Sport and Physical Activity

Cambridge Technical Extended Certificate

at

The Blue Coat Sixth Form

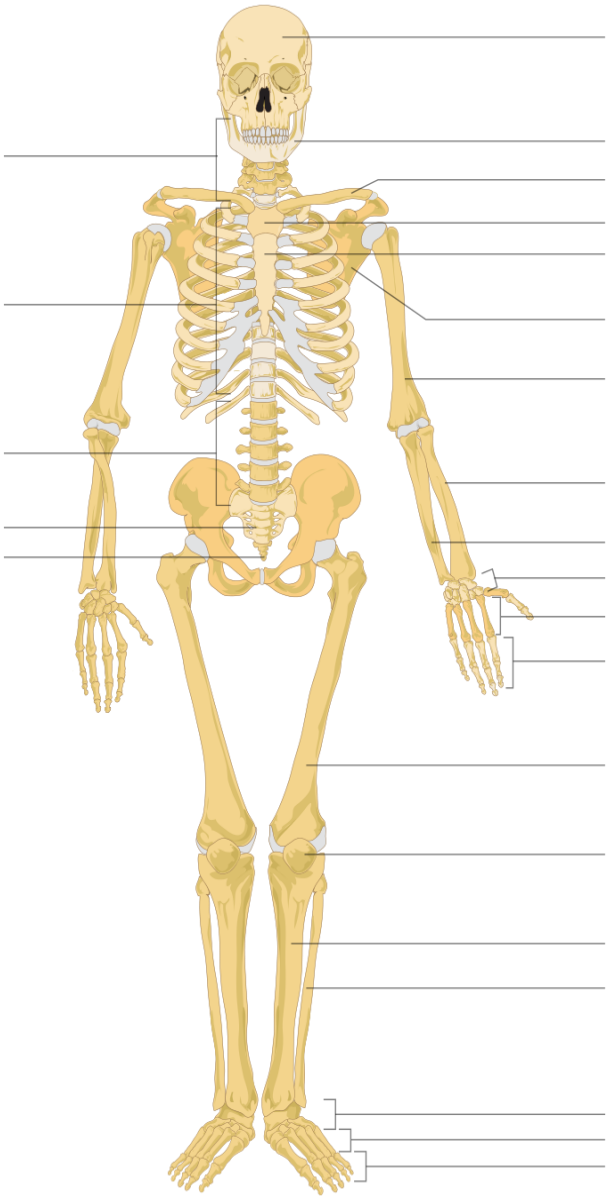
The idea behind the bridging course is to give you a head start and so that you are already familiar with some of the key concepts and terms you will be using throughout the course. It doesn't matter whether you have studied PE at GCSE as we are going to prepare you for the Key Stage 5 course.

Section A – Body systems and the effects of physical activity

The skeletal system

Task 1:

- Label the following outline of the skeleton with the list of bones provided;



Bones to include;

cranium
sternum
ribs
cervical vertebrae
thoracic vertebrae
lumbar vertebrae
sacrum
coccyx
scapula
clavicle
humerus
radius
ulna
carpals
metacarpals
phalanges
femur
patella
tibia
fibula
tarsals
metatarsals

You will need to **add** a line for the following;

ilium
ischium
pubis
talus

Spend time learning their location, try to do this by getting someone else to read them to you and you indicate their position on your own body and the person can check whether you are correct or not.

Task 2:

Label the following diagram with the list of muscles provided;

List of muscles (please add lines carefully and accurately)

Anterior Deltoid	Posterior Deltoid	Deltoid
Adductor longus, Adductor brevis, Adductor magnus	Gluteus maximus, Gluteus medius, Gluteus minimus	Rectus femoris, vastus medialis, vastus intermedius, vastus lateralis
Latissimus Dorsi	Wrist flexors	Biceps femoris, semimembranosus, semitendinosus
Pectoralis Major	Wrist extensors	Tibialis anterior
Trapezius	Rectus abdominus	Gastrocnemius
Teres Major	Erector Spinae	Soleus
Biceps Brachii	Internal and external obliques	Pronator Teres
Triceps Brachii	Iliopsoas	Supinator muscle

Spend time learning their location, try to do this by getting someone else to read them to you and you indicate their position on your own body and the person can check whether you are correct or not.

