

## PE Transition Work June 2020

For each subject you will receive a detailed introduction to allow full transition into the college and your new learning. Please complete the weekly tasks outlined below and attend the meet sessions with the teachers for further guidance and information. Please keep all work created in a folder to present to me in the first lesson in September.

<b>BTEC Level 3</b>	<b>Google Classroom Code:</b>	<b>Google Meet code:</b>
		BTEC Extended Certificate in Sports Science Transition work
<b>Weekly Tasks</b>	<b>Topic</b>	<b>Resources</b>
W/C 1.6.20	Functional Anatomy	<p>Research what is meant by the following anatomical terms: anterior, posterior, lateral, medial, proximal, distal, superior, inferior, peripheral, superficial, deep, supine, prone.</p> <p>Research the anatomy of the heart including the following structures: coronary arteries, atria, ventricles, bicuspid/mitral valve, tricuspid valve, semilunar valves, chordae tendineae.</p> <p>Research the location, structure and function of the following blood vessels: aorta, superior vena cava, inferior vena cava, pulmonary vein, pulmonary artery.</p>
W/C 8.6.20	Coaching	<p>Research the following supporting technologies:</p> <ul style="list-style-type: none"> <li>o video analysis software, e.g. Coach's Eye, Dartfish®, Kandle</li> <li>o electronic training logs, e.g. TrainingPeaks®, Strava™, Runkeeper</li> <li>o heart-rate monitors</li> <li>o Global Positioning System (GPS) tracking</li> <li>o power meters</li> <li>o laboratory-based testing, e.g. VO2 max tests, lactate threshold testing</li> <li>o online resources, e.g. specialist websites, forums, video sharing sites and social media</li> </ul> <p>Think about the role technology may have to support athlete development when coaching for performance and fitness.</p>
W/C 15.6.20	Functional Anatomy	<p>Watch the following videos and create an exam splat/knowledge vomit for each.</p> <p>Cardiac cycle  <a href="https://www.youtube.com/watch?v=swGV1a3f1G8">https://www.youtube.com/watch?v=swGV1a3f1G8</a></p> <p>Sliding filament theory  <a href="https://www.youtube.com/watch?v=2-NVeq7_uWk">https://www.youtube.com/watch?v=2-NVeq7_uWk</a></p> <p>Neural control of the respiratory system  <a href="https://www.youtube.com/watch?v=RYb1gUAB098">https://www.youtube.com/watch?v=RYb1gUAB098</a></p> <p>Neural control of the cardiac cycle  <a href="https://www.youtube.com/watch?v=NdGmpRXqIk4">https://www.youtube.com/watch?v=NdGmpRXqIk4</a></p>

W/C 22.6.20	Psychology	<p>Research the theories of arousal-performance relationship:</p> <ul style="list-style-type: none"> <li>o drive theory</li> <li>o inverted-U hypothesis</li> <li>o catastrophe theory</li> <li>o individual zones of optimal functioning</li> </ul>
W/C 29.6.20	Biomechanics	<p>Watch the following videos and create an exam splat/knowledge vomit for each.</p> <p>Newton's laws of motion  <a href="https://www.youtube.com/watch?v=jLvoiZUsiZY&amp;list=PLKdzNhBMRVyzqabEIX1-Qy1c8rpNoSLXg&amp;index=3">https://www.youtube.com/watch?v=jLvoiZUsiZY&amp;list=PLKdzNhBMRVyzqabEIX1-Qy1c8rpNoSLXg&amp;index=3</a></p> <p>Levers  <a href="https://www.youtube.com/watch?v=F6X_ydbOR1g">https://www.youtube.com/watch?v=F6X_ydbOR1g</a></p> <p>Planes and axis  <a href="https://www.youtube.com/watch?v=moP483UxRQ8">https://www.youtube.com/watch?v=moP483UxRQ8</a></p>
W/C 6.7.20	Psychology	<p>Research the 4 different theories of aggression:</p> <ul style="list-style-type: none"> <li>• instinct</li> <li>• social learning</li> <li>• frustration-aggression theory</li> <li>• adapted frustration-aggression theory</li> </ul> <p>How do these theories link to sport.</p>
W/C 13.7.20	Assignment writing	<p>In this session we will discuss what makes good, effective assignment writing including presentation of information, referencing, critically evaluating content and applying information effectively to sport and/or physical activity/exercise.</p>
<b>Fortnightly Meet: Date &amp; Time</b>	<b>Teacher delivering</b>	<b>Resources</b>
Thursday 4 <sup>th</sup> June 2020 10:10am	G. Mayer & L. Wright	Functional Anatomy
Thursday 18 <sup>th</sup> June 2020 10:10am	G. Mayer & L. Wright	Coaching
Thursday 2 <sup>nd</sup> July 2020 10:10am	G. Mayer & L. Wright	Biomechanics

Thursday 16 <sup>th</sup> July 2020 10:10am	G. Mayer & L. Wright	Psychology

General resources and suggested reading:

**Specification Link:**

<https://qualifications.pearson.com/en/qualifications/btec-nationals/sport-and-exercise-science-2016.html>

**Useful websites/resources:**

<https://www.em-sportscience.com/>

***The World leading evidence-based source for sport training and athletic performance.*** You can follow EM Sport science on Facebook, Instagram and Twitter to get regular updates on recent sporting research & their findings. This is a great resource, not only for topics we study in biomechanics but also tips for your own training and performance goals.

<https://www.muscleandmotion.com/>

***This website and its apps aim to enhance your understanding of the muscular movements of the human body.*** Followed on Facebook, Instagram and Twitter by anatomy students, physical and massage therapists, educators, personal trainers, athletes and anyone interested in enhancing their knowledge of the muscular motions of movement. A great website showing animated muscle movements to help you learn muscle locations and their actions. There are apps available to purchase if you are looking at going on to study physiotherapy or sports massage but the free ones are helpful.

<https://www.getbodysmart.com/>

***Animated text narrations and quizzes to explain the structures and functions of the human body systems.*** Useful to dip into whilst studying the topics in unit 2. It covers the skeletal, muscular, cardiovascular & respiratory systems and you can test yourself using the interactive quizzes.

<https://www.teachpe.com/>

***Interactive website focusing on all aspects of Sport.*** Some good interactive quizzes to test your knowledge and downloadable images to help you revise.

**Additional resources/support material:**

**YouTube James Morris** Excellent for revision.

**YouTube PlanetPE** Excellent for revision.

**BBC sport /sky sports news** to keep you up to date with sports news to support application to assignments.

Pearson BTEC National Sport & Exercise Science student book.

Pearson REVISE BTEC National Sport & Exercise Science Revision workbook.

Pearson REVISE BTEC National Sport & Exercise Science Revision Guide.