

Cambridge Technical Level 3 Sport and Physical Activity

Introduction – an outline of the course

Welcome to Cambridge Technical Level 3 Sport and Physical Activity. The course is equivalent to one A level. During your time at Sixth Form you will study the following topics and they will be tested using the following assessment methods:

Unit 1 – Body systems and the effects of physical activity – exam

Unit 2 – Sports coaching and activity leadership – practical delivery and portfolio

Unit 3 – Sports organization and development – exam

Unit 17 – Sports injuries and rehabilitation – portfolio

Unit 19 – Sport and exercise psychology – portfolio

Assessment is spread across both Year 12 and Year 13 and your grade will be based on your performance across all units. Units 1,2 and 17 are completed in Year 12 and unit 3 and 19 in Year 13.

The practical element of the course requires you as a sports coach and you will need to deliver a series of lessons to students in KS3 on your chosen sport. We also expect you to contribute to the PE department by either helping in lessons or an extra-curricular club.

What will we be studying in the first half term?

In September you will start all 3 units simultaneously and they will all be delivered by different members of the PE department.

Unit 1

Begins by looking at the skeletal system, we will add to your knowledge from KS4 regarding the skeletal structure and functions. We will delve deeper into joint types as well as the structures found in synovial joints.

We begin our work on movement analysis, looking to link which joints are capable of which movements and how that translates into sporting examples.

Finally, we will look at the impact of a warm up on the skeletal system, then the changes that occur to the skeleton during a single bout of exercise as well as the adaptations that happen over time as a result of training.

Unit 2

Begins by looking at the roles and responsibilities of sports coaches. Then how they have a responsibility to improve the health of participants. Finally, we compare and contrast the responsibilities of a sports coach to that of a teacher and an activity leader.

Unit 17

Begins by looking at causes, signs and symptoms of common acute and chronic injuries. Then we look at the psychological impact of suffering an injury.

What can I do that will help me prepare for Sport and Physical Activity?

Preparation for Unit 1 will be time well spent as this is the exam you will sit in Year 12. Reading around the body systems (skeletal, muscular, cardiovascular and respiratory) will be a great foundation for your studies.

BBC Bitesize GCSE PE (OCR) is a great place to start with simple information and diagrams to help. For more advanced content the YouTube channel CrashCourse has excellent explanations.

Beyond that any current news and science articles in the world of sport and specifically sport science will increase your understanding of sport in a wider context. There are a number of good podcasts if you prefer to listen rather than read e.g. the high performance podcast.

Here are also some great TED talks to watch:

- https://www.ted.com/talks/christian_moro_the_surprising_reason_our_muscles_get_tired#t-134282
- https://www.ted.com/talks/leah_lagos_and_jaspal_ricky_singh_how_playing_sports_benefits_your_body_and_your_brain
- https://www.ted.com/talks/jeffrey_siegel_what_makes_muscles_grow
- https://www.ted.com/talks/edmond_hui_how_the_heart_actually_pumps_blood
- https://www.ted.com/talks/david_epstein_are_athletes_really_getting_faster_better_stronger

Summer Gap Task and where to find this

Over the summer we would like you to select one of the following titles

- Protein powder: training must have or waste of money?
- Doping: is the only way to have a truly fair games to allow all athletes to legally dope?
- Olympic legacy: is there a truly lasting impact on participation from holding major tournaments?
- Diet: low carb and high fat or high carb and low fat, which is most effective for athletes?
- Injury prevention: is yoga the answer?
- Does practice make perfect or are winners born?
- If you attribute winning to your ability, will you will always win?
- Stress: is it negative for an athlete?
- Athletes: does having everything mean you cannot suffer from mental health illnesses?

Once you have selected a topic you need to do some reading around the subject. This could be in the form of newspaper/magazine articles, video sources such as TEDtalks, websites such as NHS, and journals.

Journals maybe a new source of information to you, they are scholarly articles written by researchers about a specific question or topic. These are the cutting edge of sports science, good places to look are the Journal of science and medicine in sport, Journal of science in sport and exercise & The Lancet, but there are many more.

Some will come at a cost – please don't spend money accessing them, there are many free ones and all should offer some free extracts.

Once you have researched your topic we would like you to write a short review of your findings. This should include:

- Introduction
- At least 2 points of view of the topic
- These should be supported by some sort of research
- Your opinion/conclusions

You are limited to no more than 2 a4 sides – font size 12.

We are really looking forward to seeing you in September and working with you so that you achieve your goals and aspirations.