The skeletal system – types of synovial joints

Complete the table below, your diagram of the skeleton might help you with the last column.

Type of joint	Example of where found in body	Bones that make up that joint (known as articulating bones)	Type of movement possible at this type of joint
Hinge			
Ball and socket			
Pivot			
Condyloid			
Thumb			
Gliding			

Definitions of types of movement;

Write a definition/description of the following types of movement. The terms below should be the ones you have used in the final column of the table above.

Flexion =

Extension =

Lateral flexion =

Abduction =

Adduction =

Horizontal abduction and adduction =

Medial rotation =

Lateral rotation =

Circumduction =

Pronation =

Supination =

Dorsi flexion =

Plantar flexion =

You are going to try a series of exam style questions, using the answers from the bridging work so far. You need to make a separate point for the number of marks that the question is worth. Make sure you use the **correct anatomical language** for the names of the bones, muscles etc where appropriate. In September, these will be marked and recorded as an indication of how well you are starting this section of the course.

1 Which one of the following is **not** part of the pelvis?

(a) Ischium ☐

(b) Pubis ☐

(c) Femur ☐

(d) Ilium ☐

[1]

3 Which of the following bones form the elbow joint?

(a) Humerus, femur and ulna ☐

(b) Humerus, tibia and fibula ☐

(c) Humerus, radius and fibula ☐

(d) Humerus, radius and ulna ☐

[1]

4 Which one of the following describes flexion at a joint?

(a) Elbow movement during the downward phase of a press up ☐

(b) Movement at the shoulder when bowling in cricket ☐

(c) Turning the palms of the hands to face downwards ☐

(d) Lifting the head to look upwards to take a high catch ☐

[1]

9 What type of joint is found at the base of the thumb?

.....**[1]**

2 Which one of the following muscles contracts to cause knee extension?

(a) Vastus medialis ☐

(b) Tibialis anterior ☐

(c) Adductor magnus ☐

(d) Semimembranosus ☐

[1]

11 **Fig. 11.1** shows a diagram of the bones of the lower leg.

Fig.11.1

Identify A, B and C on the diagram.

A.....**[1]**

B.....**[1]**

C.....**[1]**

12 **Fig. 12.1** shows a performer doing a tuck jump.

Fig. 12.1

Complete the table below to identify the joint types and movements during the tuck jump.

Joint	Joint type	Movement
Hip	.....	Flexion
Elbow	.....	.....

[3]

Section B – Sport organisation and development

Task 1:

Research the following organisations

	What do they do?	What are they responsible for?	Other information
UK Sport			
Sport England			

Task 2:

National Governing Bodies

Each NGB is responsible for managing a Sport and they have expert knowledge in that particular sport e.g. The FA are responsible for managing Football in England

Research a National Governing Body from a sport of your choice and choose 10 key bits of information to record below.

Sport:

Name of NGB:

Task 3:

