

# Summer Induction Work

**Sport + Physical Activity (Double)**



## HAZELEY 6TH FORM

CHARACTER, CONFIDENCE & CREATIVITY

Deadline: Friday 11th  
September  
The Hazeley Academy

## **Sport and Physical Activity (Diploma)**

OCR Cambridge Technical (Level 3):

Unit 1- Body Systems and the effect of physical activity

Unit 2- Sports coaching and Leadership

Unit 5 Performance analysis in sport and physical activity

Unit 18: Practical Skills in physical activity

**Remember this is not informing PR1, but off the back of this work and the first 3 weeks you will need to be able to say yes or no to students meeting the demands of the course.**

### **Objectives:**

- *To develop a deeper understanding of the body systems and how they are affected by sport and physical activity*
  - *To understand the principles which underpin effective coaching and leading*
- *To understand the performance profiling protocol and perform a profile of 2 players in similar positions and opposing teams.*
- *To develop your understanding of the Laws of the game for 1 sport to aid decisions making when officiating.*

### **Tasks**

#### **Unit 1- Body Systems and the effect of physical activity: 1.1 The Axial and appendicular skeleton**

1) You have been supplied with 2 diagrams (one is the skeleton the other is the vertebral column) you need to research and label the bones. You need to include the following bones- Cranium, sternum, ribs, Scapula, clavicle, humerus, radius, ulna, carpals, metacarpals, phalanges, ilium, ischium, pubis, femur, patella, tibia, fibula, tarsals, talus, metatarsals.

Label the regions of the vertebral column (include the number of bones):- Cervical, Thoracic, Lumbar, Sacrum and Coccyx.

#### **30 minutes**

2) You need to understand the functions of the Skeleton and how they relate to sport. Complete the table attached.

#### **30 minutes**

3) Research the different types of bones. You need to:

- Identify the 5 different types of bones
- 3 different examples of each type of bone
- Justify how the different types of bones are effective in sport

#### **30 minutes**

4) You are to research all 4 topics in the list below. You should use the internet and textbooks to search for the information

You are to present on a single side of A3 paper all of the key information about that topic (1 piece of paper for each). When you arrive in September you will present them to the group and your work will be used for display purposes.

Topic to choose from:

- Muscular-skeletal system (Joint and movement, functional role of muscles, types of contraction, skeletal muscle contraction, Planes of movement types of muscle fibres and recruitment patterns)

- Cardiovascular system (Heart valves, Cardiac cycle, conduction system, vascular shunt mechanism, venous

return, regulation of heart rate)

- Respiratory system (Breathing values, mechanics of breathing at rest, mechanics of breathing at exercise, gaseous exchange in the alveoli, Gaseous exchange in the muscles, regulation of the breathing rate)

- Energy system (what is ATP, ATP-PC system, Glycolytic system, Aerobic system, energy continuum, Recovery, fast component of EPOC, Slow component of EPOC)

**3 hours**

### **Unit 2- Sports coaching and Leadership: 2.1 Principles of leadership**

You need to research about the different leadership styles and personalities of a leader. You need to explain how the different leadership styles and personalities can support the learning of sport skills.

You should look at:

Leadership styles

- Autocratic
- Democratic
- Laissez-faire

Personalities

- Aggressive
- Passive
- Extrovert
- Introvert
- NACH
- NAF
- Type A
- Type B

For this task you need to describe the suitability of each leadership approach for different situations e.g. beginners, elite, players, sports with high risk.

**1 hour**

2) Complete the table attached on the different methods of practice when teaching/coaching skills. Apply the different types of practice to 2 different sporting examples.

**30 minutes**

3) Write a report on how different groups are formed. You should consider:

- Stages of group development
- cohesion and factors that affect group cohesion
- How to create an effective environment
- Steiner's model of group effectiveness

**2 hours**

**Unit 5 Performance analysis in sport and physical activity: Be able to carry out performance profiling.**

1) For this task you will be analysing the performance of 2 opposing players.

To do this, you should:

- Pick any sport of your choice and find a whole game/match on youtube.
- Pick 2 players who are in same position but on opposing teams.
- List as many different skills, tactics and fitness components that are needed for this position (You need a minimum of 12 components)
- Watch the game/match.
- For all of the analysis component (Skills, tactics and fitness) rate both players out of 10 (10 is the highest, 1 is the lowest)
- You then need to display the performance profiling results in a range of different ways (e.g. spider diagram, pie chart, bar chart, table etc)
- You then need to produce a report for the player that your profile has been identified as the weakest.

**2.5 hours**

2) Research and produce a leaflet about effective player profiling, you should consider:

- What is player profiling
- What are the main objectives of player profiling
- What the profiling process involves
- Why and how the performance profiling process may be adapted

**2.5 hours**

### **Unit 18: Practical Skills in physical activity: Be able to officiate in sport and physical activity**

For a sport of your choice, you need find the Laws of the games. These are available on the sports governing body website e.g. The Laws of Association football can be found on the FIFA website. You should reduce this document in to a series of flashcards so that you can refer to them when you need to officiate your matches. This also includes the different officiating roles e.g. referees, assistant referees and 4th official.

