fairly detailed response in the box above, but it may not be quite detailed enough. So, in this activity we are going to analyse body parts involved in helping Usain Bolt achieve his success.



Activity 4 – Deeper Level of Analysis

Now rewrite the analysis from page 3.

- Write it focussing from either the Head and Eyes down the body or from the feet and toes up.
- Also try to include some of the terminology you have defined on page 2.
- Try to include the definition in your writing. So, for example …. As he moves from the take your marks position to the set position – he shifts his body weight forward as he reduces the extension in both knees and hips and the ankles move more towards plantarflexion. At this point in the set position, he is **focused** on the finish line and his head remains still. His fingers provide **balance** and enable him to remain in stable position during the 'set position' of the start sequence. Re-watch the video link several times to help you develop the detail along with what you have written for activities 1 and 3.

Extension work:

Watch the following documentaries which are available on Youtube or Netflix:

- **"Game Changers**" A documentary exploring the meat vs plant based diets in relation to sport. It has generated a lot of debate and is worthwhile looking into some of the arguments for and against the different sides.

- **"Icarus"** Focusing on the Russian doping scandal. It explores whether performance enhancing drugs are essential to compete at the elite level.

- **Podcast - "The Sports Psychology show"** (Sport Psychology)

- **Podcast - "JP's Sports Science "**

- **Podcast - Flintoff, " Savage" and**

- **Podcast The Ping Pong Guy "Don't Tell Me The Score"**

OTHER FILMS / RESOURCES THAT WILL ALLOW YOU TO DEVELOP KNOWLEDGE AND UNDERSTANDING OF VARIOUS ASPECTS OF THA ALEVEL COURSE – do not attempt to watch then all but select a variety of sports and areas.

SPORTS FILMS NETFLIX Films

- Moneyball, 2011 (baseball)
- Coach Carter, 2005 (basketball)
- Friday Night Lights, 2004 (NFL)
- Warrior, 2011 (MMA)
- Tonya, 2017 (figure skating)
- Cool Runnings - Jamaican bobsleigh team at the Winter Olympics.
- Gladiator - Roman games
- Football Factory - Football Hooliganism
- An English Game - History of factory teams in football development
- Chariots of Fire Olympism and Harold Abrahams
- This Sporting Life Rugby League, based on Wakefield Trinity FC
- Million Dollar Baby Boxing trainer helps female boxer achieve her dream
- Gregory's Girl School football story
- Losers – Adversity in sport
- Tom Browns School Days Athleticism and the rationalization of sports, 2019 (cricket)

Documentaries:

- Katie, 2019 (boxing)
- Generation Iron, 2017 (body building)
- Formula 1: Drive to Survive, 2020 (formula 1)
- The last Dance – Michael Jordan
- Last Change U, 2019 (NFL)
- The Redeemed and the Dominant, 2017 (crossfit)
- The Dawn Wall, 2017 (climbing)

AMAZON PRIME

- Building Jerusalem, 2015 (rugby)
- All or Nothing: The Michigan Wolverines, 2018 (NFL)
- All or Nothing: Manchester City, 2018 (football)
- All or Nothing: New Zealand All Blacks, 2018 (rugby)
- Andy Murray: Resurfacing, 2019 (tennis)
- The Race to Dope – Drugs in sport
- The fittest on Earth: Crossfit games
- Eat.Race.Win: Diet and Nutrition

YOUTUBE

- Candide Thovex || Few Words, 2012 (freestyle skiing)
- Commonwealth Netball Final, 2018 (England vs Australia)
- Is professionalism killing sport? (BBC Documrntary)
- Kobe Bryant – Black Mamba Dance
- Crossing the line – Australian Cricket
- Tyson Fury Road to redemption

BBC IPLAYER

- Eluid Kipchoge: My Sub Two-Hour Marathon, 2020 (running)
- Football Going Vegan, 2019 (diet)
- Gareth Thomas: HIV and Me, 2019 (health)
- Driven: The Billy Monger Story, 2018 (racing)
- Doddle Weir: One More Try, 2019 (rugby and health) Bats, Balls and Bradford Girls

USEFUL OTHER RESOURCES

- PE Review magazine (e-magazine will be available from September 2020)
- Journal of Sports Sciences
- Journal of Sport & Social Issues
- National newspapers - the sports pages report global events and the biggest issues and often these contain articles written by athletes. They are therefore valuable wider reading material (www.bbc.co.uk/sport)

USEFUL INFORMATIVE WEBSITES

- www.bbc.co.uk/history/british/victorians/sport_01.shtml
- news.bbc.co.uk/sport1/hi/academy/default.stm
- www.mypeexam.com
- www.brianmac.co.uk
- www.olympic.org
- www.london2012.com
- www.eis2win.co.uk
- www.youthsporttrust.org
- www.youtube.com/channel/UCChU8cYZY5xpQ7pBIklu3Xw
- James Morris – A Level PE YouTube Channel

We hope you manage some of these tasks facilitating an easier transition from GCSE work to A level. If you have any queries regarding any aspect then please email either Miss Manson - charlotte.manson@bostonhighschool.co.uk or myself nic.brennan@bostonhighschool.co.uk and either of us will be happy to help answer the questions, as we will be delivering this course next year.

Have a good summer – stay safe and keep busy as you KEEP FIT and active – allowing for a more effective performance in your preferred sport from September.