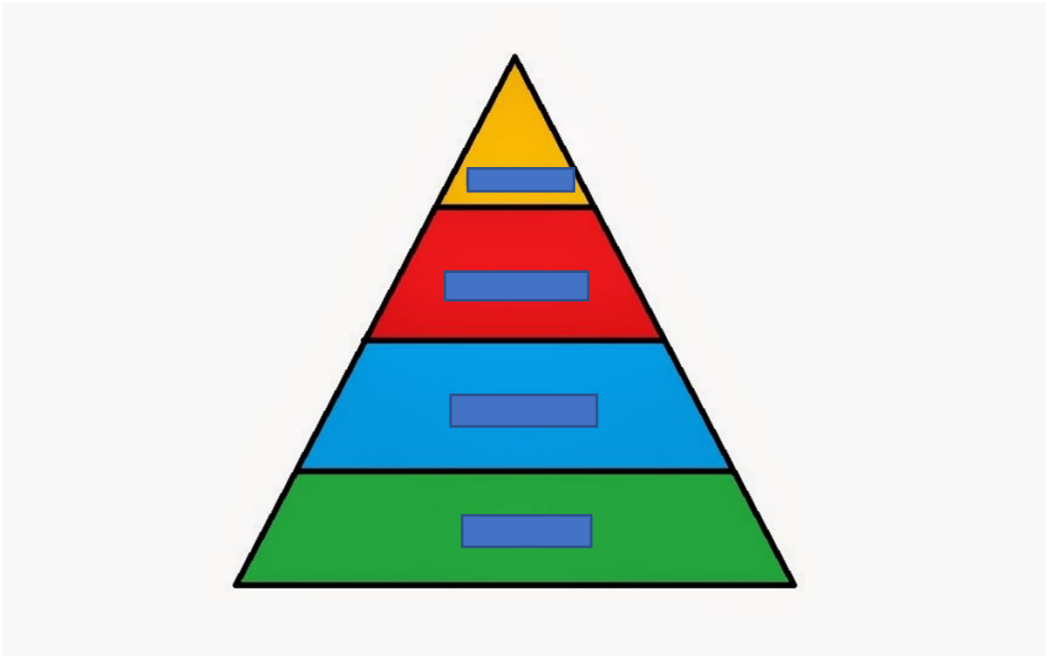
Provision

Research your local area; What opportunities are available for people to get involved in sport and physical activity?

Name of Area: Opportunities:

Sports Development continuum

1. Label the stages on the pyramid below. Annotate any extra information around the pyramid.



2. Attempt to describe what type of skills a person might be learning at each stage in a sport of your choice.

Sport:

Stage:	
Stage:	
Stage:	
Stage:	

You are going to complete a series of exam style questions, using knowledge acquired from the first part of the bridging work.

You need to make a separate point for the number of marks that the question is worth; There is no "banding" used for these questions.

In September, these will be marked and recorded as an indication of how well you are starting this section of the course.

1) In the UK various organisations are involved with sport and physical activity; one such organisation is Sport England. Describe the work of Sport England. (6)

2) Explain the role of UK Sport (7)

Section C – Sport and exercise psychology

Task 1:

Motivation

Make a list of everything that motivates you to participate in sport.

Split your list into the appropriate columns in the table.

Intrinsic motivation	Extrinsic (tangible) motivation	Extrinsic (intangible) motivation

Are you more motivated by intrinsic or extrinsic factors? Explain why.

Why might the types of motivation differ between an elite footballer and a novice cross country runner?

Task 2:

Goal setting

Consider the sporting goals suggested in the table below. State in the spaces provided whether you think the goals are long-term or short-term, and whether they are performance or outcome goals.

Goal set by sports performer	Type of goal – long or short	Type of goal – performance or outcome
To win the league		
To do more weights to improve strength		
To get picked for the county team		
To improve the percentage of first serves that are successful in my tennis game		
To improve my personal best time in 100m		
To place in the top 3 in the National finals		

Give a short, medium and long-term goal of yours related to your sport. It is easier to start with your long-term goal and then plan the steps required to help you to meet this.

Long term goal Medium term goal Short term goal

In order for goal setting to be effective, the well-known SMART principle is used. Record what the acronym stands for, with an explanation of each point.

S

M

A

R

T

Evaluate your three goals - are they SMART? If so, explain why, and if not, re-write them to ensure that they meet all of the criteria.

Motivation - achievement motivation

Define achievement motivation =

Identify characteristics of each type of performer.

NACH	**NAF**

Which type of performer are you? Does it depend on the situation? Give sporting examples to justify your response.

Plot where the following scenarios would be on the graph:

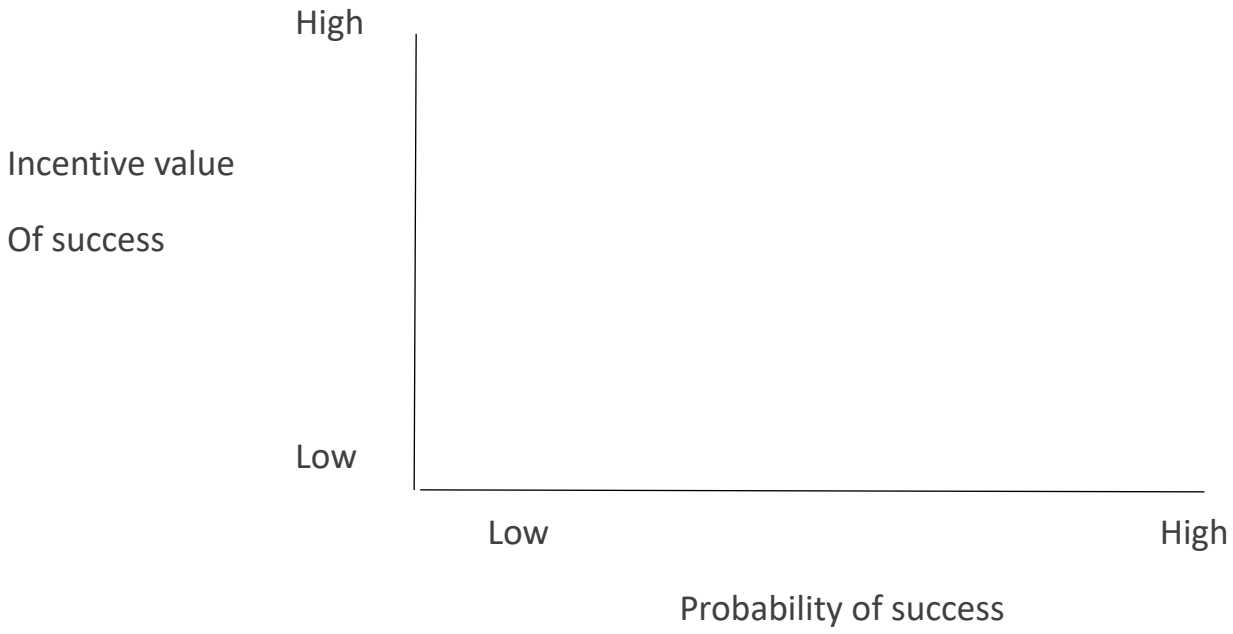
A - Running 100m against Usain Bolt.

B - Playing a game of football against a team in the league below.

C - Playing a game of tennis against Nadal.

D - Climbing a highly rated, extreme rock climb.

E - Running a cross country race against peers in school when you are the National champion.



A coach could use several methods to develop NACH behaviour. Which of these methods do you think is the most effective and why?

Section D – Practical skills in sport and physical activity

1) Define the following terms:

Skill	
Technique	
Strategy	
Tactic	

2) For a sport of your choice (see the approved lists in the next section), list the key skills, techniques, strategies and tactics required to compete. Once complete, RAG rate your level of competence in each area using a highlighter/coloured pen. E,g. Passing, Defensive Heading

Sport:

Skills	
Techniques	
Strategies	
Tactics	

For a sport of your choice, describe the roles and responsibilities of **all** the officials required for an elite / professional game. You may use images to help support your answer.

Section E – Sports coaching and activity leadership

Choose a sport from the approved lists below and create an overview for a series of 6 lessons. Each lesson will have a SMART objective.

Team Activity
Association football
Badminton
Basketball
Camogie
Cricket
Dance
Gaelic football
Handball
Hockey
Hurling
Lacrosse
Netball
Rowing
Rugby league
Rugby union
Squash
Table tennis
Tennis
Volleyball

Individual Activity
Amateur boxing
Athletics
Badminton
Canoeing
Cycling
Dance
Diving
Golf
Gymnastics
Equestrian
Kayaking
Rock climbing
Rowing
Sculling
Skiing
Snowboarding
Squash
Swimming
Table tennis
Tennis
Trampolining

Eg. Hockey

Lesson (progressively more difficult)	1	2	3	4	5	6
Focus	Dribbling and ball control	Passing and receiving	Defending (tackling, marking)	Attacking (maintaining possession)	Formations/tactics	Game play
SMART objective (Cater for all ability levels – all will meet the same objective, but some will do this by completing a	By the end of the session: -All will know the coaching points for dribbling and will be able to demonstrate this in a drill.					

more difficult task).	-Some will be able to dribble effectively in a mini game situation at a faster pace **(slightly more difficult).** -Most able will be able to demonstrate this on the reverse stick side **(most difficult).**					

This objective is:

Specific – linked to a basic skill in hockey.

Measurable – the group can verbally give the coaching points; dribbling time can be measured in seconds.

Achievable *(we use this rather than accepted which was a GCSE term)* – caters for all ability levels.

Realistic – drills set will allow for the objectives to be met.

Time bound - progress will be made during the time of the session.