Attached to this is a list of possible sports that you can use as your assessed activities. Rate yourself out of 5 (5 highest, 1 lowest) your experience and confidence in those activities. You will be assessed in 1 team, 1 individual and 1 outdoor activity

**3 hours**

### **Assessment**

*The work above relates directly to the assessment criteria that you will have when you produce the assessed work.*

*For task 1: you can achieve one of 4 grades: Near Pass (R), Pass, Merit or Distinction.*

*For task 2: You can achieve one of the 3 grades: Pass, Merit or Distinction*

## PLC/Assessment criteria

### Unit 1

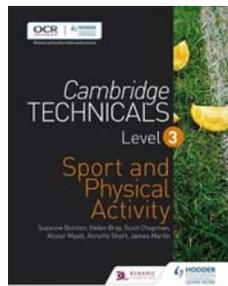
- 1.1 The Axial and appendicular skeleton
- 1.2 The functions of the skeleton and the link to type of bone
- 1.3 Types of bones

### Unit 2

- P4- Explain how different leadership styles and personalities can support different stages of group development.
- M1- Evaluate the importance of different attribute in supporting the principles of leadership and group dynamics.
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## Resources/Research

Bointon, S. et, al. (2016). *Cambridge Technical Level 3, Sport and Physical Activity*. Hodder education. London.



[www.teachpe.com](http://www.teachpe.com)

[bbc.co.uk/sport](http://bbc.co.uk/sport)

<https://www.bbc.co.uk/bitesize/subjects/znyb4wx>

## Wider Reading

- Gleim, G. W. (1984). *The profiling of professional football players*. *Sports Medicine*. 3(1):185-197
- Newman, J. and Crespo, M. (2008). *Performance profiling in tennis*. *ITF Coaching and Sport Science review*. 44(16):12-16.
- <https://img.fifa.com/image/upload/datdz0pms85qbnqy4j3k.pdf>
- Bointon, S. et, al. (2016). *Cambridge Technical Level 3, Sport and Physical Activity*. Hodder education. London.
- *OCR A level PE, Hodder education*.
- Gould, D. and Voelker, D. k. (2013). *Enhancing youth leadership through sport and physical education*. *Journal of Physical Education, recreation and dance*. 83: 38-41
- Allen, M. S. and Laborde, S. (2014) *The role of personality in sport and physical activity*. *Current directions in psychological science*.
- Maffulli, N. and King, J. B (1992) *Effects of physical activity and some components of the skeletal system*. *Sports medicine*. 13: 393-407
- Carter, J. B., Banister, E. W. and Blaber, A. P. (2003) *Effects of endurance exercise on autonomic control of heart rate*. *Sports Medicine*. January (33)33-46.
- Furley, P. A (2010) *The role of working memory in sport*. *International review of sport and exercise psychology*. 3(2) 171-194.
- McIntosh, A.S. (2011) *Biomechanical considerations in the design of equipment to prevent*

- sports injury. *Journal of Sports engineering and technolog.* December
- Levine, B. D and Stray-Gundersen (1997) "Living high-training low": effect of moderate-altitude acclimatization with low-altitude training on performance. *Journal of applied physiology.* 83(1):102-112.

**Online course: All students are expected to complete the following course:**

**A question of ethics: right or wrong?**, discusses ethical and professional principles in sport and fitness environments. Working closely with individuals and developing relationships is an inherent and often satisfying part of the work of a sports coach or exercise instructor.

<https://www.open.edu/openlearn/health-sports-psychology/question-ethics-right-or-wrong/content-section-0?active-tab=description-tab>

**All work must be submitted by Friday 11<sup>th</sup> September 2020**





Function of the skeleton	Description of how the skeleton fulfils this	Anatomical example	Apply this function to a sporting example
Shape			
Support			
Protection			
Movement			
Blood cell production			
Mineral storage			

Practice type	Description	Benefits	<b>Apply</b> this practice type to two different sporting examples
<b>Part method</b>	Breaking the skills it on their individual subroutines and teaching the smaller components	<ul style="list-style-type: none"> <li>- Gives quick success</li> <li>-allows the performer to make sense of the movement</li> <li>- Gain confidence</li> <li>-Correct individual faults in technique</li> </ul>	<ul style="list-style-type: none"> <li>-Practicing the backswing in tennis</li> <li>-Using a float in swimming to teach the leg kick</li> </ul>
<b>Whole method</b>			
<b>Whole-part-whole method</b>			
<b>Progressive part</b>			
<b>Massed Practice</b>			
<b>Fixed practice</b>			
<b>Distributed practice</b>			

<b>Varied practice</b>			
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## Performance analysis

Comment on how the body position has changed during each stage of the skill (tip) look at the position of the joints and how the body changes as the phase develops

### Preparation stage:



Key coaching points

### Execution phase:



Key coaching points

## Recovery Phase



Key coaching points

Team sport	Rating	Individual Sport	Rating	Outdoor activities	Rating
Association football		Amateur boxing		Canoeing / Kayaking	
Badminton		Athletics		Sailing	
Basketball		Badminton		Windsurfing	
Camogie		Canoeing		Hill Walking	
Cricket		Cycling		Orienteering	
Dance		Dance		Mountaineering	
Gaelic football		Diving		Wild Camping	
Handball		Golf		Climbing Single pitch	
Hockey		Gymnastics		Abseiling	
Hurling		Equestrian		Potholing	
Lacrosse		Kayaking		Mine Exploration	
Netball		Rock climbing		Cycling- Mountain	
Rowing		Rowing		Cycling- Trail	
Rugby league		Sculling		Cycling- BMX	
Rugby union		Skiing		Snow boarding	
Squash		Snowboarding		Skiing	
Table tennis		Squash		Shoe Shoeing	
Tennis		Swimming		Hang Gliding	
Volleyball		Table tennis		Paragliding	
<b>Specialist Team Activities</b>		Tennis		Gorge Walking	
Blind cricket		Trampolining		Sea Level traversing	
Goal ball		<b>Specialist Individual Activities</b>		High Ropes Courses	
Powerchair football		Boccia		Canyoning	
Table cricket		Polybat		Coasteering	
Wheelchair basketball					
Wheelchair football					
Wheelchair rugby					