You do not need to write out SMART for each objective. You can explain why all your objectives are SMART in one paragraph.

Sport:

Lesson (progressively more difficult)	1	2	3	4	5	6
Focus						
SMART objective (Cater for all ability levels – all will meet the same objective, but some will do this by completing a more difficult task).						

Explain why your objectives are SMART.

Create a lesson plan for lesson one from your overview in part 2 of the bridging course.

Plan for 12 year 7, mixed ability participants in a space of your choice (e.g. Sports Hall, Gym, Field, Netball Courts).

The session should last for 30 minutes.

Here is a basic example of how you may set out your plan. You can use and adapt this, or you can create your own.

ACTIVITY:					
NO OF PARTICIPANTS:		**AGE RANGE:**		**ABILITY LEVEL**	
VENUE					
OBJECTIVES FOR THE SESSION					
TIME	**ACTIVITY**	**MAIN TEACHING POINTS**	**ORGANISATION**	**RESOURCES/EQUIPMENT**	
	Warm up **Drills (progressive)** **Game situation** **Cool down**				

Useful YouTube videos for the physiology section;

https://www.youtube.com/watch?v=otHNMOaXSns&list=PLzh4kOin3WAqKL76NpiwuRoLrJDg65K16

Alternatively, type into YouTube – 'A level PE Anatomy and Physiology Joints and Movement', and the video you are looking for is by James Morris.

https://www.youtube.com/watch?v=2MOK3NrWTUE&list=PLzh4kOin3WAqKL76NpiwuRoLrJDg65K16&index=2

Alternatively, type into YouTube – 'A level PE Anatomy and Physiology Joint action and muscles', and the video you are looking for is by James Morris.

Not the same specification that you will be doing, but very good for understanding, nonetheless.

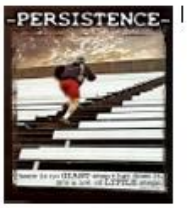
Useful information for the sport organisation and development section;

https://www.gov.uk/government/organisations/department-of-health

https://www.gov.uk/government/organisations/department-for-digital-culture-media-sport

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/848082/School_sport_and_activity_action_plan.pdf

Useful information for the psychology section;



https://www.youtube.com/watch?v=f4npCA983sk

Alternatively, type into YouTube – GCSE PE Paper 2 – Goal Setting and SMART targets

Useful information to know

Which specification is it?

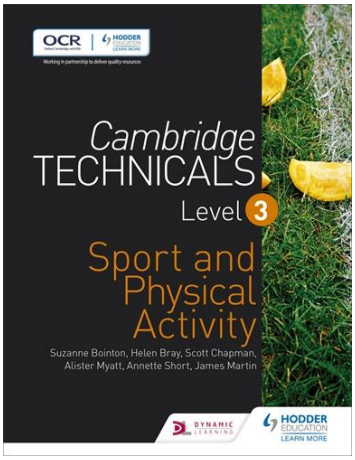
OCR Cambridge Technical Extended Certificate in Sport and Physical Activity

https://www.ocr.org.uk/qualifications/cambridge-technicals/sport-and-physical-activity/#level-3

Which textbook will I use?

Textbooks will be provided by the PE department, but if you want to purchase a copy, this is the amazon link.

https://www.amazon.co.uk/Cambridge-Technicals-Level-Physical-Activity/dp/1471874850



Course overview

Unit %	Topic	Content	Assessment
25%	Body systems and the effects of physical activity (physiology)	• Skeletal system • Muscular system • Cardiovascular system • Respiratory system • Energy systems	Exam 1 hour 30 70 marks
25%	Sports coaching and activity leadership	• Roles and responsibilities of a coach • Principles which underpin coaching • Plan sports activities and sessions • Prepare sports and activity environments • Deliver and review sports and activity sessions	Coursework assignments
16.6%	Sports organisation and development	• Organisation of sport in the UK • Sports development • Measurement of the impact of sports development • Sports development in practice	Exam 1 hour 60 marks
16.6%	Practical skills in sport and physical activities	• Individual sport • Team sport • Outdoor adventurous activity • Officiating	Coursework assignments
16.6%	Sport and exercise psychology	• Motivation • Attribution theory • Stress • Anxiety • Arousal • Group dynamics • Mental health and wellbeing	Coursework assignments